

Stratford Extension Project Environmental Impact Statement

APPENDIX J

NON-ABORIGINAL HERITAGE ASSESSMENT





On Thursday 28 June 2012, Yancoal Australia Limited was listed on the Australian Stock Exchange and merged with Gloucester Coal Ltd (GCL) under a scheme of agreement on the same date. Stratford Coal Pty Ltd is now a wholly owned subsidiary of Yancoal Australia Limited. Any reference to GCL in this Appendix should be read as Yancoal Australia Limited.

**STRATFORD EXTENSION PROJECT
NON-ABORIGINAL HERITAGE ASSESSMENT**

A REPORT FOR STRATFORD COAL PTY LTD

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1. INTRODUCTION

1.1 BACKGROUND

The Stratford Mining Complex comprises the Stratford Coal Mine (SCM) and Bowens Road North Open Cut (BRNOC), two open cut mining operations located some 10 kilometres (km) south of Gloucester and approximately 100 km north of Newcastle, New South Wales (NSW) (Figure 1.1).

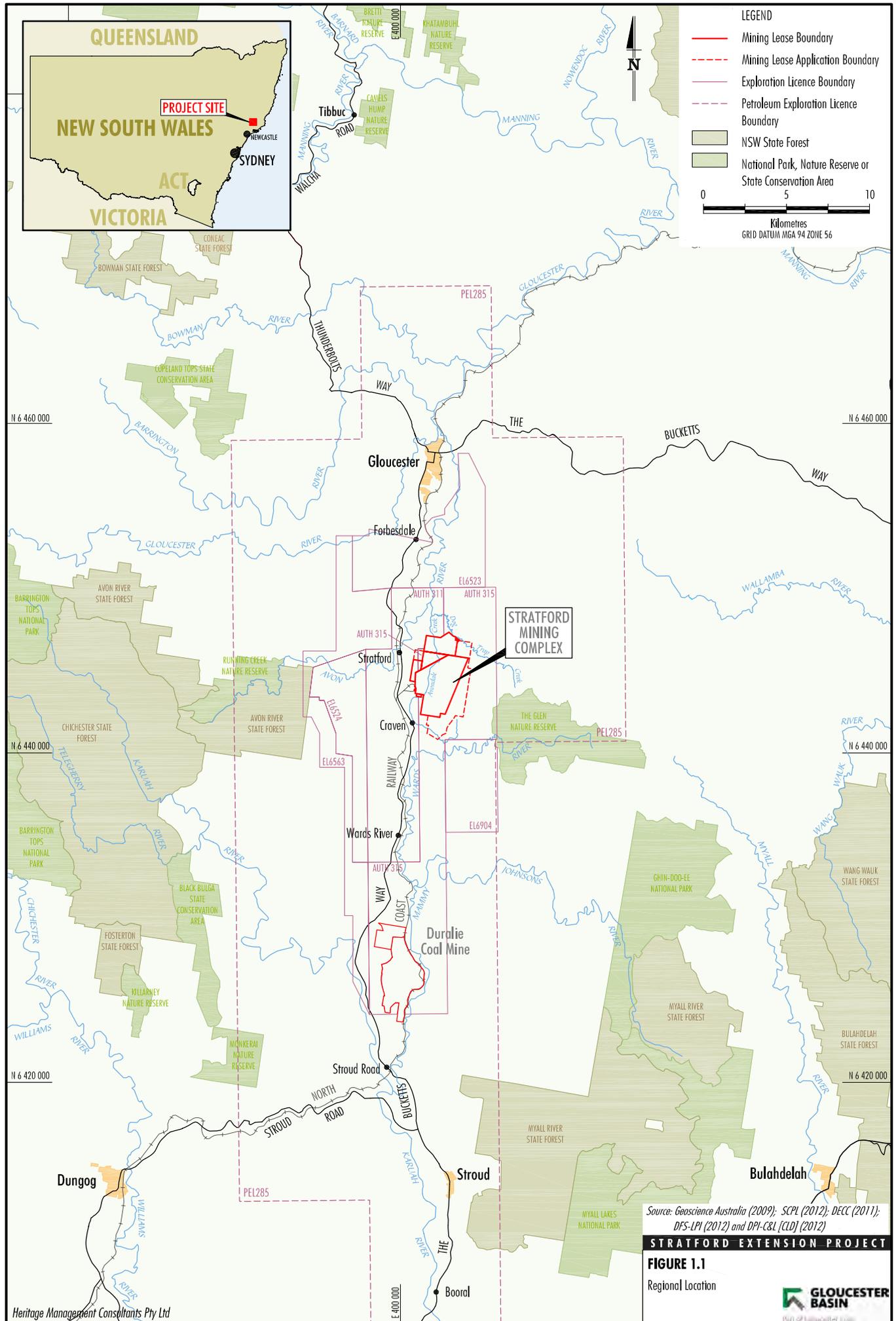
Stratford Coal Pty Ltd (SCPL), a wholly owned subsidiary of Gloucester Coal Ltd (GCL) owns and operates the Stratford Mining Complex. The Stratford Mining Complex includes coal processing and rail infrastructure for the off-site transport of product coal. The Stratford Mining Complex also receives and processes coal from the Duralie Coal Mine (DCM), located some 20 km to the south (Figure 1.1), which is owned by Duralie Coal Pty Ltd, a wholly owned subsidiary of GCL.

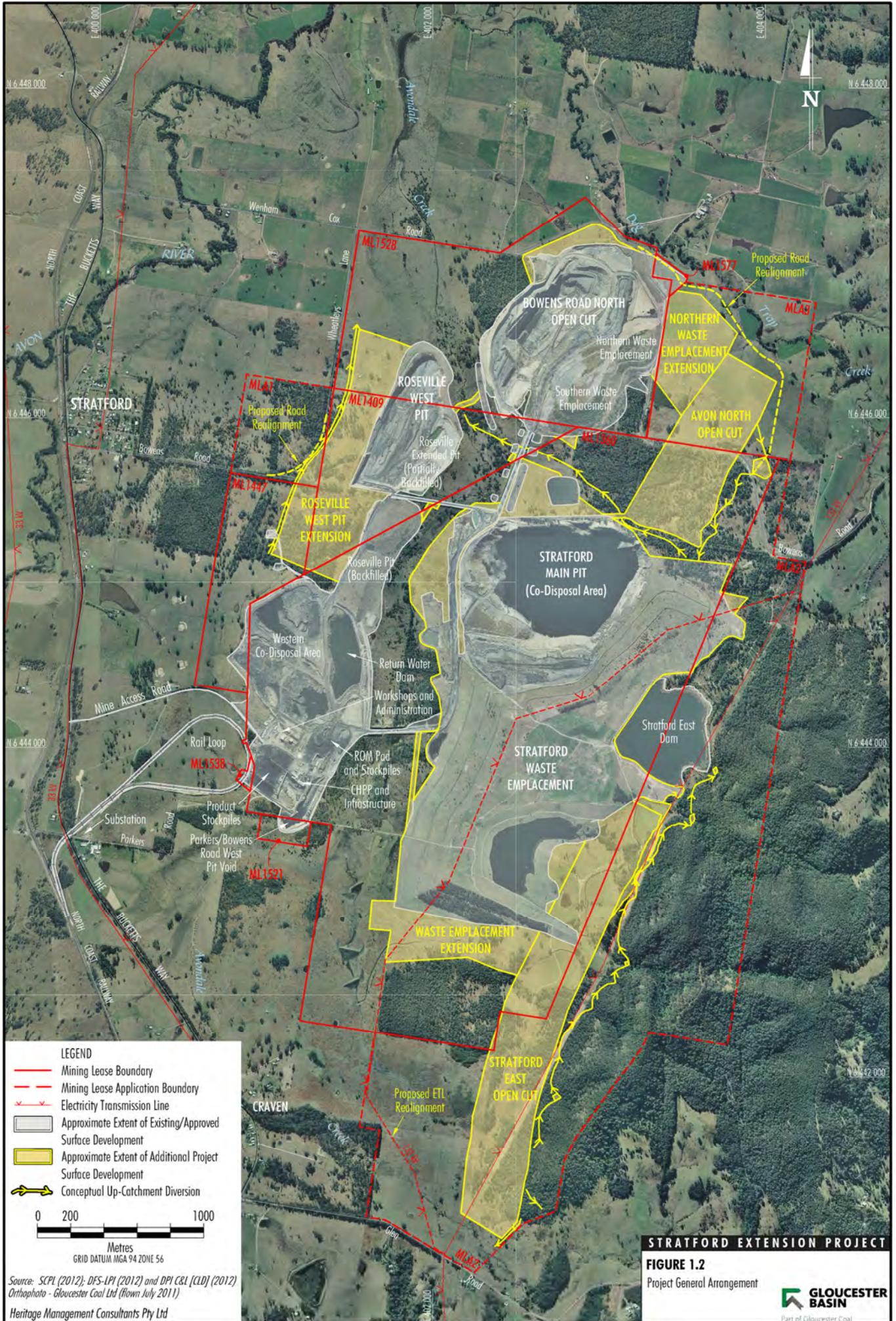
SCPL proposes to increase the extent and operational life of the Stratford Mining Complex via the Stratford Extension Project (the Project). The main activities associated with the development of the Project would include (Figure 2):

- run-of-mine (ROM) coal production up to 2.6 million tonnes per annum for an additional 11 years (commencing approximately 1 July 2013 or upon the grant of all required approvals), including mining operations associated with:
 - completion of the BRNOC;
 - extension of the existing Roseville West Pit; and
 - development of the new Avon North and Stratford East Open Cuts;
- exploration activities;
- progressive backfilling of mine voids with waste rock behind the advancing open cut mining operations;
- continued and expanded placement of mine waste rock in the Stratford Waste Emplacement and North Waste Emplacement;
- progressive development of new haul roads and internal roads;
- coal processing at the existing coal handling and preparation plant (CHPP) including Project ROM coal, sized ROM coal received and unloaded from the DCM and material recovered periodically from the western co-disposal area;
- stockpiling and loading of product coal to trains for transport on the North Coast Railway to Newcastle;
- disposal of CHPP rejects via pipeline to the existing co-disposal area in the Stratford Main Pit and, later in the Project life, the Avon North Open Cut void;
- realignments of Wheatleys Lane, Bowens Road, and Wenham Cox/Bowens Road;
- realignment of a 132 kilovolt (kV) power line for the Stratford East Open Cut;

- continued use of existing contained water storages/dams and progressive development of additional sediment dams, pumps, pipelines, irrigation infrastructure and other water management equipment and structures;
- development of soil stockpiles, laydown areas and gravel/borrow areas, including modifications and alterations to existing infrastructure as required;
- monitoring and rehabilitation;
- all activities approved under DA 23-98/99 and DA 39-02-01; and
- other associated minor infrastructure, plant, equipment and activities, including minor modifications and alterations to existing infrastructure as required.

Figure 1.2 shows the proposed layout of the existing and proposed open cuts and waste rock emplacement extensions associated with the Project. Further description of the Project is provided in Section 2 in the Main Report of the Environmental Impact Statement (EIS).





SCPL will lodge an EIS to facilitate approval of the Project from the Minister of Planning under Division 4.1 of Part 4 of the NSW *Environmental Planning and Assessment Act, 1979*. In accordance with the Director-Generals Requirements the preparation of a Non-Aboriginal Heritage Assessment is required for the EIS. 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 likely impacts of the Project on non-Aboriginal heritage is then made.

This assessment is based on desktop analysis of available documentation relating to the history and cultural heritage of the Project area, and an on-ground survey of the Project area. This report has been drafted in consideration of the relevant principles and articles contained in the Burra Charter (the Australian branch of the International Council on Monuments and Sites [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.

- Tony Dwyer, Manager Environment and Approvals, Gloucester Basin Operations.
- Alarna Pain, Environmental Officer, GCL.
- Mara Barnes, NSW National Trust.
- Richard and Tim Clarke, Bowens Road, Stratford.

2. HISTORICAL OVERVIEW

2.1 THE AUSTRALIAN AGRICULTURAL COMPANY

The Project area was part of a very large land grant held from the early 19th century by the Australian Agricultural Company (herein referred to as the AA Company). The AA Company was established in London in 1824 and, supported by an Act of Parliament and a Royal Charter and on the basis of a nominal £1 million pounds capital, was granted in 1826 one million acres in NSW on which to raise merino sheep. Surveyor John Oxley proposed that the AA Company take up half the land on the Liverpool Plains for sheep grazing, and the other half in the Manning River valley for cropping. An associated recommendation was that land be acquired in Port Stephens for use as a port. After some uncertainty, the land finally chosen was in three blocks: 464,640 acres between Port Stephens and the Manning River (Port Stephens Estate), 249,600 acres on the Liverpool Plains west of Willow Tree (Warrah), and 313,298 acres at the Peel River south of Tamworth (Goonoo Goonoo). The AA Company was established in all three locations by the early 1830s.¹

In 1826 the AA Company's inaugural superintendent, Robert Dawson, explored the Karuah, Avon, Manning and Myall Rivers area, and the Barrington River north of Gloucester. It is thought that Dawson named Stroud as a townsite in 1826 after a town in the Cotswold country in England, because the land reminded him of the English countryside in that area. Stroud first developed as a sheep run outpost in 1827, and a small town was developed by Dawson's successor, the Arctic explorer Sir Edward Parry, who was the AA Company Superintendent from 1830 to 1834. Stroud House was built as the Commissioner's accommodation and the majority of the AA Company's convict labour force was based in Stroud by 1836.² The maximum number of convicts assigned to the AA Company was 464 convicts in 1837. The company also engaged approximately 100 free men throughout the 1830s³. The Wards River/Johnsons Creek area immediately to the south of the Project area seems to have been grazed by the AA Company's sheep from around 1828.

¹ Pemberton, P. 1985. 'Australian Agricultural Company - Peel River Land & Mineral Company', *ABLative* No.1, Autumn 1985, pp 1-2 (Newsletter of the ANU Archives of Business and Labour (the Noel Butlin Archives Centre); Stroud & District Historical Society, N.D. at www.heritageaustralia.com.au/search.php?state=NSW®ion=97&view=504 accessed 6/8/09 ; Birrell, W.K. 1987. *The Manning Valley: Landscape and Settlement 1824-1900*. Jacaranda Press, Gladesville: 39-43; see also Jack, R.I. & Jeans, D.N. 1996. *Regional histories of New South Wales*, Heritage Office and Department of Urban Affairs and Planning, NSW, Sydney: 51-55.

² Stroud & District Historical Society, N.D.

³ Chadban, J. 1970. *Stroud and the A.A. Co.* Stroud Shire Council, Stroud: 15.

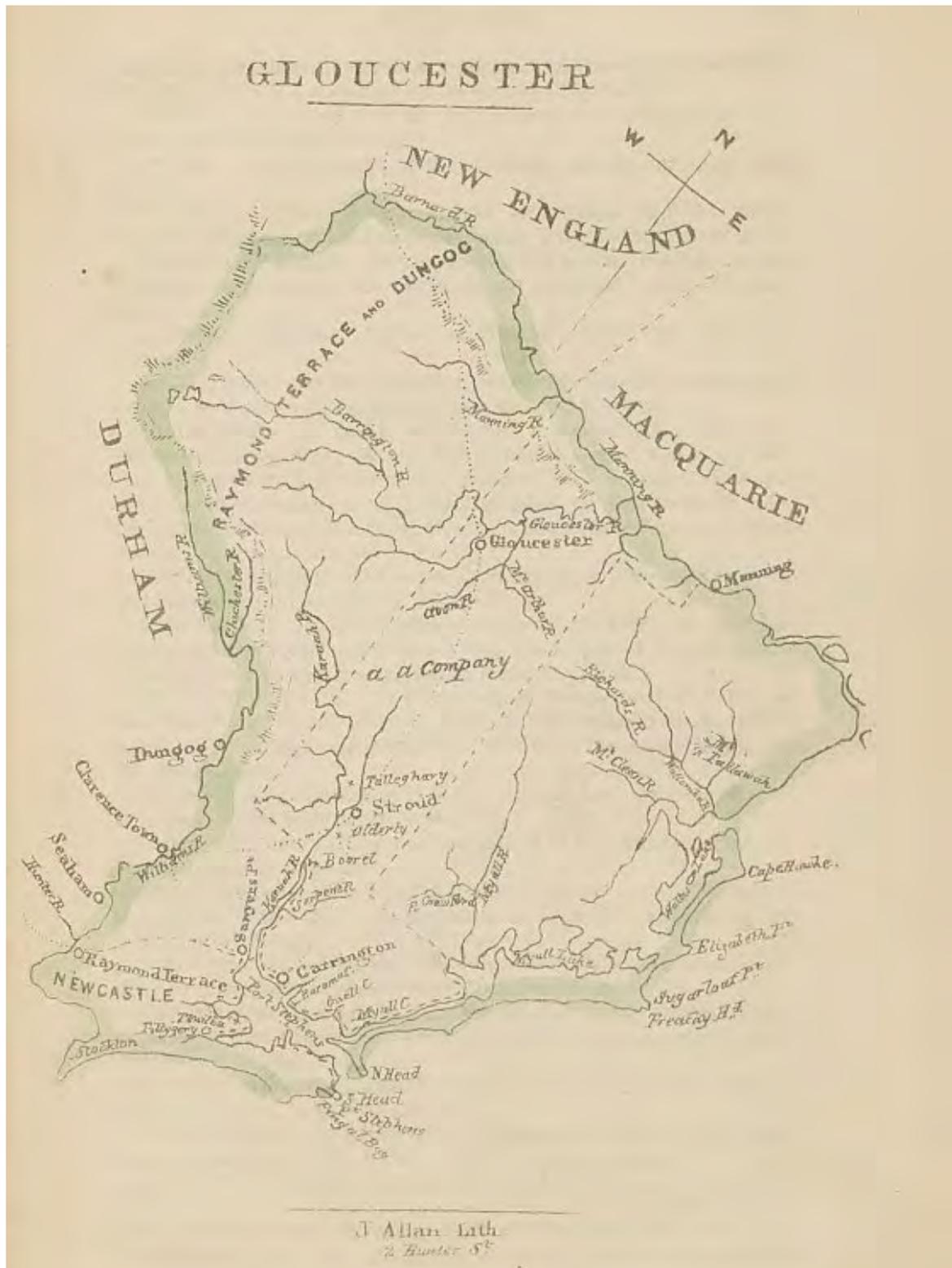


Figure 2.1 Map of County Gloucester, 1848, showing the AA Company lease area. Source: Wells 1848 facing p.184.

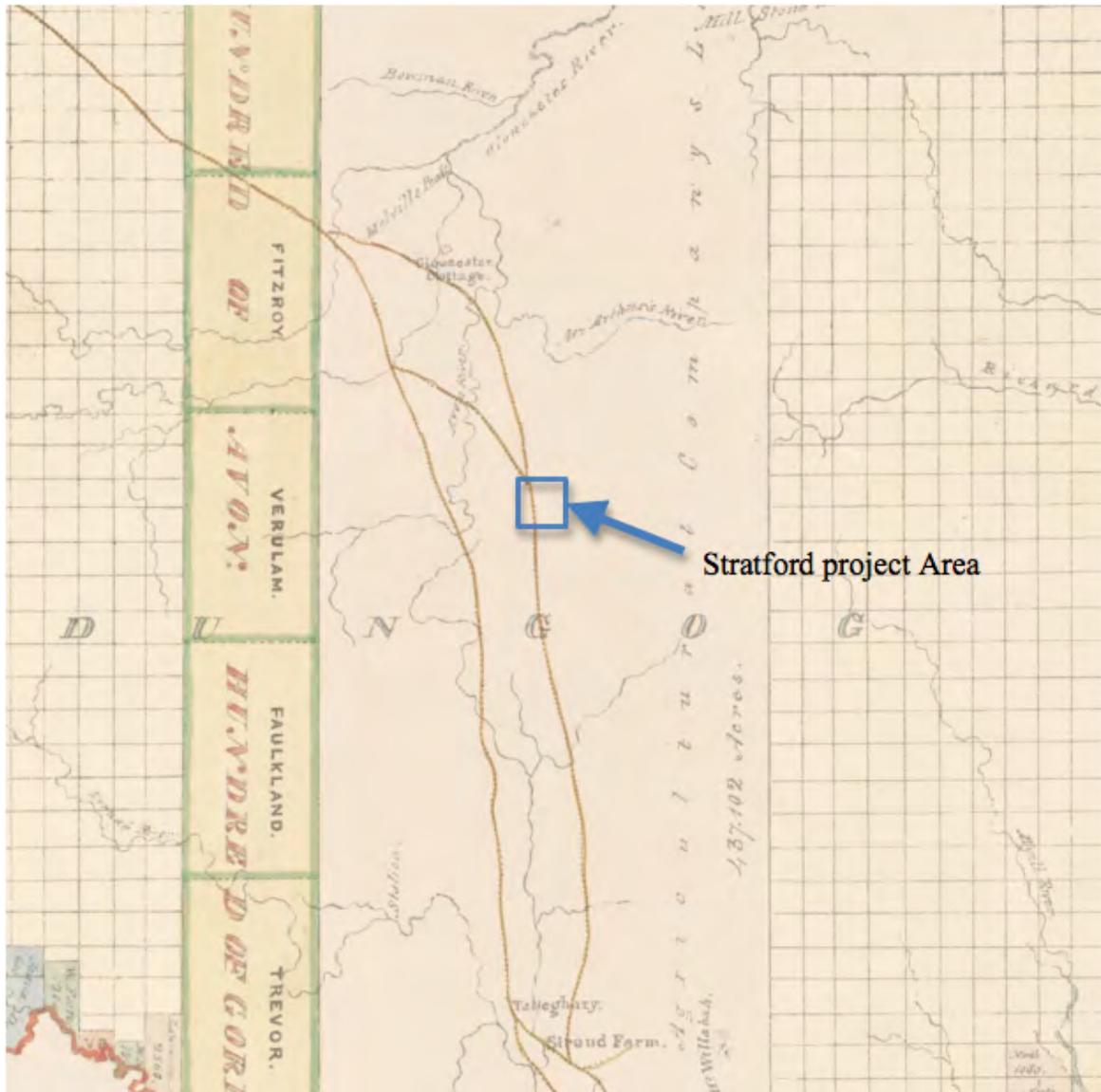


Figure 2.2 Detail of the AA Company lease area in 1846, showing the approximate position of the Project area. Source: Baker's Atlas 1846, Co Gloucester.

The ending of convict assignment in 1838 together with the general economic difficulties in the 1840s and the increasing realisation that the Port Stephens land was unsuited to sheep, resulted in major problems for the AA Company. The labour shortages during the gold rushes in the early 1850s compounded the problems. The number of sheep grazed by the company on the Port Stephens Estate had reached a maximum of 124,000 in 1834, and remained at over 100,000 until 1850. Sheep numbers dropped to nil by 1857 however, when it was finally concluded that sheep were not suited to the area. In response to these problems the AA Company was re-organized, with the company's sheep operations (including the Port Stephens sheep) being transferred to Warrah, and the northern part of the Port Stephens Estate being developed for cattle grazing in the mid-1850s. Around Stroud, land was sold and leased for agricultural purposes from as early as 1849, and there was some timber getting in the district.

In 1850, Stroud became the AA Company's headquarters in Australia. This role, however, was short-lived and the headquarters were relocated to Sydney in 1856, and Stroud was abandoned entirely by the company in 1873.⁴

The Gloucester end of the AA Company's land became a cattle breeding establishment. Avon Creek, now Stratford, was used as the Company's horse station, where the Company's horses and mules were bred. The flat land west of the present Stratford Village area was divided into small paddocks with high fences, and a residence was located immediately opposite the former railway station site. By 1861 the house was deserted and the country abandoned to wild horses and cattle, the house being used from time to time by brumby catchers and horse breakers, such as John Kay in 1868 and 1869 and Edward Corbett and William Ellis in 1872 or 1873. Corbett and Ellis shot 1,500 brumbies on the Gloucester run being paid one shilling per head for each horse, the hide and hair being sent to Sydney for sale.⁵

In an attempt to diversify the company's activities, a Mr Odenheimar did a mineralogical survey of the Port Stephens Estate in 1855 and identified major coal deposits in the Johnsons Creek area. In 1858 four pits were sunk and although coal was found of excellent quality, it was thought to be too costly to extract from that location. A proposal to mine the area was again raised within the company in 1872, but again dropped.⁶ It is not clear from the documentation available whether this mining activity was on Coal Creek, south-west of Craven (immediately south of the SCM) or on Coal Shaft Creek which runs through the DCM area some 20 km to the south.

2.2 LAND SALES TO SMALL SETTLERS

The nature of the country at the time of the major changes to AA Company operations in the 1850s can be gauged from the journal of Edward Hamilton, Governor of the AA Company, who travelled through the Gloucester valley area in September 1858:

'...started [from Stroud] for Gloucester, leaving the usual line of the road and passing through the lower part of Mammy Johnson's Creek to the Coal Creek. Almost the whole of the country, between Stroud and the Avon is exceedingly poor soil and too heavily timbered to be of any value whatever to a grazier. The ridges are uniformly bad, never fit for agriculture, and originally but ill fitted for, and now from the increase of timber saplings utterly unfit for pasture. To be compelled to run stock, whether sheep, horses or cattle on such a country could only result in disastrous consequences. On the lower portion of Mammy Johnsons Creek I saw no good land worth speaking of but I am told the valley opens out further up and that a considerable portion of good land may be set out in farms on some uniform plan.'⁷

⁴ Pemberton 1985; Stroud & District Historical Society, N.D.

⁵ Rye, L. & Penfold, J. 1965. 'The early days —Gloucester 1824-1922'. *Gloucester District Historical Society Journal*, 2 (1): 7-24: 17.

⁶ Chadban 1970: 9.

⁷ Ward's River –Johnson's Creek School Centenary Committee, 1972. *School Centenary 1872-1972*. Ward's River –Johnson's Creek School Centenary Committee; 13. NOTE on nomenclature: Mammy Johnsons Creek was originally called Telligherry River (1826), was renamed Mammy Johnsons (or Johnston's) Creek about 1854 (reputedly because an Aboriginal women of that name drowned in it), and since 1971 the names Johnsons River, Mammy Johnsons Creek and Mammy Johnsons River all seem to be acceptable to the NSW Geographical Names Board.

Hamilton ordered the splitting up and sale of lands through this district, leaving aside the land subject to a railway survey, and began by selling land along Mammy Johnsons Creek. By the end of the 1860s, however, only 1,027 hectares (ha) of AA Company land had been sold off, with sales limited to small mixed farmers.⁸ The land sold was mainly south of the present shire boundary (and that between Parishes Grant to the south and Avon to the north). To the north of this was the Company's Gloucester Run of 206,579 acres, of which the Project area occupies the southern portion. The AA Company decided to concentrate cattle breeding around Gloucester. Town lots were surveyed in 1855, but few buildings were erected in Gloucester, the 'Homestead', home of the AA Company's superintendent, being an exception.⁹

Sale of AA Company land remained slow during the 1870s, as expired grazing leases on Crown land elsewhere in the colony became available and were taken up in preference. While 1.8 million ha of NSW grazing land was taken up by settlers during that decade, the AA Company only sold an additional 1,567 ha. Sales improved in the 1880s and 1890s, with blocks varying in size from 21 acres to 433 acres which sold for between 14 shillings and 6 pence and 30 shillings per acre. Dairying began on the freehold land bordering the AA Company's land in these decades, and slowly spread to the AA Company land as blocks were sold off. Three of the earliest purchasers of land for dairying in the district were Messrs Ashworth, Fry and Henderson, dairymen from Gippsland, Victoria.¹⁰ 'Wards River Run', south of the Project area, was sold in about 1901.¹¹

The peak in AA Company land sales was reached in 1902-03, when 126,000 ha were sold; 81,000 ha of that was in one sale of most of the northern section of the AA Company grant, to the Gloucester Estate Company Limited, at 12/6 per acre.¹² Gloucester Estate Company Limited, established partly following the initiative of J.A. McKenzie, a Stroud land auctioneer, then started subdividing and selling the former AA Company land to individual settlers, most of whom took up dairying and cattle production. The southern section of the Gloucester Estate, in which the Project area is located, was subdivided as the Avon Subdivision, and included the sites that were to become Stratford and Craven Villages. Other subdivisions of the estate were auctioned between 1904 and 1908. Gloucester township grew rapidly as the centre for the new settlement areas.

⁸ Bairstow, D. 2003. *A million pounds, a million acres: The pioneer settlement of the Australian Agricultural Company*. The author, Balmain: 359.

⁹ McCalden, G. 2010. *Craven, a history 1903-2009*. the author, Craven (not paginated).

¹⁰ Gloucester Cooperative Dairy Company Limited 1955: 4.

¹¹ Ward's River –Johnson's Creek School Centenary Committee, 1972; 13.

¹² Bairstow 2003: 360, 364.

A creamery opened in Stroud in 1902, and another at Reidsdale Road, Stroud Road in 1904, called the 'Gloucester District Factory'. Mr Albert Dare ran a four horse coach to bring cream from Gloucester and Barrington to the Stroud Road factory.¹³ Another butter factory, the 'Avon and Barrington Butter Factory', was opened at Gloucester in 1905.

The first dairying settlers faced the daunting task of clearing their blocks of forest and bush, much of which was pit-sawn for building houses and sheds. A commercial sawmill, Fenwick's, also opened in Stroud during the clearing phase.

The development of saw mills, which enabled the development of a local timber industry, was greatly influenced by the advent of the North Coast Railway, which was extended from Dungog to Taree between 1911 and 1913, and runs immediately west of the Project area. Although Gloucester had always been on the land route to the north coast, the development of the Pacific Highway in the 1920's along the Bucketts Way increased its importance as a traffic route. When the Main Roads Board designated the coastal route to the east as the new Pacific Highway in 1952, the Bucketts Way reverted to a rural road.¹⁴

The Village of Stratford (immediately west of the Project area) was established when the southern section of the Gloucester Estate Company purchase, the Avon Subdivision, was auctioned. There was no village in existence to service the new close settled areas, so one was created at Stratford (so named because of its location on the Avon). On 27th November 1903 the first 37 lots in Stratford Village were auctioned in Stroud, together with 26,000 acres of farming land in 140 blocks in the upper Avon, with blocks on alluvial land around Stratford as small as 6 acres. Stratford Village was doubled in size late 1905-early 1906 by extension to the northern side.¹⁵

The experience of the Williams family exemplified the life of early small settlers around Stratford. F.G. (Frank) Williams father bought 188 acres at 'Edgmond Park' near Stratford from the Gloucester estate in 1903. Frank Williams worked from 1906 ringbarking trees on the property, and burning off the dead logs when they had dried out. He and his brother boarded with the Wilson's near the Avon River crossing, but spent much time in a bark hut on the property. Williams recalls that George Yates was butcher at Stratford in 1907-1908, where Williams bought meat, 'the pick of the cask, for threepence per pound.' George Davis built the home at 'Edgmond Park', five-rooms with two 1,000 gallon tanks, for £150, and the family came to live there in 1909, bringing their goods up from Tomago in a 6-horse dray. The country was still very forested: 'The box and stringy bark trees grew so thickly on the ridge that it was impassable in some places to either swing an axe or ride a horse through it.' There were still very many brumbies in the forested land.

¹³ Stroud Sesqui Centenary Committee. 1976. *Stroud and District Sesqui Centenary 1826-1976*. Stroud and District Historical Society: Gloucester Cooperative Dairy Company Limited, 1955. *Green gold: The story of the Gloucester Dairy Industry. 50th anniversary, 1905-1955*. Gloucester Cooperative Dairy Company Limited, Gloucester: 3; Chadban 1970: 15.

¹⁴ Hunter Development Brokerage 2006: 9.

¹⁵ McCalden 2010.

The Williams installed the second set of Simplex milking machines to be seen in the district in 1918, sending their cream by way of Billy Arnold's cart first to the Avon and Barrington Butter Factory in Gloucester, then to the Stroud Road creamery, then to Dungog when Stroud went broke, and then finally, due to restrictions during World War II (WWII), back to the Gloucester factory.¹⁶

A provisional school (requiring more than 10 but fewer than 20 children) was established at Stratford from 1907 to 1912, becoming a public school (greater than 20 children) in 1912, and remaining so today.¹⁷ In 1910 Mr Beattie was school teacher at Stratford, succeeded by Miss McDade. They and Frank William's father arranged an exchange of flags with Stratford-on-Avon, and this was unfurled by Governor Sir Gerald Strickland. Navvies working on the railway in 1911-12 had a reputation for thieving, especially of boots, and 100 of them were camped on Mr Bignell's property (later Bowen's) adjacent to Stratford, under the supervision of Mr Wilcox the contractor. 'Edgmond Park' lost seven acres reclaimed for the railway right of way.¹⁸ The railway line, and the station at Stratford, opened on 4 February 1913.

Messrs Herkes and Beecroft owned a wood mill at Coxwood railway siding. Often there were 20 carts at a time at the siding to offload wood for shipment to Sydney, the carters being paid 1/- per ton. A timber railway at Stratford brought logs from the east to a mill located south of the village (the Herkes and Beecroft mill?), using timber rails and horse power (see further description below).¹⁹

The church at Stratford was relocated from Gloucester (being originally the Gloucester River Union Church).²⁰

The Village of Craven (south-west of the Project area) similarly came into existence because of the closer settlement, in this case stimulated by the coming of the railway and the ability to export timber. The first settlers in Craven were the Blanch family, two brothers Harry and Sid buying three blocks totalling 450 acres from the Gloucester Estate Company in 1906. 'Cravens Flat' appeared as the local name on Surveyor Charles Scrivener's map in 1896, and applied to the general area around what became the village. The source of the name is not confirmed. The Yates family moved on to 675 acres 6 km down the Glen Road from Craven in 1911 ("Kimberley").²¹

J.H. Sheddon came to the area as a bridge contractor on the North Coast Railway in 1909. He bought the Gloucester sawmill in 1913, bought the former AA Company manger's house, the 'Homestead', in Gloucester that year, and set up another sawmill at Craven, his son J.P. Sheddon moving onto a house there in 1913 as manager.

¹⁶ Williams, F.G. 1968. 'Reminiscences by F.G. Williams', *Gloucester District Historical Society Journal*, 3: 17-34: pp21-28.

¹⁷ Department of School Education Library (NSW), 1993. *Government Schools of New South Wales 1848-1993*, NSW Board of School Education, Parramatta: 133.

¹⁸ McCalden 2010: 24-26.

¹⁹ Williams 1968: 27; McCalden 2010.

²⁰ Williams 1968: 32-33.

²¹ McCalden 2010.

The Craven Mill was built in 1913-14 (possibly built in partnership between Sheddon and Sir Allen Taylor), and ten cottages were built to house mill workers, forming the core of Craven Village. Allen Taylor & Co owned the Craven and Avon forest land to the east and west that would provide logs to the mill. The mill came into operation in April 1914. The mill cottages were simple four-roomed dwellings with lean-to kitchen and scullery, and one was of eight rooms, built as a boarding house, plus two better houses, one for the mill manager. Six of these cottages, including the manager's house, still stand. The mill was located 400 metres (m) behind the main row of houses and 100 m from the railway line, with a spur line running to it.²²

Government State Forests were declared at Avon and Craven in 1916 and 1917 respectively, the forester's residence being established 8 km down the Glen Road at The Glen (Lot 314) in 1917. The Sheddon family had acquired the forest blocks from Allen Taylor & Company, and sold them and the timber mills to the State Forestry Department in 1917, but J.P. Sheddon stayed on as manager of the Craven mill. A steel-railed standard gauge railway line was run into the Glen Forest in 1918-19, designed by the Public Works Department. It came into operation on 1 June 1918, and remnant landforms associated with it survive intact today (see description below). A second timber mill was constructed at the same time, coming into operation in the second half of 1918, located immediately to the south-east of the original Craven mill, with which it operated in tandem. The Glen railway line split to run each side of the two mills, and one line continued on as the main line spur line of Craven goods siding. 50 men worked at the two mills, with an output of 90,000 feet per week. Two other mills were operating beside the State Mills at Craven from 1918, built and managed by the Woods brothers, but these had ceased operation by the end of the 1920s.²³

No 1. Mill had a fire in 1920, which was put out without disastrous damage. In 1924 the government offered the Craven Mills for sale together with 200 acres freehold incorporating the village, 24 worker's cottages, 13 worker's huts and the Glen Forest railway. The Gloucester Estate Timber Co (Sheddon's) appears to have acquired it.

The Gloucester Estate Timber Co went into liquidation in 1933 and the mills at Craven and Gloucester were again offered for sale, together with 19 dwellings, 15 fronting the main road. The Glen railway with 5 miles of track, (on which there was 455 tons of rail) and a six-wheel railway engine and three table-top rail trucks were also for sale.

The two mills were bought by the Viggers company, but not the Glen railway, which was dismantled a year or two later, the engine being sent to Mackay for harbour works. Viggers continued mill operations through WWII, going into receivership in 1968, and was taken over by Allen Taylor and Co in 1969, coming full circle. The mill finally closed in 1978.²⁴

²² McCalden 2010.

²³ McCalden 2010.

²⁴ McCalden 2010.

A provisional school was opened at Craven on 18 January 1915 after lengthy local petitioning. It became a public school in 1916, and closed in 1978, the same year as the timber mill. The school building was transferred by truck to Stratford school in 1981, where it is now used as the library.²⁵

The Craven store, opened in one of the company cottages in 1913 closed in 1985 (the Post Office housed there having closed in 1979). The Union Church, built by public subscription in 1916, was sold in 2005 for residential use, but was later acquired by GCL, and now stands vacant and in poor condition.

3. OTHER HERITAGE STUDIES AND LISTINGS

Previous heritage studies covering the Project area and surrounds have included the supporting studies for the *Gloucester Local Environment Plan (LEP) 2010*, and *The Stroud-Gloucester Valley & The Vale of Gloucester—A Heritage Landscape Under Threat*²⁶.

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

- the Australian Heritage Places Inventory of the Commonwealth Department of Sustainability, Environment, Water, Population and Communities;
- the NSW State Heritage Inventory;
- *The Gloucester Shire Council Local Environmental Study 2006* (Hunter Development Brokerage, 2006);
- Gloucester LEP; and
- the National Trust Register (to 1995) and supplement (to 1997) (paper copies), and a record provided by the Trust office (for Stroud Gloucester Valley Incorporating the Vale of Gloucester).

Places with identified heritage values in the vicinity of the Project in the Gloucester LEP are:

- The Glen, Craven Logging Tramline, Glen Road, lots 284 and 311-314, DP 979573, Craven (Item I 13); and
- Avon Valley Colliery Site, Waukivory Road, Waukivory (Item I 64).

Both sites are listed in the Gloucester LEP as being of local significance.

Glen Road is immediately south of the Project area.

²⁵ Department of School Education Library (NSW), 1993: 56; McCalden 2010.

²⁶ Smith, G. 2009. *The Stroud-Gloucester Valley & The Vale of Gloucester—A heritage landscape under threat*. Barrington-Gloucester Preservation Alliance Inc, Gloucester.

The National Trust of Australia (NSW) registered the Vale of Gloucester Landscape Conservation Area in 1976, which encompassed the valley of the Avon River, Johnsons Creek, and Gloucester Rivers and includes Gloucester, Stratford and the Project area, and Stroud Road. The listing was revised and extended by the National Trust in 1981, and revised and extended again as the ‘Stroud Gloucester Valley Incorporating the Vale of Gloucester’ in March 2011. The revised and retitled register citation now extends the area further to the south and includes some additional information and photographs and the registration.²⁷ The Trust’s Register is intended to perform an advisory and educational role. The listing of a place in the Register, known as ‘classification’, has no statutory weight, and has not been replicated in the Gloucester LEP. Neither the Gloucester nor the Great Lakes LEPs recognise the listing.

A smaller portion of the National Trust’s original ‘Vale of Gloucester Landscape Conservation Area’, extending as far south as Craven, was subsequently nominated to the Register of the National Estate (RNE). This portion was referred to as the Vale of Gloucester and is currently included in the Australian Heritage Places Inventory as an indicative place, but had not been assessed by the time the RNE was effectively closed in 2004. Under amendments to the *Environment Protection and Biodiversity Conservation Act, 1999*, the RNE ceases to exist in 2012. The Vale of Gloucester has not been listed on either the National Heritage List or the NSW State Heritage Register.

Neither the original National Trust citation, *The Stroud-Gloucester Valley & The Vale of Gloucester—A Heritage Landscape Under Threat*²⁸ study nor the updated National Trust citation articulate in detail the potential heritage values of the Vale of Gloucester landscape in relation to the Project area.

²⁷ National Trust of Australia (NSW) 2011. ‘National Trust of Australia (NSW) Trust Register Listing Report, Stroud Gloucester Valley Incorporating the Vale of Gloucester, approved 30/3/2011’.

²⁸ Smith 2009.

4. HERITAGE SURVEY OF THE PROJECT AREA

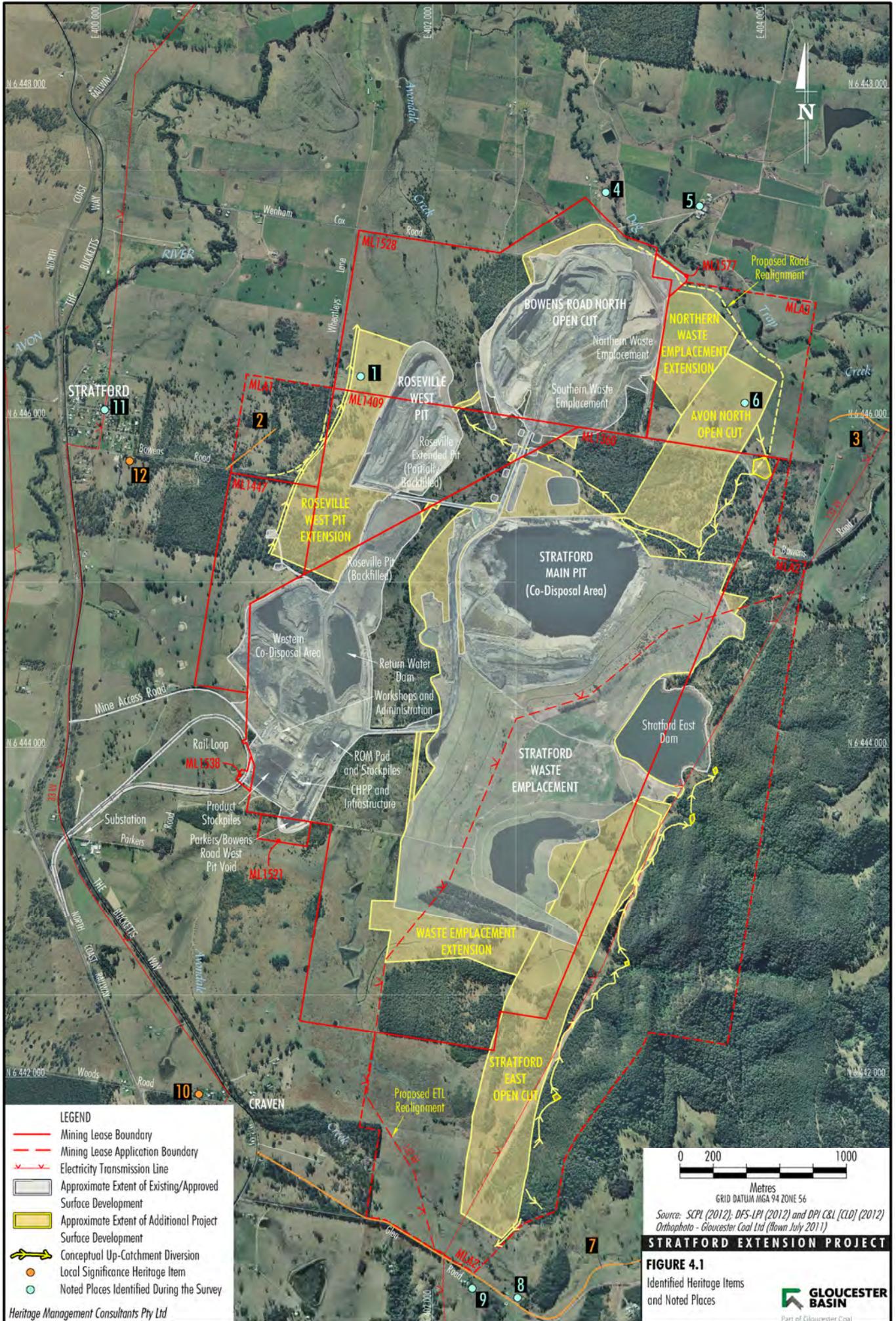
The area of each proposed extension to the open cuts and waste rock emplacements was inspected, as well as a buffer of approximately 500 m for any associated ancillary development. A single development, a farm residence and dairy, was the only built evidence of historic land use located within any of the proposed mine extension areas. The survey results are summarised in Table 1. The locations of identified places are shown on Figure 4.1.

Table 1 Places identified during the survey within or adjacent to the Project Area

	Description	Locality	Comments/assessment
1	Cottage and dairy – Wheatleys Lane	Roseville West Pit Extension (off Wheatleys Lane). 32° 6' 56.96" S, 151° 57' 23.73" E	Vacant cottage and dairy complex. No notable design, history or associations have been identified. Not of heritage significance.
2	Stratford timber railway – cutting and route #1	On north side of Bowen's Road, 600 m east of Stratford Village, extending across paddock to north-east (Portion 45, Parish Avon). 400 m west of Roseville West Pit Extension. 32° 7' 15" S, 151° 56' 52.8" E.	Part of the timber railway supplying a mill at Stratford. Of local heritage significance.
3	Stratford timber railway – cutting and route #2	Traceable in paddocks along Dog Trap Creek (Portion 293, Parish Avon). Minimum of 400 m east of Avon North Open Cut proposal. 32° 7' 07.05" S, 151° 59' 11.77" E to at least 32° 7' 16.13" S, 151° 59' 49.47" E.	Part of the timber railway supplying a mill at Stratford. Of local heritage significance.
4	House and dairy – 323 Wenham Cox Road	323 Wenham Cox Road. 300 m north of Northern Waste Emplacement. 32° 6' 19.8" S. 151° 58' 16.8" E	House occupied by mine company staff member, dairy not in use. No notable design, history or associations have been identified. Not of heritage significance.
5	Operational Dairy complex, Wenham Cox Road	Off re-aligned Wenham Cox Road. 450 m north of proposed Avon North Open Cut. 32° 6' 24.03" S. 151° 58' 41.9" E	Operational rural complex. No notable design, history or associations have been identified. Not of heritage significance.
6	Airstrip	Within and adjacent to proposed Avon North Open Cut. 32° 7' 02.88" S. 151° 58' 51.83" E (centre)	800 m long airstrip across paddocks north of Wenham Cox Road. Not of heritage significance.
7	Glen timber railway	Traceable intermittently from Craven Village to a point 6 km east. The railway ran along the alignment of the present Glen Road from a point 700 m east of the Glen Road/Bucketts Way junction to 4 km from the junction, then run into the paddock to the north where embankment and cutting can be seen clearly at 32° 9' 51.97" S. 151° 58' 24.37" E. This feature is over 700 m east of the Project area.	Sections of railway providing logs to Craven Mill. Of local heritage significance.

Table 1 Places identified during the survey within or adjacent to the Project Area (Continued)

	Description	Locality	Comments/assessment
8	Rural buildings #1, Glen Road	A weatherboard cottage, sheds and dairy located on both sides of Glen Road, 2.5 km south-east of Craven Village, and 400 m south of the proposed Stratford East Open Cut. 32° 9' 59.14" S. 151° 57' 57.70" E.	Vacant cottage and dairy complex, in poor condition. No notable design, history or associations have been identified. Not of heritage significance.
9	Rural buildings #2, Glen Road	An occupied rural house and sheds, located 200 m west of group #1 above, located on the southern side of Glen Road. 400 m south of the proposed Stratford East Open Cut. 32° 9' 56.74" S. 151° 57' 47.31" E.	Not closely inspected, but appears a typical rural smallholding of the mid-20 th century. No notable design, history or associations have been identified. Not of heritage significance.
10	Craven Village	Village of 16 cottages and associated sheds in linear arrangement along Bucketts Way and Woods Road. The Project (Stratford East Open Cut) is 1.2 km to the east and north-east of the village. Centre at 32° 9' 19.76" S. 151° 56' 46.85" E.	Remnant of at least seven 1914 cottages, related structures and the church are of historical interest and make the village. Of local heritage significance.
11	Stratford Village	Village of approximately 52 residences, a store, school, hall, church, fire station and ancillary buildings. The village is located 1 km to the west of the proposed Roseville West Pit Extension. Centre at 32° 7' 03.01" S. 151° 56' 24.92" E.	Less than half the village residences pre-date 1940s, and most are modified to varying degrees. Of historical interest, but not of heritage significance as a whole.
12	Stratford Cemetery	Stratford cemetery is located at the south-western corner of the Stratford Village grid. The cemetery is located approximately 1 km to the west of the proposed Roseville West Pit Extension. Cemetery is centred at 32° 7' 14.79" S. 151° 56' 31.34" E.	Provides evidence of the settlement of the Stratford area in the 20 th century. Of local heritage significance.



1. Cottage and Dairy - Wheatleys Lane

A vacant weatherboard cottage (with adjacent garage and sheds) and dairy are located within the Roseville West Pit Extension area, off Wheatleys Lane (Figure 4.1).



Figure 4.2
Cottage in Roseville West Pit Extension.

Source: Michael Pearson 2011



Figure 4.3
Dairy in Roseville West Pit Extension.

Source: Michael Pearson 2011

2. Stratford timber railway – cutting and route #1

The Stratford timber railway can be traced in sections along its original route from south of Stratford Village to near the original end point on Dog Trap Creek. Two sections are within 500 m of the proposed mine developments (Figure 4.1). On the north side of Bowen’s Road, 600 m east of Stratford Village, 400 m west of Roseville West Pit Extension, is a shallow cutting, which leads to a crop-marked route that can be traced on aerial images extending across the paddock to north-east (Portion 45, Parish Avon).



Figure 4.4
Stratford timber railway, section #1, showing the cutting located 600 m east of Stratford Village.

Source: Michael Pearson 2011



Figure 4.5
Stratford timber railway, section #1, marked on Google Earth image, arrow at each end.

Source: Google Earth 2011

3. Stratford timber railway – cutting and route #2

A section of the railway alignment traceable in paddocks along Dog Trap Creek (Portion 293, Parish Avon). It shows up as a levelled bench, shallow cutting and raised embankment for a distance of at least 1.1 km. Located 400 m east of the proposed Avon North Open Cut (Figure 4.1), extending east to 1.5 km from the nearest Project open cut mining area.



Figure 4.6
Stratford timber railway, section #2, showing slight embankment indicated by arrows. About centre of the map in Figure 4.7.

Source: Michael Pearson 2011



Figure 4.7
Stratford timber railway, section #2, marked on Google Earth image, on upper Dog Trap Creek.

Source: Google Earth 2011

4. House and dairy - 323 Wenham Cox Road

Weatherboard house much modified by extensions and additions. Dairy previously used as rural sheds, now not used. Located 300 m north of the extended Northern Waste Emplacement (Figure 4.1).



Figure 4.8
House at 323 Wenham Cox Road.

Source: Michael Pearson 2011

5. Operational dairy complex, Wenham Cox Road

Operational dairy and rural complex, located 450 m north of proposed Avon North Open Cut (Figure 4.1).



Figure 4.9
Dairy/sheds at 323 Wenham Cox Road.

Source: Michael Pearson 2011

6. *Airstrip*

An 800 m long unpaved airstrip across paddocks north of Wenham Cox Road. Within and adjacent to the proposed Avon North Open Cut (Figure 4.1).



Figure 4.10
Airstrip north of Wenham Cox Road. Shows as truncated rectangular area running diagonally across the image.

Source: Google Earth 2011

7. *Glen timber railway*

Traceable intermittently from Craven Village to a point 6 km east. The railway ran along the alignment of the present Glen Road from a point 700 m east of the Glen Road/Bucketts Way junction to 4 km from the junction, then run into the paddock to the north where embankment and cutting can be seen clearly at $32^{\circ} 9' 51.97''$ S. $151^{\circ} 58' 24.37''$ E. The precise alignment along Glen Road is not evident. The section along the road alignment is 300 m south of the proposed Stratford East Open Cut, while the nearest obvious earthworks on the railway are over 700 m to the east of the Project area (Figure 4.1). Further cuttings and earthworks are reported on private land to the east, but are far removed from the Project and were not surveyed for this assessment.



Figure 4.11
Glen Timber Railway alignment. The arrows indicate the start of the embankment (to left) and end of the cutting (to right). At $32^{\circ} 9' 51.97''$ S. $151^{\circ} 58' 24.37''$ E.

Source: Michael Pearson 2011

8. Rural buildings #1, Glen Road

A vacant weatherboard cottage, sheds and dairy located on both sides of Glen Road, 2.5 km south-east of Craven Village, and 400 m south of the proposed Stratford East Open Cut (Figure 4.1). In poor condition.



Figure 4.12
Cottage, rural buildings #1, Glen Road.

Source: Michael Pearson 2011



Figure 4.13
Sheds, rural buildings #1, Glen Road.

Source: Michael Pearson 2011



Figure 4.14
Former dairy, rural buildings #1, Glen Road.

Source: Michael Pearson 2011

9. *Rural buildings #2, Glen Road*

An occupied rural house and sheds, located 200 m west of group #1 (8 above), located on the southern side of Glen Road. Approximately 400 m south of the proposed Stratford East Open Cut (Figure 4.1).

10. *Craven Village*

Craven Village comprises 16 cottages and associated sheds, with two more cottages across the railway line to the west, and several nearby rural holdings to the north and east. Seven of the cottages in the village area appear to be part of the original 1914 sawmill village, being wholly in The Bucketts Way section. Some others may have original cores not visible from the road. The 1916 Union Church is also part of the early village. The sawmill site is an empty paddock, and the rail siding to it, and the Glen timber railway running eastwards through the village are visible on Google Earth and in part on the ground. The North Coast Railway line passes the village to the west. The proposed Stratford East Open Cut is approximately 1.2 km to the east and north-east of the village (Figure 4.1).

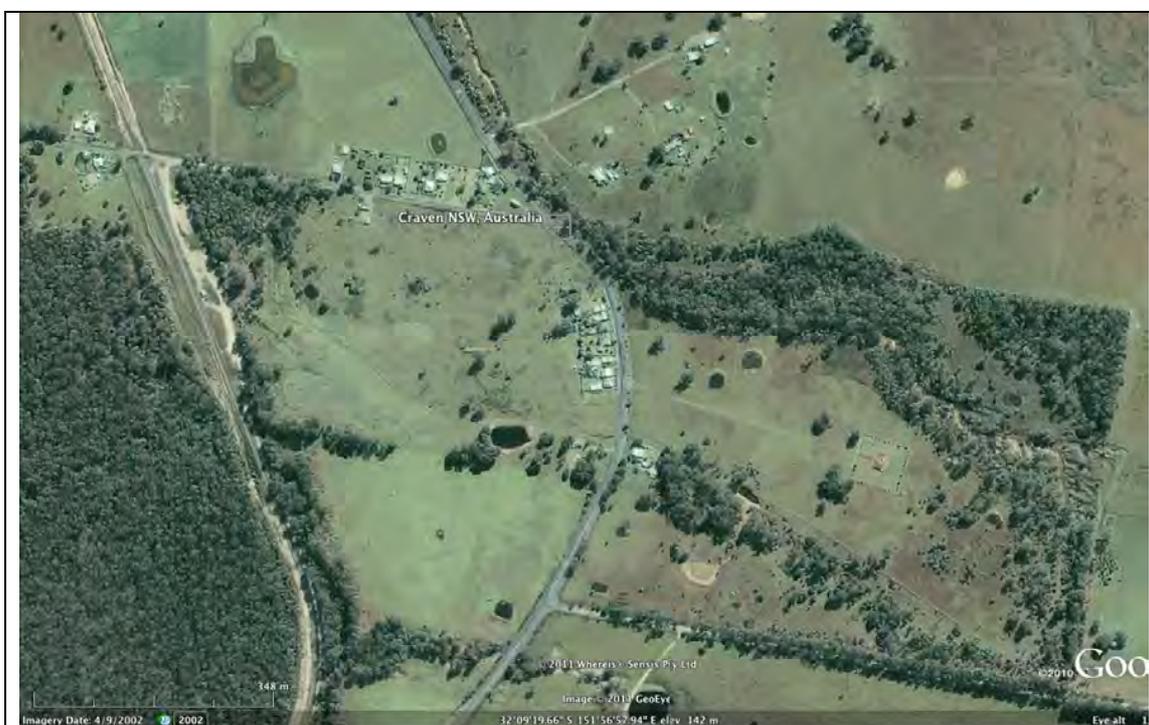


Figure 4.15

Craven Village. 1914 section on The Bucketts Way in centre of image. The Bucketts Way runs north-south, Woods Road to the west, and Glen Road to the east at the bottom of the image.

Source: Google Earth 2011 (2002 image)



Figure 4.16
Craven Village. Modified 1914 cottages each side of a more modern house on The Bucketts Way.

Source: Michael Pearson 2011



Figure 4.17
Craven Village. Modified 1914 cottage, with new cladding and infilled verandah on The Bucketts Way.

Source: Michael Pearson 2011



Figure 4.18
Craven Village. 1914 mill manager's house on The Bucketts Way.

Source: Michael Pearson 2011



Figure 4.19
Craven Village. 1916 Union church, vacant and in poor condition. At junction of Woods Road and The Bucketts Way.

Source: Michael Pearson 2011

11. Stratford Village

A village comprising approximately 60 residences, of which fewer than half appear to date from the early period of the village's development (approximately pre 1940) and five of which were built since an archived 2002 Google image. It also includes a petrol station/shop, school, hall, church, rural fire station and ancillary buildings. A recreation reserve and cemetery are part of the original village layout. Most of the early cottages have been modified to varying degrees. The village is located 1 km to the west of the proposed Roseville West Pit Extension (Figure 4.1).



Figure 4.20

Stratford Village. Bucketts Way and the North Coast Railway line run north-south to the west of the village. Bowens Road bounds the core village grid to the south.

Source: Google Earth 2011



Figure 4.21
Stratford Village. Typical streetscape, with mix of modified original houses and later residences.

Source: Michael Pearson 2011



Figure 4.22
Stratford Village. St John's Anglican Church, formerly the Gloucester River Union Church that was relocated to Stratford.

Source: Michael Pearson 2011



Figure 4.23
Stratford Village. Stratford Hall, built 1907, modified and re-clad in recent decades.

Source: Michael Pearson 2011

12. Stratford Cemetery

The cemetery was part of the original village layout and is located at the south-eastern extremity of the village and approximately 1 km to the west of the proposed Roseville West Pit Extension (Figure 4.1). The cemetery has headstones dating from at least the 1920s, reflecting the history of development of the Stratford area. The internments are divided into three denominational groupings, quite widely separated. The cemetery is well maintained.



Figure 4.24

Stratford Cemetery. On south eastern corner of the village subdivision. Well maintained and cared for.

Source: Michael Pearson 2011

5. ASSESSMENT OF THE HERITAGE SIGNIFICANCE OF IDENTIFIED ITEMS

The following summarises the assessment of heritage significance of the identified items. A more detailed statement of significance against the heritage assessment criteria for places assessed to have heritage values is provided in Attachment 1.

1. *Cottage and dairy – Wheatleys Lane*

The cottage is typical of the many such small rural residences to be seen in the Gloucester valley, and many other small settlement areas of the early-mid 20th century. The dairy, also, is typical of the many small-holder dairies in the region dating from the early-mid 20th century. There is no evidence of notable historical associations or design values of this place. Neither building, nor the buildings in combination, is assessed as having heritage significance at the local or higher level.

2. *Stratford timber railway – cutting and route #1* and

3. *Stratford timber railway – cutting and route #2*

The Stratford timber railway was a timber-railed haulage way to bring logs from the forest to the east into a sawmill south of Stratford Village on the North Coast Railway. It seems unlikely that the timber railway would have pre-dated the opening of the main railway in 1913.

The Stratford timber railway landforms can be traced in sections along its original route from the timber mill site south of Stratford Village to near the original logging camp on Dog Trap Creek, some 5.5 km to the east. Where the railway ran over gently sloping or flat land it is generally undetectable at ground level (but may show up in aerial photography). Two sections were identified in this study, east of Stratford Village, and on Dog Trap Creek, which show the nature of the tramway formation. In the section that once crossed the Project area no physical evidence of the tramway was located during the survey. Evidence in this section may have been lost due to earlier mining and associated land clearance, while in another large section evidence may have been destroyed by intensive cropping and the creation of an airstrip. The remaining sections through forested land may survive but could not be traced.

Remnants of surviving animal-powered railways are uncommon, especially outside reserved forest areas when the evidence is often lost due to agricultural improvement and other developments. The surviving sections of the railway are assessed as being of local heritage significance.

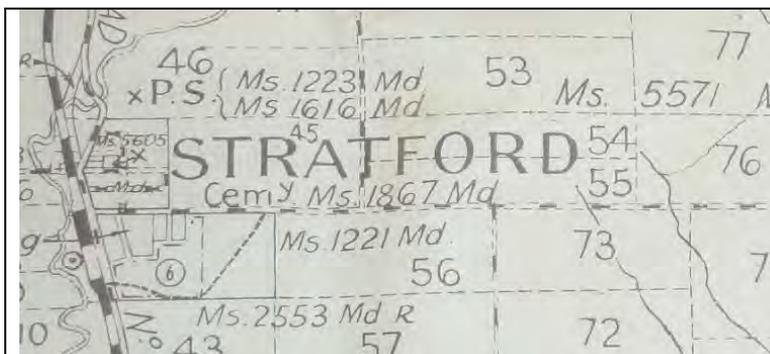


Figure 5.1

Stratford timber railway, showing alignment out of Stratford Village (dotted line). Section #1 is immediately north of where the dotted line ends.

Source: Parish Avon map (1962?)

4. House and dairy - 323 Wenham Cox Road

The cottage is of a common type, typical of the many such small rural residences to be seen in the Gloucester valley, and many other small settlement areas of the early-mid 20th century. It is also significantly modified and extended. The dairy, is typical of the many small-holder dairies in the region dating from the early-mid 20th century. There are no notable design, historical or other important associations that have been identified. The place is assessed as having no heritage significance at the local or higher level.

5. Operational dairy complex, Wenham Cox Road

The operational rural complex has had ongoing modification to meet changing needs, and has no notable design, historical or other important associations that have been identified. The place is assessed as having no heritage significance at the local or higher level.

6. Airstrip

The airstrip appears to be a relatively modern development (1990s?), and is of no heritage significance at the local or higher level.

7. Glen timber railway

The Glen railway was built in 1918-19, and appears to have operated until 1933. The rails and rolling stock were removed in the mid-1930s. The rail alignment leaving the mill site at Craven and crossing the paddock to the east is obvious in aerial imagery and on the ground. The section where the railway followed the present Glen Road reserve is not readily identifiable. Earthworks and cuttings begin at 32° 9' 51.97" S. 151° 58' 24.37" E. and are reported to extend into the forest area to the east.

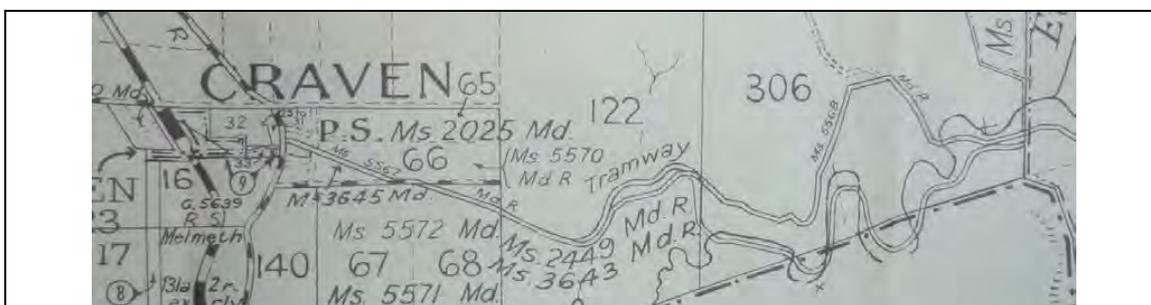


Figure 5.2
Glen timber railway, showing alignment out of Craven Village, diverting from the road easement half-way across the map, moving firstly to the north then to the south of the road alignment.
Source: Parish Avon map (1962?)

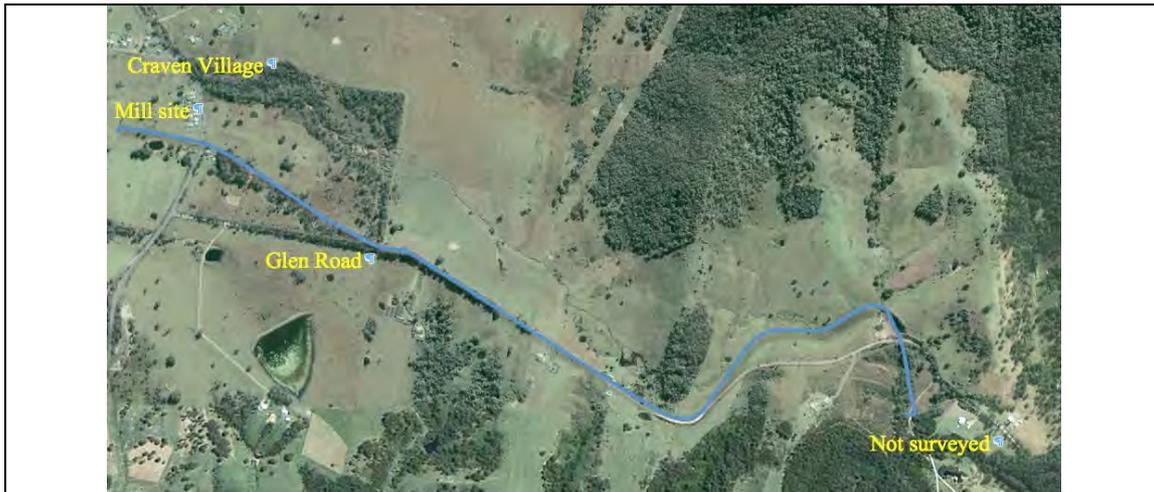


Figure 5.3

Glen timber railway, showing alignment from Craven Village, along the Glen Road easement before diverting to the north, where the first clear earthworks are located.

Source: Google Earth 2011 (2002 image)

The Glen, Craven Logging Tramline, Glen Road, lots 284 and 311-314, DP 979573, Craven, are identified on the Gloucester Shire LEP as being of local heritage significance (Item I 13). These lots are located between 7 and 12 km east of the nearest part of the Project (the Stratford East Open Cut).

8. Rural buildings #1, Glen Road

The cottage is typical of the many such small rural residences to be seen in the Gloucester valley, and many other small settlement areas of the early 20th century, and is in poor condition. The dairy, also, is typical of the many small-holder dairies in the region dating from the early-mid 20th century. There are no notable design, historical or other important associations that have been identified. The place is assessed as having no heritage significance at the local or higher level.

9. Rural buildings #2, Glen Road

While not closely inspected, the complex is typical of small holdings of the mid-20th century to be seen in the Gloucester valley. There are no notable design, historical or other important associations that have been identified. The place is assessed as having no heritage significance at the local or higher level.

10. Craven Village

The Craven Village was created to service the Craven sawmill in 1914, as was the Glen railway four years later. Seven cottages and the church relate to the early development of the village, and the mill site survives as an as-yet undisturbed archaeological site. While more than half of the buildings now making up the village are not original, the surviving layout, built form, scale and the surviving buildings make the origins of the village easily understood, and the village is assessed as having local significance as a relatively intact industrial settlement of the early 20th century. Its significance is enhanced by the survival of sections of the associated Glen timber railway (7 above).

11. Stratford Village

The Stratford Village is earlier in origin than Craven Village (being established in 1903), has always been a larger settlement, and has experienced new development and modification on a larger scale than the smaller Craven. While the village has a pleasant character, its streetscapes and built form do not have a high degree of authenticity and integrity. More than half of the residential housing in the village appears to be post WWII, and the older buildings have been modified and extended to varying degrees. Some individual buildings are of historical interest (such as the school and hall), but have been modified and added to in recent years and have lost a degree of integrity.

It is not believed that Stratford Village as a whole is of high enough heritage value to be entered in the LEP, and is not assessed as having heritage significance at the local or higher level.

12. Stratford Cemetery

The cemetery, while not outstanding aesthetically or historically if compared with other cemeteries in the region, is of local heritage significance in documenting the history of settlement of the village and immediate surrounding rural area. While the Stratford Village as a whole is not assessed as having heritage significance at the local or higher level, the Stratford Cemetery is assessed as being of local heritage significance.

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

On the basis of the historical research, the interrogation of heritage registers, review of aerial photography and on-ground inspection, there appears to be only one building group within the additional Project disturbance area. This group (the Cottage and Dairy – Wheatleys Lane) is assessed to have no heritage significance.

Twelve rural, residential and industrial developments have been recorded adjacent to the Project area, as indicated in Sections 4 and 5 above, and five of these places (Stratford timber railway – cutting and route [two sites], Glen timber railway, Stratford Cemetery, and Craven Village) are assessed as having local significance. One of these (the Glen Railway) is in part already entered in the Gloucester LEP.

The Glen timber railway and the Stratford timber railway are represented by surviving robust earthworks, either cuttings, embankments or flattened areas on level ground. These features are therefore by their nature not susceptible to indirect impacts such as blasting vibration.

The identified remaining features on the Stratford railway alignment are located 200 m and more from the Project disturbance areas, and the nearest obvious physical remains of the Glen railway alignment are over 700 m from the Project open cuts. It is extremely unlikely that these remnant landform features would be impacted by mining activity within the Project area.

Ancillary Project developments such as the realignment of the existing 132 kV electricity transmission line to the south-west of the Stratford East Open Cut have some potential to impact on remnant landforms associated with the Glen railway. However, the Glen railway would be avoided in the design of individual electricity transmission tower sites.

While no obvious physical features are visible along the section of Glen Road historically shared with the Glen railway, this section of road comes to within 300 m of the Project area.

Craven Village is located to the south-west of the Project and would not be directly impacted by mining activities. There is the potential, however, for other impacts on the village, as many of the village residential blocks are now owned by GCL. The company does, however, have a commitment to maintain company owned buildings and residences (whilst owned by GCL) to a standard consistent with the condition of the building/residence when acquired by GCL, as a component of its corporate governance.

There is also some limited potential for indirect blasting related impacts on Craven Village (i.e. associated with blast vibration), however, SLR Consulting (2012) conclude that blast vibration resulting from the Project would be less than the relevant building damage criteria at all buildings within Craven Village.

The Stratford cemetery is on the outskirts of the village to the west of the Project and would not be directly impacted by mining activities. SLR Consulting (2012) conclude that blast vibration resulting from the Project would be less than the relevant building damage criteria at all buildings within Stratford Village and at the Stratford cemetery (Appendix C to the EIS).

The Stroud Gloucester Valley Incorporating the Vale of Gloucester has been considered by the National Trust to have some cultural landscape value. While a landscape analysis has not been a part of this Non-Aboriginal Heritage Assessment, it is possible to indicate the general likely impact of the proposal on the basis of the values identified in the Trust citation.

The National Trust citation suggests the landscape values of the identified area relate to its history, particularly the AA Company occupation. However, the pre-existing natural character of the area described in the National Trust citation does not appear to have applied uniformly to the Project area (and was certainly much altered by late 19th and early 20th century occupation), and the assertion that the current settlement pattern of small villages along The Bucketts Way reflects AA Company origins is not born out by the historical evidence.

The Project area sits in the Gloucester valley, north of Wards Rivers and south of Waukivory Creek. Historically, the valley in the Project area appears to have been largely wooded during the AA Company period, and was only cleared for dairying in the early 20th century. It seems unlikely that the cultural landscape of the Stratford area today could be claimed to reflect either the pre-existing natural landscape nor the historical landscape relating to the operations of the AA Company. In addition, the post-mine rehabilitation of the land already carried out on existing Stratford mine landforms (e.g. Stratford Waste Emplacement) would suggest that the final visual outcome would be little different from that of the adjacent post-AA Company rural landscape.

In the absence of a more definitive statement of landscape heritage values in the Stratford area, it is not warranted for this study to make any further assessment of potential impacts on landscape values. It is noted that a separate Visual Assessment for the Project has been completed and is presented as Appendix O to the EIS.

7. ASSESSMENT OF THE CUMULATIVE EFFECTS OF THE PROJECT

Consideration has been given to the potential cumulative impacts of the Project on non-Aboriginal heritage values in the context of other major developments in the region, and in particular the adjacent AGL Gloucester Gas Project, the DCM located some 20 km to the south and Gloucester Resources Limited Rocky Hill Coal Project located to the north of the Project.

On the basis of the information presented in Sections 2 to 6 of this report, there would not appear to be any material Project effects on non-Aboriginal heritage values and therefore the Project would not materially contribute to local or regional cumulative effects on non-Aboriginal heritage.

8. DEVELOPMENT OF MITIGATION MEASURES

While the remains of the Stratford and Glen railways are not within the direct Project disturbance areas, any associated ancillary infrastructure developments such as the realignment of the 132kV electricity transmission line and road alignments should be designed to avoid any impact on the identified sites where practicable.

Any future upgrade of Glen Road immediately south of the Project area (e.g. by Gloucester Council) should recognise the road easement as the former alignment of the Glen railway by, where practicable, retaining the current alignment and including interpretive signage regarding the railway.

Craven Village would not be directly impacted by Project mining activities, but as the GCL owns large parts of the village, there is the potential for indirect impacts in the event that some buildings are not occupied for extended periods of time, and suitable maintenance of unoccupied building is not undertaken. It is recommended that SCPL develop a brief statement of intent or master plan to help guide its management of the village area. This plan would formalise the company's commitment to maintain GCL-owned buildings within the village to a standard consistent with the condition of the building/residence when acquired by GCL and to facilitate occupation of the buildings, if in a suitable condition.

9. CONCLUSIONS

The Stratford railway and Glen railway, identified as having non-Aboriginal heritage value, are at some distance from the major Project disturbance areas, and are of a nature that greatly reduces any potential for adverse impact from mining activities.

The Craven Village and Stratford Village are at some distance from the Project area, but there is some potential for indirect impacts, which should be mitigated by adequate planning and monitoring and management of Project blasting.

The identified cultural landscape values of the Stroud Gloucester Valley Incorporating the Vale of Gloucester in the National Trust Registration in relation to the Project area have not been clearly articulated, and have not been recognised by any statutory heritage listing process. On this basis, further consideration of Project impacts on the identified cultural landscape values of the valley in this report is not warranted. Notwithstanding, a description of the visual character of the Project, including the Vale of Gloucester, is provided in the Visual Assessment (Appendix O of the EIS). It is noted however, that the existing rehabilitated mine landforms at Stratford are generally well integrated and once revegetated look very similar to the surrounding un-mined lands.

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ATTACHMENT 1

DESCRIPTION OF ITEMS OF HERITAGE SIGNIFICANCE WITHIN THE
PROJECT AREA

The following citations are for the five places assessed as having local significance. In terms of the New South Wales (NSW) Heritage Office guidelines, local heritage items are those of significance to the local government area. The criteria each place is assessed as satisfying at the local level is indicated below. No places of higher (regional or state) significance were identified in the Stratford Extension Project (the Project) area and surrounds.

The places assessed as having local significance are:

*Site 2. Stratford timber railway – cutting and route #1
and*

Site 3. Stratford timber railway – cutting and route #2

Site 7. Glen timber railway

Site 10. Craven Village

Site 12. Stratford Cemetery

**SITE 2. STRATFORD TIMBER RAILWAY – CUTTING AND ROUTE #1
and
SITE 3. STRATFORD TIMBER RAILWAY – CUTTING AND ROUTE #2**

2.1 History

The Stratford timber railway was a timber-railed haulage way to bring logs from the forest to the east into a sawmill south of Stratford Village on the North Coast Railway. It seems unlikely that the railway would have pre-dated the opening of the main railway in 1913.

2.2 Physical description

The Stratford timber railway can be traced in sections along its original route from the timber mill site south of Stratford Village to near the original logging camp on Dog Trap Creek, some 5.5 kilometres (km) to the east. Where the railway ran over gently sloping or flat land it is generally undetectable at ground level (but may show up in aerial photography). Two sections were identified in this study, east of Stratford Village, and on Dog Trap Creek, which show the nature of the tramway formation. In the section that once crossed the Project area no physical evidence of the tramway was located during the survey. Some of the evidence in this section has potentially been lost because of earlier mining and associated land clearance, while another large section has potentially been impacted by both intensive cropping and the creation of an airstrip. The remaining sections through forested land could not be traced.

The two surviving Stratford timber railway sections are within 500 metres (m) of the proposed Project developments. Cutting and route #1 on the north side of Bowen's Road, 600 m east of Stratford Village, 400 m west of Roseville West Extension Pit, is a shallow cutting, which leads to an at-grade crop-marked route that can be traced on aerial images extending across the paddock to the north-east (Portion 45, Parish Avon).

Cutting and route #2 is a section of the railway alignment traceable in paddocks along Dog Trap Creek (Portion 293, Parish Avon). It shows up as a levelled bench, shallow of the proposed Avon North Open Cut, extending east to 1.5 km from the Project. The railway is reported to run east to a former logging camp site, but the site, well beyond the Project area, was not accessible during the survey.

2.3 Location

Cutting and route #1 is located on the north side of Bowen's Road, 600 m east of Stratford Village, extending across paddock to north-east (Portion 45, Parish Avon). 400 m west of Roseville West Pit Extension. 32° 7' 15" S, 151° 56' 52.8" E.

Cutting and route #2 is traceable in paddocks along Dog Trap Creek (Portion 293, Parish Avon). Minimum of 400 m east of the proposed Avon North Open Cut. 32° 7' 07.05" S, 151° 59' 11.77" E to at least 32° 7' 16.13" S, 151° 59' 49.47" E.

2.4 Physical condition

The surviving sections of railway remnant landforms are disturbed to varying degrees by soil erosion and physical disturbance, such as by farm tracks. Small sections of the eastern Cutting and route #2 demonstrate the likely original form of the track bed, while most other sections only survive to the extent that the railway route can be traced through the landscape.

2.5 Heritage Assessment Criteria

Criterion A: an item is important in the course, or pattern, of NSW's cultural or natural history;

The Stratford timber railway remnants demonstrate the pattern of small timber tramways used during the 19th and 20th centuries to transport logs from forest areas to timber mills. The surviving sections of the railway remnant landforms are important at a local level as evidence of that phase in the course and pattern of NSW's history.

Criterion E: an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history;

The railway remnant landforms (i.e. benches, cuttings and embankments) have a minor potential for providing new information of local interest about the pattern of settlement and exploitation of the local area.

Criterion F: an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history;

Remnants of surviving animal-powered railways are uncommon, especially outside reserved forest areas, the evidence often being lost due to agricultural improvement and other developments. The surviving sections of the railway are assessed as being uncommon and endangered at the local level.

2.6 Statement of significance

The Stratford timber railway remnants demonstrate the pattern of small timber tramways used during the 19th and 20th centuries to transport logs from forest areas to timber mills. The surviving sections of the railway remnant landforms are important at a local level as evidence of that phase in the course and pattern of NSW's history. The potential exists to expand the local understanding through research of the railway remains and its history.

Remnants of surviving animal-powered railways are uncommon, especially outside reserved forest areas, the evidence often being lost due to agricultural improvement and other developments. The surviving sections of the railway are assessed as being uncommon and endangered at the local level.

SITE 7. GLEN TIMBER RAILWAY

7.1 History

The Glen railway was built in 1918-19, and appears to have operated until 1933. The rails and rolling stock were removed in the mid-1930s. The rail alignment leaving the mill site at Craven Village and crossing the paddock to the east is obvious in aerial imagery and on the ground. The section where the railway followed the present Glen Road reserve is not readily identifiable. Earthworks and cuttings commence east of the Project area and are reported to extend into the forest area further to the east (into land not accessed during this survey).

7.2 Physical description

The railway remnant landforms are traceable intermittently from Craven Village to a point 6 km east. The railway ran along the alignment of the present Glen Road from a point 700 m east of the Glen Road/Bucketts Way junction to 4 km from the junction, then run into the paddock to the north where embankment and cutting can be seen clearly at 32° 9' 51.97" S. 151° 58' 24.37" E. The precise alignment along Glen Road is not evident. The section along the road alignment is 300 m south of the proposed Stratford East Open Cut, while the nearest obvious earthworks on the railway are over 700 m to the east of the Project area. Further cuttings and earthworks are reported on private land to the east, but are far removed from the Project area and were not surveyed.

The visible railway alignment consists of short sections of cut and fill side-cuttings, raised embankments, and cuttings through ridges. Where the rail bed ran across level ground it is usually not visible.

The Glen, Craven Logging Tramline, Glen Road, lots 284 and 311-314, DP 979573, Craven, are identified on the Gloucester Shire LEP as being of local heritage significance (Item I 13). These lots are located between 7 and 12 km east of the nearest part of the Project area (the Stratford East Open Cut).

7.3 Location

Traceable intermittently from Craven Village to a point 6 km east. The railway ran along the alignment of the present Glen Road from a point 700 m east of the Glen Road/Bucketts Way junction to 4 km from the junction, then runs into the paddock to the north where an embankment and cutting can be seen clearly at 32° 9' 51.97" S. 151° 58' 24.37" E. This feature is over 700 m east of the Project area. Further cuttings and earthworks are reported on private land further to the east, but are far removed from the Project area and were not surveyed for this assessment.

7.4 Physical condition

The section immediately out of Craven is evident in the landscape as a clearing through the treed landscape. Where the tramway followed the Glen Road alignment it cannot be traced. The surviving sections of railway remnant landforms 4 km from Craven are disturbed to varying degrees by soil erosion and physical disturbance, such as by farm tracks and stream erosion, but can be clearly seen from Glen Road.

7.5 Heritage Assessment Criteria

Criterion A: an item is important in the course, or pattern, of NSW's cultural or natural history;

The Glen railway remnants demonstrate the pattern of small timber tramways used during the 19th and 20th centuries to transport logs from forest areas to timber mills. The surviving sections of the railway are important at a local level as evidence of that phase in the course and pattern of NSW's history.

Criterion E: an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history;

The railway remnants have a minor potential for providing new information of local interest about the pattern of settlement and exploitation of the Craven area.

Criterion F: an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history;

The Glen railway as an example of a long-lived timber railway is uncommon in the region and is locally significant as a result.

7.6 Statement of significance

The Glen railway remnants demonstrate the pattern of small timber tramways used during the 19th and 20th centuries to transport logs from forest areas to timber mills. The surviving sections of the railway remnant landforms are important at a local level as evidence of that phase in the course and pattern of NSW's history. The potential exists to expand the local understanding through research of the railway remains and its history.

The Glen railway as an example of a long-lived timber railway is uncommon in the region and is locally significant as a result.

The Glen, Craven Logging Tramline, Glen Road, lots 284 and 311-314, DP 979573, Craven, are identified on the Gloucester Shire LEP as being of local heritage significance (Item I 13). These lots are located between 7 and 12 km east of the nearest part of the Project area (the Stratford East Open Cut), and do not include the items recorded in this survey.

SITE 10. CRAVEN VILLAGE

10.1 History

The Craven Village was created to service the Craven sawmill in 1914, as was the Glen railway four years later (see Section 2.2 of the report for a fuller history). Seven cottages and the church relate to the early development of the village, and the mill site survives as an as-yet undisturbed archaeological site. While more than half of the buildings now making up the village are not original, the surviving layout, built form, scale and the surviving buildings make the origins of the village easily understood.

10.2 Physical description

Craven Village comprises 16 cottages and associated sheds, with two more cottages across the railway line to the west, and several nearby rural holdings to the north and east. Seven of the cottages in the village area appear to be part of the original 1914 sawmill village, being wholly in the Bucketts Way section. Some others may have original cores not visible from the road. The 1916 Union Church is also part of the early village. The sawmill site is an empty paddock, and the rail siding to it, and the Glen timber railway running eastwards through the village are visible on aerial images and in part on the ground. The North Coast Railway line passes the village to the west. The Project Stratford East Open Cut is 1.2 km to the east and north-east of the village.

10.3 Location

Village of 16 cottages and associated sheds in linear arrangement along Bucketts Way and Woods Road. The Project Stratford East Open Cut is 1.2 km to the east and north-east of the village. Centre of the village is at 32° 9' 19.76" S. 151° 56' 46.85" E.

10.4 Physical condition

The cottages are in fair to good condition. The church is in poor condition. The timber mill site and associated rail sidings are as yet undeveloped.

10.5 Heritage Assessment Criteria

Criterion A: an item is important in the course, or pattern, of NSW's cultural or natural history;

The Craven Village and associated timber mill demonstrate the opening up of the Gloucester Valley to more intensive exploitation through forestry and dairying with the coming of the State railway in 1913. The intact form of the industrial village layout and its remaining cottages illustrate the course and pattern of local development in the Gloucester valley.

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;

The village is closely associated with the Sheddon family, one of the pioneer families of the local area.

Criterion D: an item has strong or special associations with a particular community or cultural group in NSW for social, cultural or spiritual reasons;

The Village of Craven and the associated Glen Forest are valued for their strong associations with a number of the early settler families, descendants of whom still reside in the area.

Criterion G: an item is important in demonstrating the principal characteristics of a class of NSW's

- cultural or natural places; or
- cultural or natural environments.

The Village of Craven is of note in the local area as reflecting its 'company town' form, with cottages of similar design along the main road.

10.6 Statement of significance

The Craven Village and associated timber mill demonstrate the opening up of the Gloucester Valley to more intensive exploitation through forestry and dairying with the coming of the State railway in 1913. The intact form of the industrial village layout and its remaining cottages illustrate the course and pattern of local development in the Gloucester valley. The village's significance is enhanced by the survival of sections of the associated Glen timber railway. The Village of Craven is of note in the local area as reflecting its 'company town' form, with cottages of similar design along the main road.

The village is closely associated with the Sheddon family, one of the pioneer families of the local area, and Craven and the associated Glen Forest are valued for their strong associations with a number of other early settler families, descendants of whom still reside in the area.

SITE 12. STRATFORD CEMETERY

12.1 History

The Village of Stratford was established when the southern section of the Gloucester Estate Company purchase, the Avon Subdivision, was auctioned in 1903. There was no village in existence to service the new close settled areas, so one was created at Stratford (so named because of its location on the Avon). On 27th November 1903 the first 37 lots in Stratford Village were auctioned in Stroud, together with 26,000 acres of farming land in 140 blocks in the Upper Avon, with blocks on alluvial land around Stratford as small as 6 acres. Stratford Village was doubled in size in late 1905-early 1906 by extension to the northern side. Other subdivisions of the estate were auctioned between 1904 and 1908.

The Stratford cemetery was developed to service the growing local community and has headstones dating from at least the 1920s, reflecting the history of development of the Stratford area.

12.2 Physical description

The cemetery occupies a large fenced paddock, with interments divided into three denominational groupings, quite widely separated by mown grass.

12.3 Location

Stratford cemetery is located at the south-western corner of the Stratford Village grid, adjacent to Bowens Road. The cemetery is located approximately 1 km to the west of the proposed Roseville West Pit Extension. Cemetery is centred at 32° 7' 14.79" S. 151° 56' 31.34" E.

12.4 Physical condition

The cemetery is well maintained, with largely intact headstones set in mown grass.

12.5 Heritage Assessment Criteria

Criterion A: an item is important in the course, or pattern, of NSW's cultural or natural history;

The Stratford Cemetery is locally significant as a record of the development of the Stratford area from the early 20th century, and reflects the history of the adjacent village.

Criterion D: an item has strong or special associations with a particular community or cultural group in NSW for social, cultural or spiritual reasons;

The Stratford Cemetery is valued for its strong associations with a number of the early settler families, descendants of whom still reside in the area.

12.6 Statement of significance

While not outstanding aesthetically or historically if compared with other cemeteries in the region, the Stratford cemetery is of local heritage significance in documenting the history of settlement of the village and immediate surrounding rural area from the early 20th century. While the Stratford Village as a whole is not assessed as having heritage significance at the local or higher level, the Stratford Cemetery is assessed as being of local significance.