



Centennial Coal



Historic Heritage Management Plan

Northern Region

July 2018

Table of Contents

1	BACKGROUND	1
1.1	INTRODUCTION	1
1.2	PURPOSE	1
1.3	INTERACTION OF REGIONAL MANAGEMENT PLANS AND EXTRACTION PLANS.....	3
2	LEGISLATION AND GUIDELINES.....	5
2.1	STATE LEGISLATION	5
2.1.1	<i>Heritage Act 1977 (as amended).....</i>	<i>5</i>
2.1.2	<i>Environmental Planning & Assessment Act 1979.....</i>	<i>5</i>
2.1.3	<i>National Parks and Wildlife Act 1974.....</i>	<i>5</i>
2.2	STATUTORY PLANNING & MANAGEMENT DOCUMENTS.....	5
2.2.1	<i>Statutory Planning Documents.....</i>	<i>6</i>
2.3	BEST PRACTISE MANAGEMENT HISTORIC HERITAGE.....	6
2.3.1	<i>The Burra Charter.....</i>	<i>7</i>
2.3.2	<i>OEH Guidelines</i>	<i>7</i>
3	HISTORIC HERITAGE CONTEXT FOR NORTHERN REGION.....	9
3.1	EARLY LAND GRANTS AND TOWN DEVELOPMENT	9
3.2	TIMBER GETTING	9
3.3	COAL MINING AND COAL POWER.....	10
3.4	DEFENCE	10
4	HISTORIC HERITAGE SITES WITHIN NORTHERN REGION	11
5	HISTORIC HERITAGE ASSESSMENT	13
5.1	HERITAGE IMPACT ASSESSMENT PROCEDURE.....	13
5.1.1	<i>Heritage Impact Assessment where land was previously not accessible</i>	<i>13</i>
5.2	HERITAGE ACT APPROVALS PROCEDURE	14
5.2.1	<i>State Heritage</i>	<i>14</i>
5.2.2	<i>Locally significant archaeological sites.....</i>	<i>14</i>
6	HISTORIC HERITAGE MANAGEMENT.....	15
6.1	QUALIFICATIONS FOR ARCHIVAL RECORDING	15
6.2	ARCHIVAL RECORDING REQUIREMENTS	15
6.3	HERITAGE SITES MONITORING PROGRAM	15
6.3.1	<i>Extraction Plan Historic Heritage Monitoring Program</i>	<i>15</i>
6.3.2	<i>Other Historic Heritage Monitoring Programs.....</i>	<i>15</i>
6.4	CONTINGENCY PLAN	17
6.5	REPORTING	17
6.5.1	<i>Annual Review.....</i>	<i>17</i>
6.6	INCIDENTS, COMPLAINTS AND EXCEEDANCES.....	17
6.6.1	<i>Incidents</i>	<i>17</i>
6.6.2	<i>Community enquiries or complaints.....</i>	<i>18</i>
6.6.3	<i>Non-compliance notification procedure.....</i>	<i>18</i>
6.7	IDENTIFICATION OF PREVIOUSLY UNKNOWN HERITAGE SITES OR SKELETAL REMAINS	18
6.7.1	<i>Heritage Sites</i>	<i>18</i>
6.7.2	<i>Skeletal Remains</i>	<i>20</i>
7	ROLES AND RESPONSIBILITIES	21
7.1	PENALTIES AND CONSEQUENCES FOR NON-COMPLIANCE	21
7.1.1	<i>Heritage Act 1977.....</i>	<i>21</i>
7.1.2	<i>Environmental Planning and Assessment Act 1979</i>	<i>22</i>
7.2	INDUCTIONS	24
7.3	DOCUMENT CONTROL AND REVIEW	24
8	BIBLIOGRAPHY.....	26

List of Figures

FIGURE 1 - CENTENNIAL NORTHERN HOLDINGS	2
FIGURE 2 - INTERACTION OF REGIONAL MANAGEMENT PLANS AND EXTRACTION PLANS.....	4
FIGURE 3 - NORTHERN HISTORIC HERITAGE SITES	12
FIGURE 4 - MONITORING AND MANAGEMENT FLOWCHART FOR UNDERGROUND MINING ACTIVITIES	16
FIGURE 5 - FLOW CHART PROTOCOL FOR UNEXPECTED FINDS	19
FIGURE 6 - CONTINUAL REVISION OF THE HISTORIC HERITAGE MANAGEMENT PLAN (HHMP) PROCEDURE	25

List of Tables

TABLE 1 NORTHERN REGION HISTORIC HERITAGE SITES WITHIN COLLIERY HOLDINGS	11
TABLE 2 - ROLES AND RESPONSIBILITIES OF PERSONNEL INVOLVED IN THE HHMP.....	23

List of Attachments

Attachment 1 Awaba Colliery	
Attachment 2 Mandalong Mine	
Attachment 3 Myuna Colliery	
Attachment 4 Newstan Mine	
Attachment 5 Northern Coal Services	
Attachment 6 Consultation Log	
Attachment 6A Consultation Comments	

DOCUMENT CONTROL

DOCUMENT DETAILS	Name:		Northern Region Historic Heritage Management Plan
	Author:		Tessa-Boer Mah (RPS)
	Revision No.:		2
	Document Status		Final
APPROVAL DETAILS	Revision No.	Trigger	Details of change
	1	SSD 5144 Approval & SSD 5145 Approval	
	2		Inclusion of Awaba, Newstan and Myuna

Acronyms and Definitions

ACHMP	Northern Region Aboriginal Cultural Heritage Management Plan
Centennial	Centennial Coal Pty Limited
CCCC	Central Coast City Council
CMP	Conservation Management Plan
DPE	Department of Planning and Environment
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EIS	EIS
Environmental Impact Statement	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
Heritage Item	An item as defined under the Heritage Act 1977
Heritage Act	<i>Heritage Act 1977</i>
HIS	Heritage Impact Statement
HHMP	Historic Heritage Management Plan
IHO	Interim Heritage Order
NPW Act	<i>National Parks and Wildlife Act 1974</i>
LGA	Local Government Area
LEP	Local Environmental Plan
LMCC	Lake Macquarie City Council
LMHS	Lake Macquarie Heritage Study
OEH	NSW Office of Environment and Heritage
Secretary	Secretary of the Department of Planning and Environment
SHR	State Heritage Register

1 BACKGROUND

1.1 Introduction

Centennial Coal Company (Centennial) is a coal mining company supplying thermal and coking coal to the domestic and export markets. Centennial is a major fuel supplier to the New South Wales energy industry, fuelling approximately 40% of the State's coal-fired electricity.

Centennial is one of the largest underground coal producers in NSW and now, as part of Banpu, a member of the largest independent pan-Asian coal group. Centennial's northern operations include Awaba Colliery, Newstan Colliery, Northern Coal Services, Myuna Colliery and Mandalong Mine.

1.2 Purpose

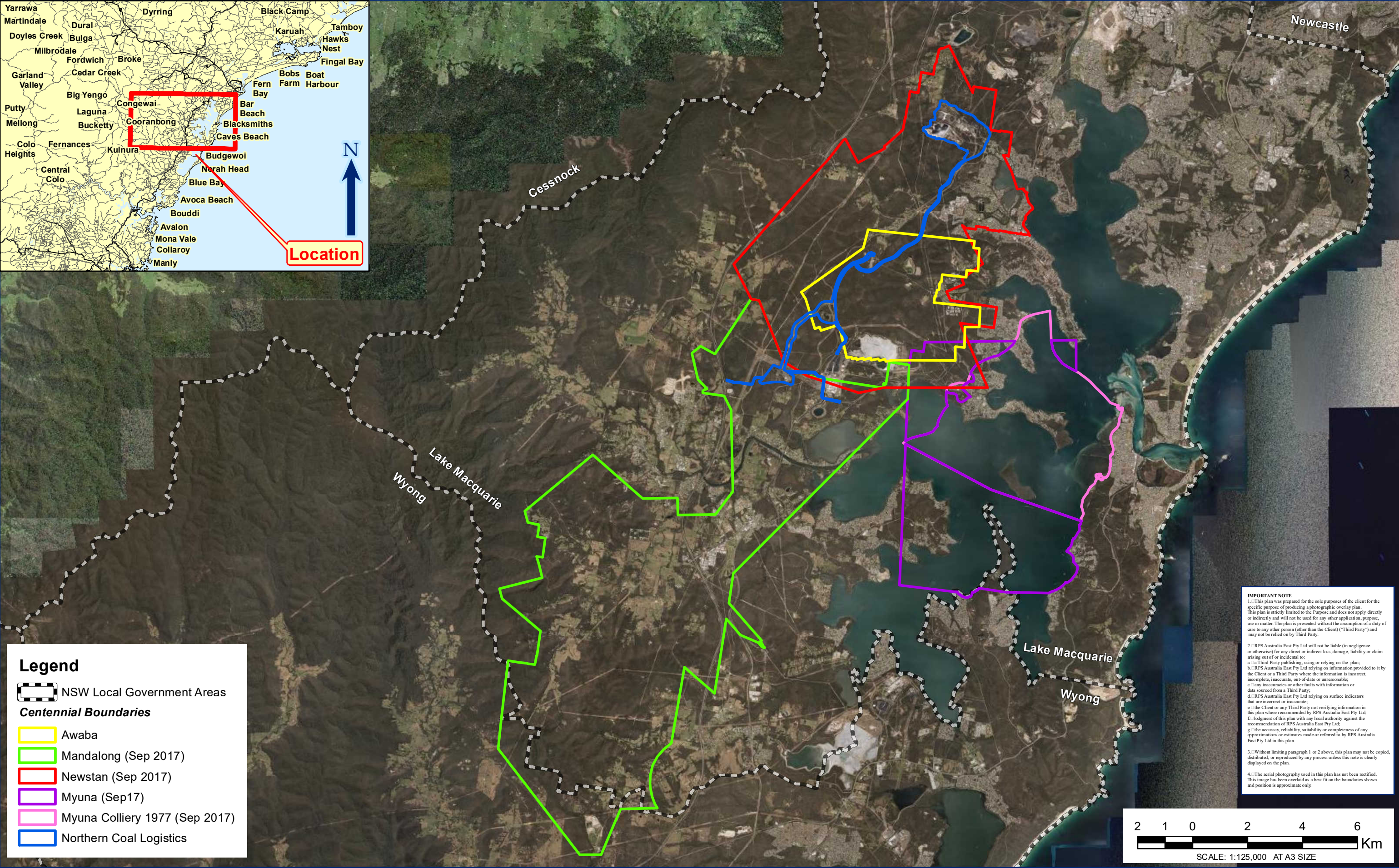
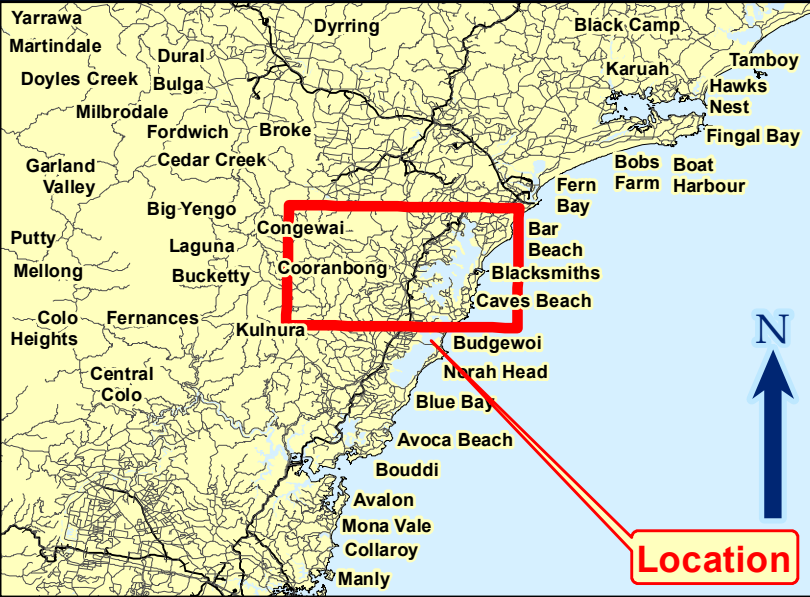
This Historic Heritage Management Plan (HHMP) provides a consistent approach to Centennial's management of historic heritage identification, recording, management and consultation. This HHMP covers historic heritage protected under the NSW Heritage Act 1977. Aboriginal heritage is addressed in Centennial's Northern Holdings Aboriginal Cultural heritage Management Plan (ACHMP).

This HHMP addresses Centennial's northern operations which include:

- Awaba Colliery (Attachment 1);
- Mandalong Mine (Attachment 2);
- Myuna Colliery (Attachment 3);
- Newstan Mine (Attachment 4); and
- Northern Coal Services (Attachment 5).

This HHMP includes a Consultation Log (Attachment 6) and demonstration of consultation outcomes in Consultation Comments (Attachment 6A).

Figure 1 identifies the location and extent of each of Centennial's operations located within the northern region. Individual heritage items are included in Site Specific Attachments.



Legend

NSW Local Government Areas

Centennial Boundaries

Awaba

Mandalong (Sep 2017)

Newstan (Sep 2017)

Myuna (Sep17)

Myuna Colliery 1977 (Sep 2017)

Northern Coal Logistics

IMPORTANT NOTE

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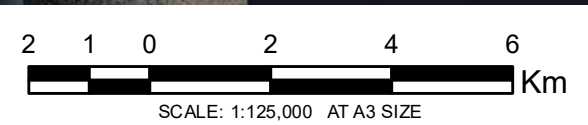
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1.3 Interaction of Regional Management Plans and Extraction Plans

Each of Centennial's operations operate under an Environmental Management Strategy. These Environmental Management Strategies identify Environmental Management Plans required including:

- Regional Environmental Management Plans;
- Operational Environmental Management Plans; and
- Operational Extraction Plan and Sub-Plans.

The Regional Environmental Management Plan, using a regional framework for consistency, identifies baseline monitoring, compliance monitoring, adaptive management, reporting and review processes to be adopted across the operations.

Extraction Plans and Sub-Plans required under the Mining Act 1992 are constrained to a mining area and specific to requirements outlined in the Extraction Plan Guidelines (NSW Department of Planning and Environment 2015). As such, each Sub-Plan required by the Extraction Plan developed for Centennial operations will specifically include:

- Site specific baseline information;
- Updated subsidence predictions on relevant surface features;
- Performance measures for relevant surface features;
- Trigger Action Response Plan (TARP);
- Adaptive Management Approach; and
- Any additional monitoring reporting and review requirements not addressed by the Regional Environmental Management Plan.

The specific Regional Environmental Management Plan and Extraction Plan Sub-Plan are interrelated and the plans will reference or duplicate sections where relevant for the purpose of maintaining consistency (**Figure 2**).

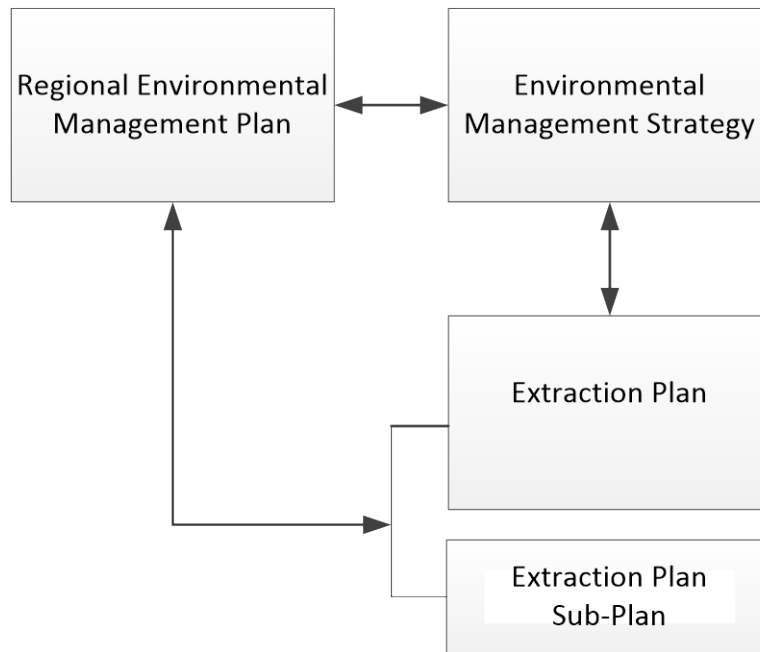


Figure 2 - Interaction of Regional Management Plans and Extraction Plans

2 LEGISLATION AND GUIDELINES

2.1 State Legislation

2.1.1 Heritage Act 1977 (as amended)

Historical archaeological relics, buildings, structures, archaeological deposits and features are protected under the *Heritage Act 1977* (and subsequent amendments) and may be identified on the State Heritage Register (SHR) or by an active Interim Heritage Order.

The Heritage Council of NSW, constituted under the *Heritage Act 1977*, is appointed by the Minister and is responsible for heritage in NSW. The Council reflects a cross-section of community, government and conservation expertise with the NSW Heritage Division being the operational arm of the Council.

2.1.2 Environmental Planning & Assessment Act 1979

The *Environmental Planning & Assessment Act 1979* (EP&A Act) regulates a system of environmental planning and assessment for NSW. Land use planning requires that environmental impacts are considered, including the impact on cultural heritage. Assessment documents prepared to meet the requirements of the EP&A Act including Reviews of Environmental Factors, Environmental Impact Statements and Environmental Impact Assessments, should address cultural heritage where relevant. Statutory planning documents such as Local Environment Plans and State Environmental Planning Policies typically contain provisions for heritage.

2.1.3 National Parks and Wildlife Act 1974

Amongst other matters, the *National Parks and Wildlife Act 1974* (NPW Act) provides for the reservation, care and management of various types of protected natural landscapes including State Conservation Areas, National Parks and nature reserves. The preparation of a Plan of Management for protected areas is required and becomes a statutory document under the NPW Act. Once the Minister has adopted a plan, the plan must be carried out and no operations may be undertaken in relation to the lands to which the plan relates unless the operations are in accordance with the plan.

2.2 Statutory Planning & Management Documents

Each local council has Local Environmental Plan (LEP) which is the statutory planning document containing clauses which set controls and requirements for development proposals and guide councils' decisions. Within the LEP (Schedule 5) is a list of local heritage items within the Local Government Area (LGA).

The Northern Region is primarily located within Lake Macquarie City Council (LMCC), but the southern portions of Mandalong and Myuna overlap the Central Coast Council (CCC).

2.2.1 Statutory Planning Documents

Clause 5.10 within each of the LEPs deals with 'Heritage Conservation' and sets out the same standards and controls with regard to the management of local heritage places included in each Schedule 5 'Environmental Heritage' which is the list of local and state heritage places within each local government area.

In summary, Clause 5.10 'Heritage Conservation' within each LEP includes the following provisions:

- Clause 5.10 (2) 'Requirement for Consent' – development consent is required to demolish, move or alter the exterior of a heritage item or building, work, relic or tree within a heritage conservation area; and, to disturb or excavate an archaeological place (non-Aboriginal) while knowing or having reasonable cause to suspect that a relic(s) is likely to be discovered or impacted.
- Clause 5.10 (5) 'Heritage assessment' – before granting consent Council may require a heritage management document which assesses the extent to which the carrying out of the proposed development will affect the significance of the heritage item or heritage conservation area.
- Clause 5.10 (7) 'Archaeological sites' – before granting consent to carry out development on an archaeological site (other than that included on the SHR or subject to an interim heritage order) the consent authority must (a) notify the Heritage Council of its intention to grant consent; and (b) take into account any response from the Heritage Council within 28 days after the notice is sent.

2.3 Best Practise Management Historic Heritage

Best practice guidance produced at the national and state level provides standards and advice to be followed in the management of historic heritage including significance assessment, impact assessment and management and mitigation actions. Documents which have been consulted to inform the preparation of this HMP and which should be followed where relevant include:

- The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013 (Burra Charter);
- Burra Charter Practice Note: Understanding and assessing cultural significance (November 2013);
- Burra Charter Practice Note: Developing policy (November 2013);
- *Assessing Heritage Significance* (former Heritage Branch, 2009);
- How to Prepare Archival Records of Heritage Items (former Heritage Office, 1995, revised 1998);
- Photographic Recording of Heritage Items Using Film or Digital Capture (former Heritage Office, 2001, revised 2004, 2006); and
- *Statements of Heritage Impact* (Former Heritage Office and Department of Urban Affairs and Planning 1996, revised 2002).

2.3.1 The Burra Charter

The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013 (Burra Charter) is the best practice standard for the conservation and management of cultural heritage places in Australia. It represents the knowledge and experience of Australia ICOMOS members and is well regarded internationally. There are two practice notes which are associated with this charter.

The *Burra Charter* sets out a series of articles which define all aspects of heritage practice including conservation principles, conservation processes and conservation practice. Of particular note is the Burra Charter process set out in the document which sets out the steps to be followed in planning for and managing a place of cultural significance. The seven steps are summarised below:

1. Understand the place – define the physical extent of the place as well as investigate its history, fabric, use and associations;
2. Assess cultural significance – assess cultural heritage values embodied by the site using appropriate criteria and prepare a statement of significance;
3. Identify all factors and issues – identify all obligations arising from the significance assessment and identify opportunities and constraints;
4. Develop policy – based on the steps so far, develop policies which will enable the protection and ongoing management and conservation of the heritage place;
5. Prepare a management plan – define priorities, resources, responsibilities and timing;
6. Implement the management plan; and
7. Monitor the results and review the plan.

A series of practice notes for the *Burra Charter* were launched in 2013 and those of relevance to the assessment of heritage impact and management include:

- *Understanding and assessing cultural significance* – this note provides an explanation of the heritage significance criteria or values as defined in the *Burra Charter*. Common issues in significance assessment are identified with advice on how they can be avoided.
- *Developing policy* – this note provides guidance on developing and writing policy for places of cultural significance by defining the scope of policies, describing the steps in policy development and addressing typical issues.
- *Interpretation* – this note provides guidance on the key steps and principles of interpretation planning and addresses common issues.
- *Burra Charter Article 22 – New Work* – this note explains what new work can entail and addresses common issues around the interpretation of Article 22 which states that ‘new work should be readily identifiable as such’.

2.3.2 OEH Guidelines

This section will outline the main purposes of the Office of Environment and Heritage (OEH) guidelines.

2.3.2.1 *Assessing Heritage Significance (former Heritage Branch, 2009)*

This guideline sets out the criteria for assessing heritage significance of items and relics, including the heritage values of a place, site or item. It includes a scale for ranking significance as well as guidelines for identifying whether an item is of local or state significance. (NSW Heritage Office 2001)

2.3.2.2 *How to Prepare Archival Records of Heritage Items (former Heritage Office, 1995, revised 1998)*

This document outlines the goals of archival recording and provides a practical guide for the activities which must be undertaken. It includes guidelines for documentation including drawings, photogrammetry, catalogues and reporting. (NSW Heritage Office 1998)

2.3.2.3 *Photographic Recording of Heritage Items Using Film or Digital Capture (former Heritage Office, 2001, revised 2004, 2006)*

This document outlines the format for undertaking photographic recording including the mapping and plan requirements for recording. It outlines the necessary hard copy formats for the production of this type of document and defines the material which needs to be submitted with OEH. (NSW Heritage Office 2006)

2.3.2.4 *Statements of Heritage Impact (Former Heritage Office and Department of Urban Affairs and Planning 1996, revised 2002).*

This document outlines the requirements for preparing a Statement of Heritage Impact, including articulating why an item is of heritage significance, what impact the proposed works will have on that significance, what measures are proposed to mitigate negative impacts and why more sympathetic solutions are not viable. (Heritage Office and Department of Urban Affairs and Planning 1996, revised 2002)

3 HISTORIC HERITAGE CONTEXT FOR NORTHERN REGION

The area described as Northern Holdings is on the western side of Lake Macquarie. Historically, Lake Macquarie was discovered in 1800 when a vessel seeking the entrance to the Hunter River to the north, mistook the entrance of the lake at present day Swansea for the Hunter River. The earliest settlement at the lake was on the eastern side, with the first known settlement at present day Dora Creek (western side) around 1826 with a land grant to Lieutenant Simpson (Clouten 1967:37).

3.1 Early Land Grants and Town Development

Mandalong, part of the original 2,000 acre grant of John Simpson, was settled as a result of Simpsons Track. The Track followed the main valley which later intersected Stockton Creek, which drained the hill country west of Cooranbong (Clouten 1967: 19). The earliest settlement in the Mandalong area is documented with the purchase of blocks by Henry Osborne and Thomas Walker sometime between 1838 and 1840. In the 1840s a new route for the Old Maitland Road was surveyed through the district but with a severe economic depression the project was shelved.

In 1852 Carl F. Solling purchased the first block in Mandalong but had probably occupied the area from an earlier date. It would appear there were few permanent residents with Osborne, Walkers and Capes referred to as running cattle in the area but not as residents. From 1861 onward, farmers were moving to the area with family names of Bonnell, Kelly, Frost, Moran, Booth, Tobin, Durrington, Carroll and Kennedy recorded. The main industries in the Mandalong area timber extraction, dairying, raising horse and cattle.

Fassifern was settled following a 2560-acre grant to the Northumberland Land & Coal Co and a 49-acre grant to J.R and E.A Donaldson in 1879. Northumberland Land & Coal Co built the Fassifern Railway Station (originally named the Wyee Railway Station) in 1887 as a junction for their coal operations. In 1891, Excelsior Land, Investment, Building and Bank Company Limited had built a tramway from the Fassifern station to the Toronto wharf. An arsenic plant, owned by Duncan and Elliot, operated near Fassifern processing ore from Warialda but closed due to difficulties with the patents for the process, cost of transport for the ore and objections by surrounding landowners to the fumes from the plant (Lake Macquarie City Council 2016).

The village of Awaba followed the establishment of a timber mill and railway construction depot in, or before 1885, with the earliest settlers' timber getters and railway contractors. A post office in 1889 and a school followed the construction of a railway station in 1887. The first street plan was surveyed in 1891 (Lake Macquarie City Council 2016).

3.2 Timber Getting

Early European occupants of Lake Macquarie included timber getters who were targeting the cedar of the Watagan Mountains to the west and the stands of timber around the lake foreshore. There is record of a land selection in 1830 by Thomas Walker over the present day Wyee Point area, though there is no evidence that the land was developed (Clouten 1967: 53). From the 1830's onward the south-western boundary of Lake Macquarie was a known haunt of cattle thieves. Nearby Wyee was an important crossroads and a stopping point on Aboriginal and European tracks as it was here that

the track diverged in one direction, to the east of Lake Macquarie and the other, westward towards Maitland (Bennett 1969:16).

The local population was mainly Roman Catholic with the first church built in 1876 also serving as a private school. In 1878 'Mandelong' Provisional School was first opened. Mandalong's prosperity depended on the timber trade, as the availability and need for timber dwindled so did the village. By 1953 the school and church had permanently closed. With poor soil quality and a decline in the timber industry, Mandalong remained a quiet rural area for much of the twentieth century.

3.3 Coal Mining and Coal Power

In 1841, the Reverence Threlkeld had established the small Ebenezer coalmine at present day Coal Point (Clouten 1967:93). This colliery remained in operation under various names until 1906.

Construction of the Sydney to Newcastle railway in the 1880s opened upon the coal bearing land west of Lake Macquarie to private investors and speculators, with the Parish of Awaba attracting a substantial share. In the 1880s, Northumberland Coal and Land Co was formed in Britain to mine the site which would later become Newstan Colliery. In 1885 it purchased 2,560 acres in the Parish of Awaba (Kass 1997:3).

In 1883, a drilling program in the vicinity of Awaba found a substantial coal seam and an artesian water supply. Although coal mining was common in Newcastle and the Hunter, the only mines at Awaba were small "rat holes", worked by 3-4 men the mines bore names such as "The Blowfly", "The Marsh Fly", "Milroy" and "Awaba" (Saxon 1988:49).

In 1887, Northumberland Coal and Land Co. established Newstan Colliery which was one of the first mines lit by electric light in New South Wales (Clack 1977:48).

The construction of Wangi Power Station between 1946 and 1958 was a major development. The presence of large quantities of coal and water together with proximity to the industrial and urban hubs of Sydney and Newcastle were important factors in the location. This was reinforced with the opening of Eraring Power Station (constructed 1976-1984) (Fetscher 2001).

3.4 Defence

In 1939, an RAAF Base for Catalina Flying Boat Squadron was established at Rathmines for use in the defence of Australia in World War II. It was the used as a ground training base, training over 200 Catalina air crew and was the largest flying boat base in Australia during the war. The base also provided a flying boat and marine service repair depot. After the war it became the Officer's Training School. It closed in 1960 having over 230 buildings and structures associated with it (Brebba and Clarke 2014:140).

4 HISTORIC HERITAGE SITES WITHIN NORTHERN REGION

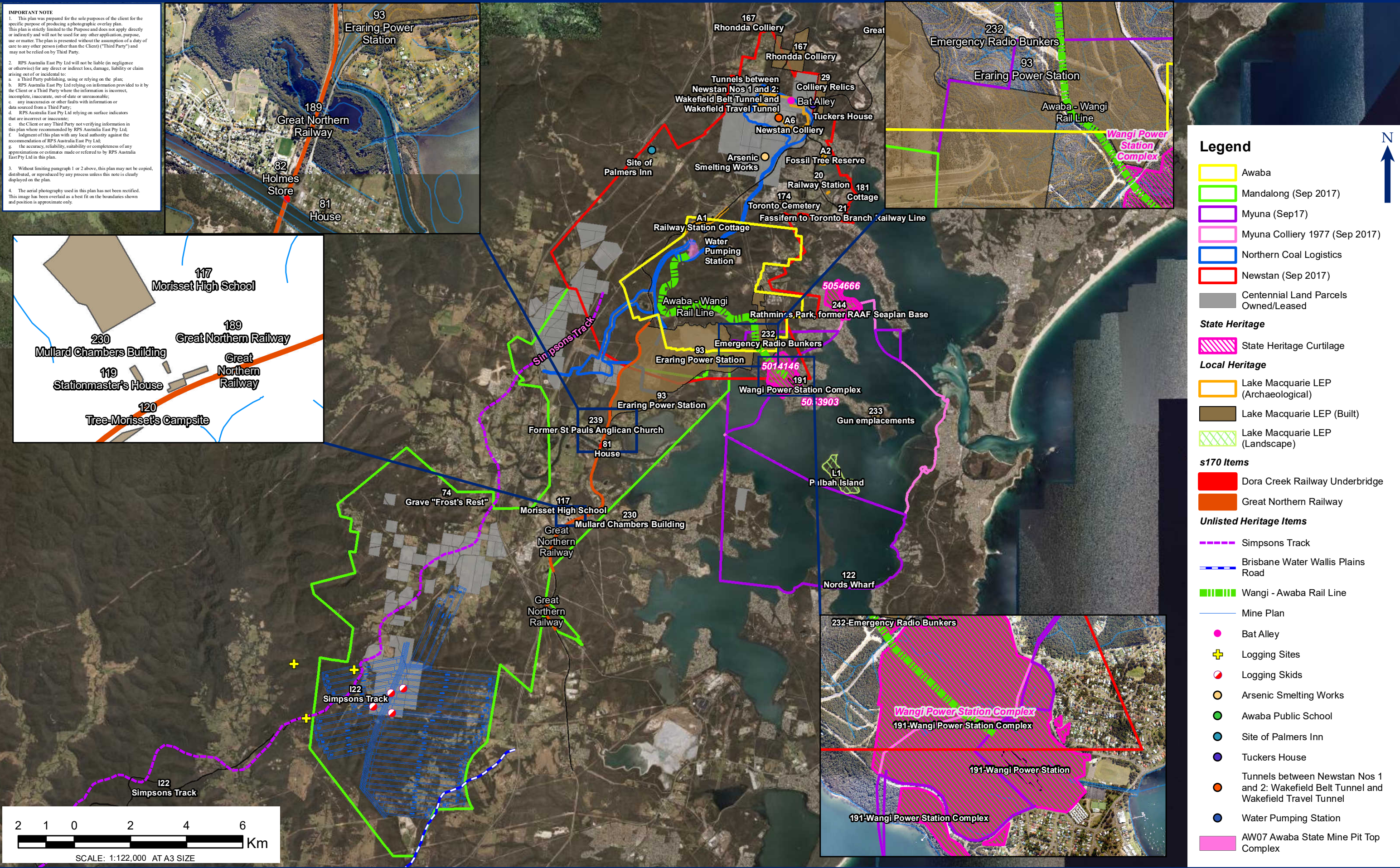
The Northern Region comprises the Lake Macquarie City Council Local Government Area.

There are 86 heritage items within the Centennial Northern region Colliery Holdings (**Table 1, Figure 3**). 64 of the sites are listed on the Lake Macquarie City Council (LMCC) LEP and State Heritage Register (SHR).

Seventeen historic heritage sites are located on freehold land leased by Centennial, crown land leased by Centennial or Centennial owned land, of which 4 are listed. For each operation the number of sites and the number of sites on Centennial land and the number of sites not on Centennial land is presented in Table 1.

Table 1 Northern Region Historic Heritage Sites within Colliery Holdings

Operation	Total number of sites	Number of sites on Centennial owned or leased land	Number of sites not on Centennial owned or leased land
Awaba	8	1	7
Newstan	40	6	34
Mandalong Mine	19	5	14
Myuna	13	2	11
Northern Coal Services	6	3	3
Total	86	17	103



TITLE : **FIGURE 3: HISTORIC HERITAGE SITES**

LOCATION :

NORTHERN HOLDINGS, NSW

DATUM:GDA 1994

PROJECTION: GDA 1994 MGA Zone 56

DATE : **22/12/2017**

PURPOSE: **HERITAGE**

VERSION (PLAN BY): D A3 (Natalie.Wood)

PATH: S:\Centennial\All Jobs\130153 Springvale Euro CHMP\10 - Drafting\Aregis Map Documents\Arch\Notherm\130153 Figure 2 Historic Heritage Sites with Boundary Updates D A3 2017\222.mxd

CLIENT: **CENTENNIAL**
JOB REF: **PR130153**

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5 HISTORIC HERITAGE ASSESSMENT

Centennial operations complete Heritage Impact Statement (HIS) during the approval process in association with attachments to this HHMP. The Attachments of this HHMP identify the required management actions for Awaba Colliery, Mandalong, Myuna Colliery, Newstan Mine and Northern Coal Services on Centennial owned or leased land.

5.1 Heritage Impact Assessment Procedure

If mining activities are likely to involve an impact on a heritage place not already approved as part of development consents, a HIS will be prepared by a suitably qualified heritage consultant to the satisfaction of the Secretary and in accordance with Heritage Council guidelines. The HIS will include:

- An assessment of the heritage significance of the place identifying heritage values/state heritage criteria in evidence;
- An assessment of the likely impact that the proposed works will have on that heritage significance;
- A description of measures that will be followed to manage and mitigate any potential negative impacts; and,
- Explanation of why more sympathetic solutions are not available.

The HIS will also need to include searches of the following heritage registers:

- World Heritage List;
- National Heritage List;
- Commonwealth Heritage List;
- State Heritage List; and
- Local Government LEP Listing.

The World Heritage, National Heritage and Commonwealth Heritage List information is accessed through the online Australian Heritage Database: <http://www.environment.gov.au/cgi-bin/ahdb/search.pl>. The State Heritage List and most Local Government LEP listings are accessed through the online State Heritage Inventory:

<http://www.environment.nsw.gov.au/heritageapp/heritagesearch.aspx>. The Local Government LEP schedule 5 is also cross checked, as changes in the LEP are not always reflected in the State Heritage Inventory.

5.1.1 Heritage Impact Assessment where land was previously not accessible

Where access to land was restricted during the initial HIS, for any reason, Centennial will use its best endeavours to request access to the land for the purpose of undertaking archaeological surveys. The request for access, and where access is granted, archaeological surveys will be completed prior to undermining.

5.2 Heritage Act Approvals Procedure

All required Heritage Act approvals are detailed in the separate mining approvals for each holding. If additional impacts are identified then the below approvals will be required depending on the nature of proposed works.

5.2.1 State Heritage

Items on the SHR are legally protected under the NSW Heritage Act 1977. To carry out activities to an item listed on the SHR or to which an interim heritage order (IHO) applies, approval must be gained from the Heritage Council. There are two relevant approvals required in relation to state heritage or a heritage item subject to an IHO:

1. An application should be made under section 60 of the Heritage Act 1977 for works to items listed on the SHR and, any excavations or ground disturbance that may impact on State Heritage listed archaeological remains.
2. A section 57 exemption application can be made where the proposed works to the state heritage place or item covered by an IHO will be minor.

5.2.2 Locally significant archaeological sites

An application under section 140 of the Heritage Act 1977 is required for any excavations or ground disturbance works that may affect known locally significant archaeological remains.

Where an impact on a known locally significant archaeological site will be minor, a section 139 exemption application will be required.

6 HISTORIC HERITAGE MANAGEMENT

6.1 Qualifications for Archival Recording

Historic heritage investigations identified in this document will be undertaken by a qualified heritage consultant. The archival recording requirements are outlined below.

6.2 Archival Recording Requirements

Archival recording will be undertaken when proposed works to a heritage place are likely to result in a substantial and usually negative impact on its heritage significance. Archival recording will be undertaken by a qualified heritage consultant. The archival recording will be undertaken in accordance with NSW best practice guidance is set out in How to Prepare Archival Records of Heritage Items (former Heritage Office, 1995, revised 1998) and Photographic Recording of Heritage Items Using Film or Digital Capture (former Heritage Office, 2001, revised 2004, 2006).

6.3 Heritage Sites Monitoring Program

6.3.1 Extraction Plan Historic Heritage Monitoring Program

A historic heritage monitoring program will be implemented in accordance with an Extraction Plan Historic Heritage Management Plan developed in accordance with the operation's conditions of development consent.

The historic heritage monitoring program will record the condition of the site before mining and post mining (Figure 4):

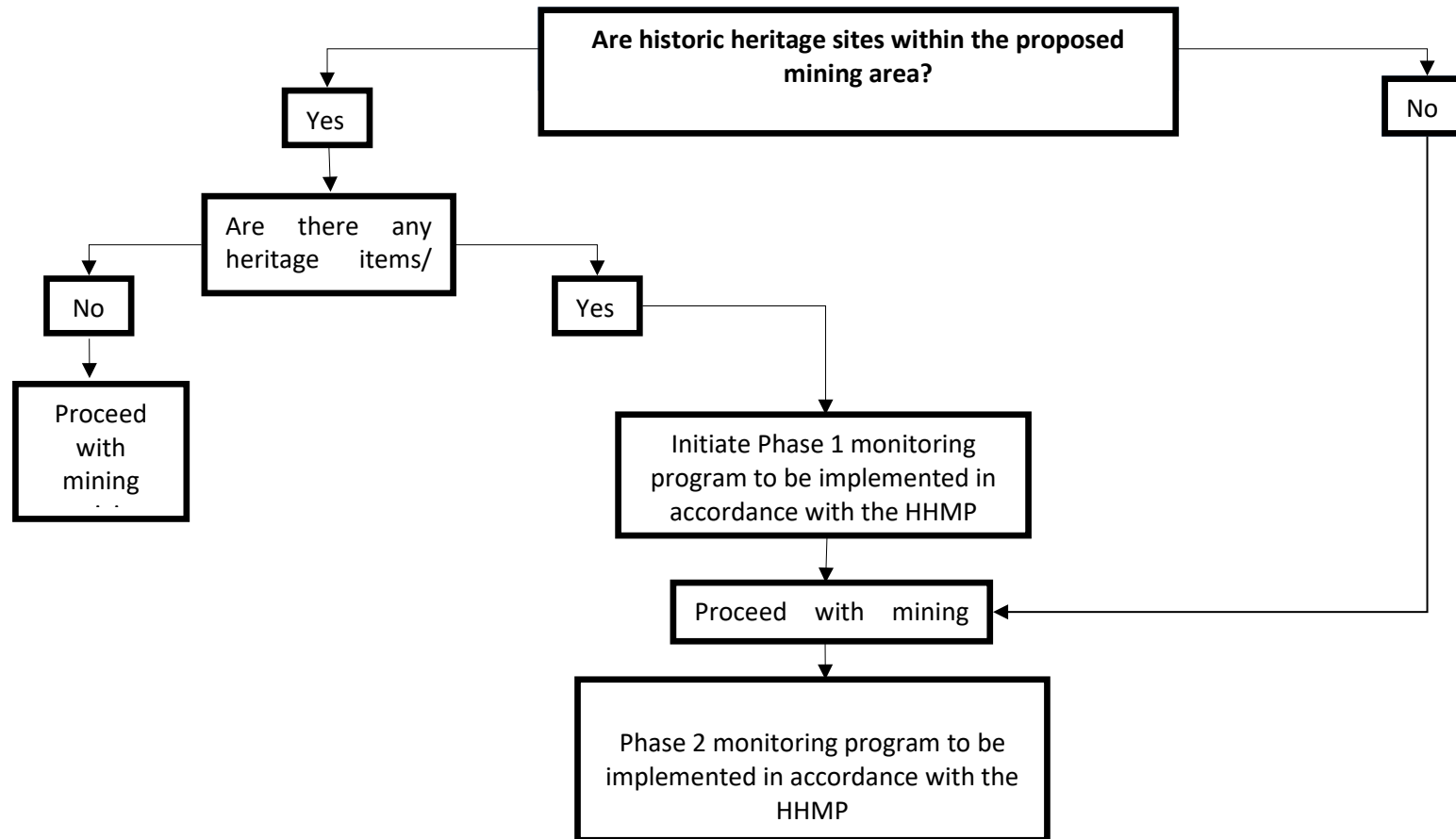
- Phase 1: Baseline recording (prior to site being undermined); and
- Phase 2: Post mining condition (within 3 months after undermining).

The results of the monitoring program will be reported in accordance with the Extraction Plan. Any further monitoring will be undertaken in accordance with an approved Extraction Plan.

6.3.2 Other Historic Heritage Monitoring Programs

Where monitoring of a historic heritage site occurs outside of an Extraction Plan, the program and its contingency plan will be developed with a qualified historic heritage consultant. The results of the monitoring program will be presented in the Annual Review for the operation.

Figure 4 - Monitoring and Management Flowchart for Underground Mining Activities



6.4 Contingency Plan

A TARP is developed using the performance indicators for historic heritage management relevant to each operation which are detailed within the relevant Extraction Plans. In the event that monitoring identifies a performance indicator has been exceeded, Centennial will implement the contingency measures as detailed in the TARP. Should unexpected impacts as a result of mining operations be identified to items of historic heritage, Centennial will notify OEH, Department of Planning and Environment (DPE) and LMCC, review its operations and implement any adaptive management or mitigation measures as necessary.

6.5 Reporting

6.5.1 Annual Review

An Annual Review is to be completed in accordance with the requirements of the conditions of approval for each operation. The Annual Review includes:

- information on the development and activities carried out in the past calendar year,
- information on the activities proposed to be carried out over the current calendar year;
- a comprehensive review of the monitoring results and complaint records of the development over the past calendar year;
- a comparison of monitoring results against:
 - the relevant statutory requirements, limits or performance measures/criteria;
 - the monitoring results of previous years; and
 - the relevant predictions in the EIS.
- information on any non-compliances over the past year, and what actions were (or are being) taken to ensure compliance;
- an identification of any trends in the monitoring data;
- identification of any discrepancies between the predicted and actual impacts of the development, and an analysis of the potential cause of any significant discrepancies; and
- a description of what measures will be implemented over the next calendar year to improve the environmental performance of the development.

Any historic heritage monitoring undertaken under this management plan will be reported annually through the Annual Review. The Annual Review will be made available on the Centennial Coal website.

6.6 Incidents, complaints and exceedances

6.6.1 Incidents

Non-compliances may be identified through regular reviews of monitoring inspections.

Any incidents, complaints and non-conformances that occur need to be reported in accordance with the Centennial Incident Reporting Standard (CIMOS-006), logged and corrective and preventable actions identified.

In the event of an incident or complaint, the following procedure will be followed:

- Investigate the incident;
- Log the complaint/incident; and
- Create an incident report, including the corrective actions that were taken and who was involved, that documents preventative actions required to prevent a recurrence of the event and includes a sign-off by an authorised person at the site.

6.6.2 Community enquiries or complaints

Centennial will record and respond to any community enquiries or complaints received as described in the respective sites Community Complaints and Enquiries Procedure and investigate the nature of the complaint / enquiry.

Complaints will be followed up by the Mine Manager or Environment & Community Coordinator as soon as the outcomes of the investigation have been completed.

All community complaints and enquiries will be recorded in the Centennial Coal Environment and Community Database (ECD).

6.6.3 Non-compliance notification procedure

The following procedure will be implemented following a measured exceedance on a historic heritage item:

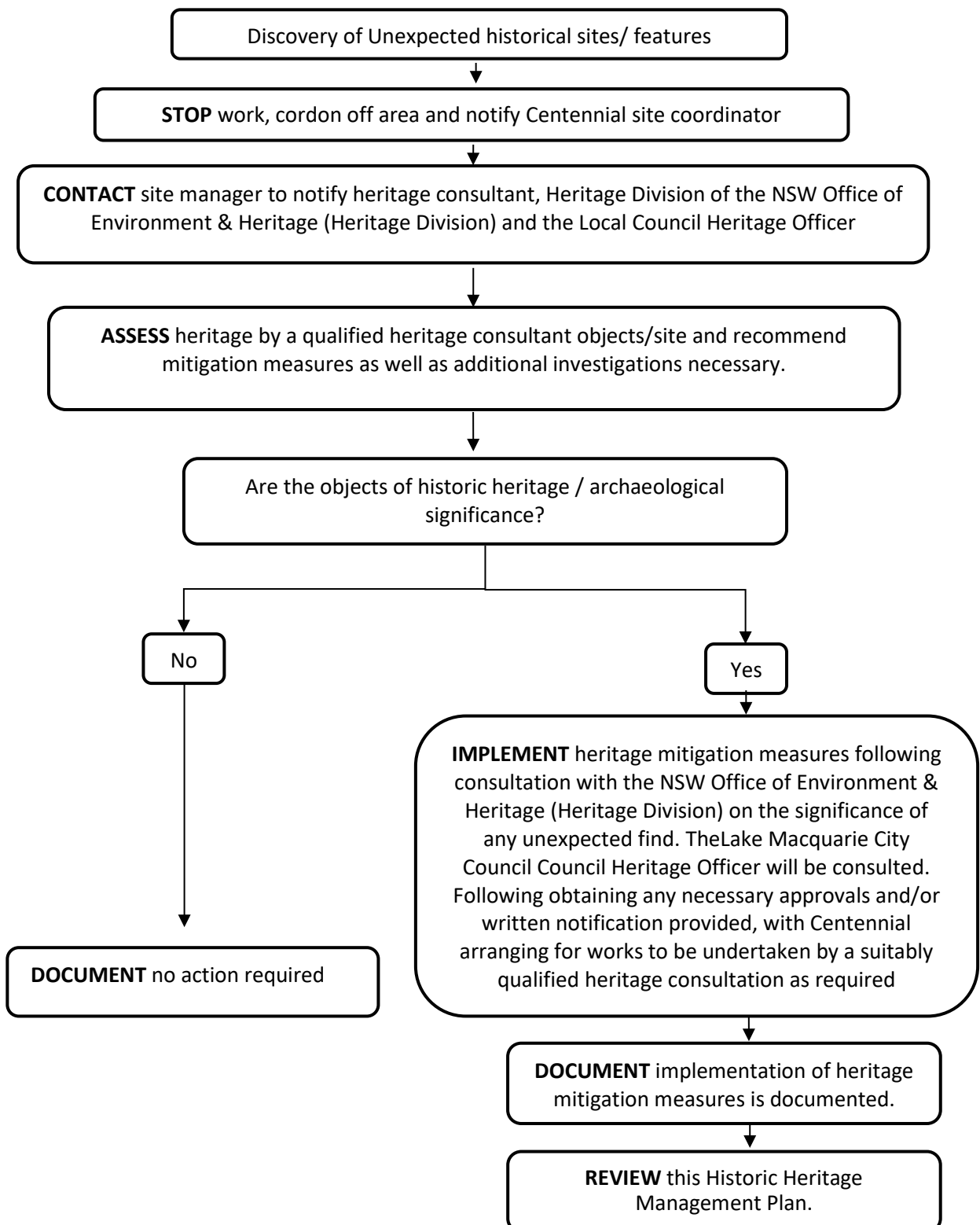
- historic heritage incident identified;
- notify DPE, OEH and LMCC in writing of the exceedance immediately;
- investigate the cause of the exceedance;
- notify DPE, OEH and LMCC of the the outcomes of the investigation and any measures that will be investigated and/or implemented to reduce the exceedance within seven (7) days of the exceedance occurring; and
- record the incident in the Centennial Coal Environment and Community Database.

6.7 Identification of previously unknown heritage sites or skeletal remains

6.7.1 Heritage Sites

If during the course of mining and mining related activities any previously unknown historical archaeological sites/artefacts or heritage items/sites are discovered or identified, all work in the area of the item(s) will cease immediately and an appropriately qualified heritage consultant/archaeologist consulted in accordance with Section 7 of this HHMP.

Figure 5 - Flow Chart Protocol for Unexpected Finds



6.7.2 Skeletal Remains

If any skeletal remains are identified all work will halt in the immediate area to prevent any further harm to the remains. Centennial will contact the NSW Police immediately. No action is to be undertaken until police provide written notification to Centennial. Centennial will contact DPE, OEH's Environment Line (131 555) and representatives of the local Aboriginal community within 7 days.

No works will continue until OEH provides written notification to Centennial about the action plan for the management of the skeletal remains and formulated management plan if required.

7 ROLES AND RESPONSIBILITIES

The roles and responsibilities for the monitoring of Historic Heritage sites will require the efforts from the following representatives as presented in Table 2:

- Environment and Community Co-ordinator;
- On-site Personnel;
- Heritage Consultant; and
- Surveyor.

In order to successfully manage historic heritage sites in the boundary of Centennial's northern operations, it is important that personnel ensure that their roles and responsibilities are carried out correctly.

Penalties for non-compliance associated with historic heritage are identified in Section 7.1.

7.1

7.2 Penalties and Consequences for non-compliance

It is important that the roles and responsibilities listed in **Table 2** are adhered to closely to ensure that investigations and management of items are undertaken to best practice standards historic heritage. It is important to be aware that there are legal repercussions for the mismanagement of historic heritage.

7.2.1 Heritage Act 1977

Historic heritage items are protected under Section 57 and Section 139 of the *Heritage Act 1977*. Under Section 57, a person must not do any of the following unless an approval has been granted by the Heritage Council:

- (a) demolish the building or work;
- (b) damage or despoil the place, precinct or land, or any part of the place, precinct or land;
- (c) move, damage or destroy the relic or moveable object;
- (d) excavate any land for the purpose of exposing or moving the relic;
- (e) carry out any development in relation to the land on which the building, work or relic is situated, the land that comprises the place, or land within the precinct;
- (f) alter the building, work, relic or moveable object;
- (g) display any notice or advertisement on the place, building, work, relic, moveable object or land, or in the precinct; and
- (h) damage or destroy any tree or other vegetation on or remove any tree or other vegetation from the place, precinct or land.

Archaeological excavation under is not permitted unless approval has been granted by the Heritage Council under Section 139.

Under the Heritage Act 1977, the penalty an offence against this Act is up to \$1.1 million, imprisonment for a period of six months, or both. A person guilty of an offence against the heritage regulations shall be liable to a penalty of up to \$5500.

7.2.2 Environmental Planning and Assessment Act 1979

Penalty Infringement Notices can be issued under Section 76A Development that needs consent of the Act for unauthorised works that require consent, this includes changes to the fabric of a Heritage Item. Additionally Orders can be issued under Section 121B of the Act in relation to works.

Table 2 - Roles and Responsibilities of Personnel involved in the HHMP

Environment and Community Co-ordinator	Responsibilities	Onsite Personnel	Responsibilities	Archaeologist / Cultural Heritage Consultant	Responsibilities	Stakeholder Group	Responsibilities	Surveyor	Responsibilities
This is the person nominated by Centennial to co-ordinate and manage environmental requirements in each respective operation	<p>Read, Understand, implement and ensure the practical application of this HHMP.</p> <p>Follow instructions outlined in this HHMP.</p> <p>Ensure that a copy of this HHMP is available onsite in addition to any other reports applicable to area of proposed works.</p> <p>Review this content of this HHMP to ensure currency and update where required.</p>	Any individual undertaking surface disturbance within Centennial's Northern operations	<p>Understand the heritage requirements under the NSW legislation.</p> <p>Be aware that there is an immediate STOP WORK requirement for some situations outlined in heritage management flow charts and ensure that there are procedures in place to secure the area for such situations.</p>	An individual with appropriate qualification to undertake cultural heritage assessments and management actions	<p>Assist with the implementation of this HHMP, as required.</p> <p>Provide heritage advice in accordance with the relevant legislation. Undertake the recording of new sites in accordance with OEH guidelines.</p> <p>Complete archival recording in accordance with protocol outlined in this document.</p>	Local Historical Society	Participate in the consultation process	An individual with appropriate qualifications to undertake surveying. This may be a Centennial survey or contractor.	Complete monitoring control forms in conjunction with the heritage consultant, as required.

7.3 Inductions

All Centennial staff and contractors undertaking work at Centennial's operations are required to undertake a site specific induction prior to commencing work. Historic heritage matters form a component of these inductions. Records of inductions will be kept and are maintained on site.

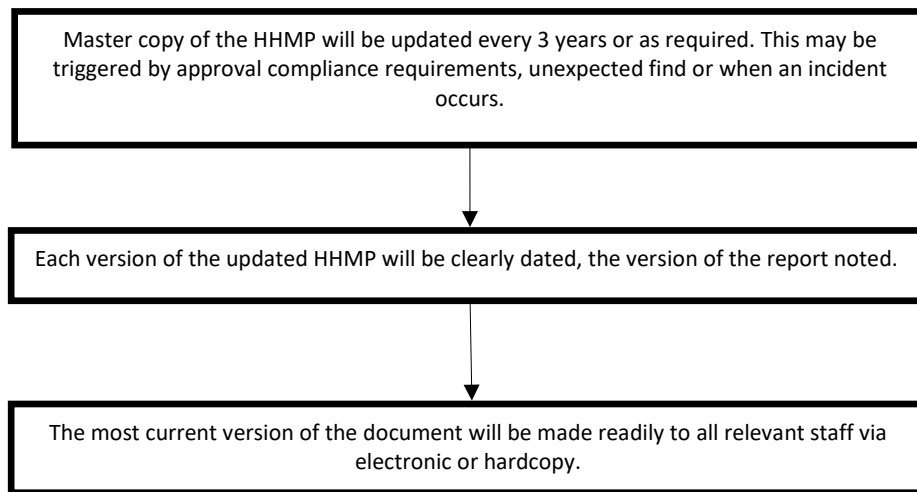
7.4 Document Control and Review

The purpose of this document is to provide a standardised and overarching management plan and mitigation strategy for historic heritage sites within the boundary of Centennial's northern operations. However, this does not discount the possibility that certain sites may require extra attention and require additional specific management protocols be put in place to ensure that the site is not harmed as a result of mining-related activities. There may be requirements to adjust/modify some of the management strategies or mitigation measures in this document if it becomes outdated or proven to be inefficient in practice. As a consequence, the HHMP will be updated when deemed necessary and reviewed annually to ensure that the document remains current and user-friendly for the purpose of managing historic heritage sites according to the standards required under NSW and Commonwealth legislation.

Given that the expected lifespan of the mining program is more than 20 years, it is important that current and future Centennial Environmental and Community Co-ordinators thoroughly read and clearly understand the operations of this document. It is the responsibility of the nominated Centennial Environmental and Community Co-ordinator to ensure that revised editions of this document are made readily accessible to all onsite Centennial staff and contractors and that refresher inductions are provided when deemed necessary.

The date that this HHMP is revised will also be included with the version of the document clearly specified (**Figure 6**).

Figure 6 - Continual Revision of the Historic Heritage Management Plan (HHMP) Procedure



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ATTACHMENTS

Attachment 1

Awaba Colliery

Overview of Operations

Awaba Colliery is a historical bord and pillar underground coal mine managed by Centennial Newstan Pty Ltd (Newstan), **Figure 1**. The mine is located within the Newcastle coalfield south of the Awaba village on the western side of Lake Macquarie, near Newcastle NSW. Mining operations commenced at the Awaba Colliery in 1947.

Historic Heritage Commitments & Consent Conditions

Table 1 - Awaba Project Approval 10_0038 MOD 1

Condition No.	Consent Condition	Addressed in HHMP/Implemented
Schedule 3 Condition 31	The Proponent shall prepare and implement a Post-Mining Heritage Management Plan for the project to the satisfaction of the Director-General. This plan must:	
	(a) be prepared in consultation with OEH, Council, any relevant local historical organisations and the Community Consultative Committee and in accordance with any relevant OEH guideline;	An Awaba Mine Closure Plan was prepared in 2012 and submitted for approval to DPE 24 August 2012. Attachment 6 Consultation Log and Attachment 6A Consultation Comments identify consultation completed.
	(b) include an assessment of the heritage significance of the non-Aboriginal heritage items located on the site, including the Awaba Colliery surface buildings and the abandoned Awaba-Wangi Railway;	The heritage significance assessment for Awaba State Colliery surface buildings and the abandoned Awaba-Wangi Railway is included in Site Specific Measures of this Attachment.
	(c) provide recommendations for the long-term management and/or use of these heritage items; and	The long-term management and/or use of the Awaba State Colliery heritage items are included in Site Specific Measures of this Attachment.
	(d) be submitted to the Department, Council and OEH within 12 months of this approval.	Awaba Colliery Mine Closure Plan submitted to DPE for approval in August 2012. Attachment 6 Consultation Log and Attachment 6A Consultation Comments identify submission of this HHMP.

Table 2 - Awaba Statement of Commitments

Commitment	Addressed in HHMP/Implemented
Prior to the decommissioning of any pit top buildings at the Awaba Colliery and in consultation with the LMCC, all buildings will be subject to a heritage assessment of significance.	Site Specific Measures of this Attachment identifies that prior to decommissioning of any pit top buildings at the Awaba Colliery a heritage assessment of significance will be undertaken in consultation with LMCC.

Heritage Items in Awaba Colliery Boundary

A search was undertaken on 6 April 2017 of the following heritage registers and studies:

- National Heritage Register database (NHR);
- NSW State Heritage Inventory including the Stage Heritage Register (SHR) and the s170 Register;
- Lake Macquarie City Council Local Environmental Plan (LEP) Schedule 5 (Environmental Heritage); and
- Lake Macquarie Heritage Study (1993) (LMHS).

The search identified eight heritage items in the Awaba Colliery Boundary. Five of the heritage items are protected under the Lake Macquarie LEP (I189, I7, I 93, I232 and A1) and three are unlisted (**Table 3**).

Table 3 - Heritage items in the Awaba Colliery Boundary

Items	Address	Heritage Status and ID	Centennial owned or leased land
Awaba State Mine	Wilton Road, Awaba	Unlisted LMHS (AW-07)	Centennial leased crown land
Water Pumping Station	Wilton Road, Awaba	Unlisted LMHS (AW-06)	No
Awaba – Wangi Railway Line	Extends south of Awaba Pit Top and continues south to Wangi	Unlisted LMHS (RT-13)	No
Eraring Power Station	268 and 294 Rocky Point Road, Eraring 115, 215, 235 and 260 Construction Road, Myuna Bay (Lots 10 and 11, DP 1050120; Lot 20, DP 840668; Lot 211, DP 840670; Lots 50 and 51, DP 840671)	LEP (I93)	No
Great Northern Railway	Line passes through Lake Macquarie from Wyee to Garden Suburb	S170 (4805752)	No
		LEP (I189)	
Gate Keepers Cottage - Built Heritage	154 Wilton Road, Awaba	LEP (I7)	No
Emergency Radio Bunkers - Built Heritage	115 Wangi Road, Wangi	LEP (I232)	No
S170: Awaba Railway Jib Crane & Former Cottage Potential Archaeological Site LEP: Railway Station Cottage (register)	Adelaide Street, Awaba	S170 (no reference)	No
		LEP (A1)	

Impact Assessment and Management of Heritage Items

One item, Awaba State Mine is located on crown land leased by Centennial (AW07). Seven items are not located on Centennial owned land (RT-13, LEP I93, LEP I18/s170 4805752, LEP I7, LEP I232 and LEP A1).

Site Specific Measures

Historical Studies Awaba Colliery

Awaba State Colliery is owned by Centennial and situated on a Crown Land mining lease. The Colliery has been the subject of two historic heritage investigations:

- Heritage Assessment and Conservation Management Strategy for the Awaba Pit Top Complex (RPS 2012); and
- Cultural Heritage Impact Assessment for Awaba Colliery (RPS 2010).

Awaba Colliery Building Protection

The in situ form and appearance of the Awaba Colliery buildings will be maintained.

The construction of new facilities will consider:

- a preference for new facilities to be established to the east of the 1987 drift portal and north of conveyor structures; and
- new facilities or structure should not exceed three stories.

The actions required for Awaba State Colliery structures are detailed in **Table 4**.

Table 4 - Actions required for Awaba Buildings prior to being altered or removed

Building	Building status	Archival recording	Retention for storage on site	Retention for reuse on site
Main Building Complex – Administration Buildings	In situ internal building signage of “Mine Manager”, “Surveyor” and other titles.	Yes	Yes	
	In situ internal fixtures and fittings	Yes	Yes	
Main Building Complex – Bath and Change House	In situ internal features including original lockers, door separating bath and change house from the administration building	Yes	Yes	Yes
Main Building Complex – Lamp Room	Original lamp and battery shelving	Yes	Yes	
Main Building Complex – Boiler House	Boiler and associated equipment	Yes		
Workshop	Moveable items	Yes		

Building		Building status	Archival recording	Retention for storage on site	Retention for reuse on site
1947 Drift Portal			Yes	Yes, if feasible*	
1949 Drift Portal			Yes	Yes, if feasible*	
1987 Drift Portal			Yes	Yes, if feasible*	
Rail Tracks		Tracks	Yes	Consider replacement for interpretation	
Fire Station Building			Yes		

*feasibility will require specialist structural engineering advice

Identified Impacts

If works are proposed that potentially impact heritage items listed in **Table 3** a HIS will be prepared in accordance with Section 5 Historic Heritage Assessment within this HHMP.

Heritage Significance

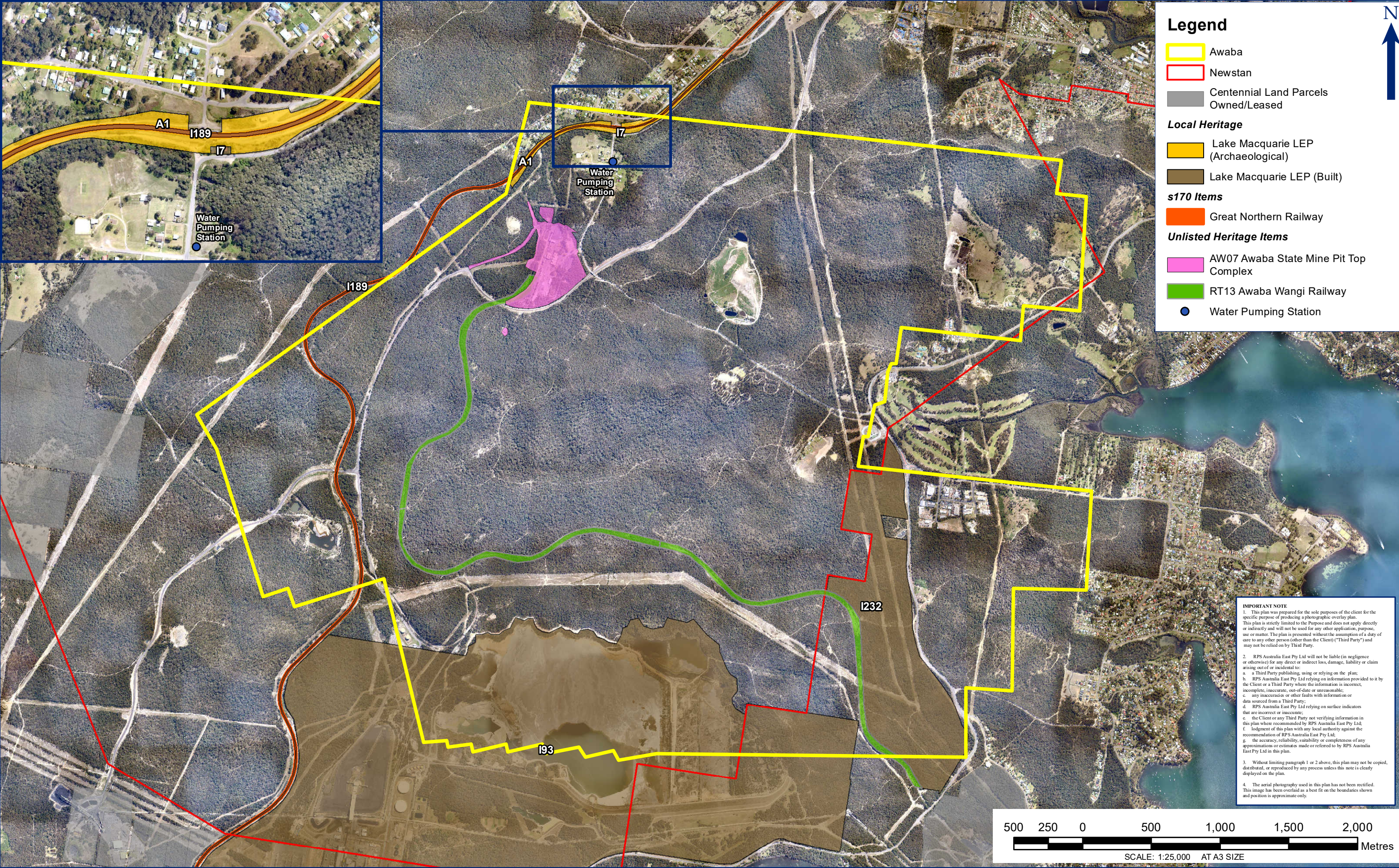
The Awaba Colliery complex is historically significant at a local level as the first colliery to be planned, constructed and operated by the NSW State Government via the State Mines Control Authority. It is representative of the significant expansion in colliery development in New South Wales by the State Government during the post-war period. Furthermore, the colliery's operation from 1947 to the present day marks a significant period of continuity in use.

The site has a strong historical association with the State significant Wangi Power Station for which it provided fuel. It was also physically linked to the Power Station by a direct rail line of which some evidence remains.

Evidence suggests that the pit top complex was technically innovative for its period of development in terms of the calibre of the social facilities provided and the standard of mechanical and electrical installations. As such, it may have the potential to yield information on mid 20th Century mining technology.

The pit top complex by virtue of its built form, infrastructure and layout represents an intact and highly legible example of a colliery dating from the immediate post-war era. The Colliery buildings, in particular the main administrative and bath house complex, have a strong industrial aesthetic characteristic of the broader region, evoking its rich coal mining history. The location of the colliery within a valley surrounded by forested slopes creates an attractive setting.

The Awaba Colliery is considered to be of local significance with further research required to establish whether it could be classed as State significant (principally through comparative research into contemporary collieries and in particular, former state coal mines). The likelihood of the site meeting the state significant threshold is considered to be low.



Legend

Awaba

Newstan

Centennial Land Parcels
Owned/Leased

Local Heritage

Lake Macquarie LEP
(Archaeological)

Lake Macquarie LEP (Built)

s170 Items

Great Northern Railway

Unlisted Heritage Items

AW07 Awaba State Mine Pit Top
Complex

RT13 Awaba Wangi Railway

Water Pumping Station

IMPORTANT NOTE

1. This plan was prepared for the sole purposes of the client for the specific purpose of producing a photographic overlay plan. This plan is strictly limited to the Purpose and does not apply directly or indirectly and will not be used for any other application, purpose, use or matter. The plan is presented without the assumption of a duty of care to any other person (other than the Client) ("Third Party") and may not be relied on by Third Party.

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b. RPS Australia East Pty Ltd relying on information provided to it by the Client or a Third Party where the information is incorrect, incomplete, inaccurate, out-of-date or unreliable;

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e. the Client or any Third Party not verifying information in this plan where recommended by RPS Australia East Pty Ltd;


f. lodgment of this plan with any local authority against the recommendation of RPS Australia East Pty Ltd;



g. the accuracy, reliability, suitability or completeness of any approximations or estimates made or referred to by RPS Australia East Pty Ltd in this plan.

3. Without limiting paragraph 1 or 2 above, this plan may not be copied, distributed, or reproduced by any process unless this note is clearly displayed on the plan.

4. The aerial photography used in this plan has not been rectified. This image has been overlaid as a best fit on the boundaries shown and position is approximate only.

Table 5 - Awaba Listed and Unlisted Heritage Items in the Northern Holdings

LAKE MACQUARIE LEP SCHEDULE 5 ITEMS	
ITEM: Eraring Power Station	 <p>Source: NSW Heritage Register Database</p>
ADDRESS: Rocky Point Rd, Eraring	
LISTING: Lake Macquarie LEP - Schedule 5	
<p>DESCRIPTION:</p> <p>Eraring Power Station is the biggest industrial undertaking around the Lake, and one of the biggest in the Hunter region. Eraring contrasts strongly with nearby Wangi P.S. in size of units (660 MW x 4 to Wangi's 50 MW x 3 & 60 MW x 3) and in design philosophy - Eraring was designed as a utilitarian structure, with minimal concessions to appearance, while Wangi was designed to express its function without sacrificing a pleasing appearance.</p> <p>Eraring represents the "State of the Art" in its technology, and is one of the biggest power stations in the State. It is undoubtedly highly significant, although considering its youth, it is arguable whether Eraring yet qualifies as a heritage item.</p>	
ITEM: Great Northern Railway	<p>No Photo Available</p>
ADDRESS: Line passes through Lake Macquarie City from Garden Suburb to Wyee	
LISTING: Lake Macquarie LEP (I189)	
<p>DESCRIPTION: The Great Northern Line profoundly changed the relationship of Newcastle with its hinterland and to the north whilst confirming the importance of Newcastle as a great coaling port.</p> <p>Later it opened the Lake to residential development and, since electrification, has become the commuting link to both Sydney and Newcastle for residents of Lake Macquarie.</p>	

ITEM: Emergency Radio Bunkers	 <p>Source: NSW Heritage Register Database</p>
ADDRESS: 115 Wangi Road, Rathmines	
LISTING: Lake Macquarie LEP (I232)	
<p>DESCRIPTION: The former remote control receiving station played a vital role in the communication operations of the State listed sea plane base at Rathmines during World War II.</p> <p>Its location and sitting in what was dense bushland demonstrate Australia's response to the threat of invasion and the need for secrecy.</p>	
ITEM: Gatekeepers Cottage	 <p>Source: NSW Heritage Register Database</p>
ADDRESS: 154 Wilton Road, Awaba	
LISTING: Lake Macquarie LEP (I7)	
<p>DESCRIPTION: A typical, mostly intact, and attractive example of railway housing of its period, in a prominent position next to the station, so that its historic relationship with the railway station is quite evident. Assessed as having moderate regional significance.</p>	

LAKE MACQUARIE LEP SCHEDULE 5 ARCHAEOLOGICAL SITES and SECTION 170 REGISTER

ITEM: Railway Station Cottage

ADDRESS: Off Adelaide Street, Awaba

LISTING: Lake Macquarie LEP (A1)

DESCRIPTION: A typical and unusually intact example of railway housing of its period, in a prominent position in open ground close to the station, so that its historic relationship with the railway station is quite evident. This cottage is particularly important because of the survival of its separate kitchen wing, complete with brick fireplace and chimney. As an archaeological site this cottage has the potential to demonstrate working class household life in the late C19th.



Railway Station Cottage [Source: NSW Heritage Register Database (house since demolished and the same site as described below in the S170 Register)]

ITEM: Awaba railway jib crane and former cottage potential archaeological site

ADDRESS: Off Adelaide Street, Awaba

LISTING: Section 170 Register



DESCRIPTION: The curtilage boundary is a circle, 5m in diameter from the outside edges of the jib crane. The curtilage excludes the nearby railway station complex, which is not considered to have any heritage significance. Archaeological Site: North: consistent with former northern boundary fence line of residence, running east-west, about 40m south of Heaton Street. South: consistent with former northern boundary fence line of residence, running east-west, about 10m north of down platform. East: approximately 30m west of Adelaide Street road reserve West: consistent with existing RailCorp property fence line to rail corridor.



Railway Station Cottage – see above [Source: NSW Heritage Register Database (house since demolished)]



Awaba railway jib crane (Source: NSW Heritage Register)

UNLISTED HERITAGE ITEMS	
<p>ITEM: Awaba – Wangi Railway Line</p> <p>ADDRESS: Lot 2 DP585142</p> <p>UNLISTED</p> <p>DESCRIPTION: The abandoned Awaba Wangi railway line comprises a single track rail line on wooden sleepers. The line holds special significance due to its association with the Wangi Power Station to the south and the Awaba Colliery to the north.</p>	 <p>Awaba Wangi rail embankment (Source: RPS)</p>
<p>ITEM: Awaba State Colliery</p> <p>ADDRESS: Wilton Road, Awaba</p> <p>UNLISTED</p> <p>DESCRIPTION: The Awaba State Mine was developed and owned by the State Mine Control Authority. Commencing production in 1949 to supply to supply Wangi Power Station (commenced operation in 1956) in the interim it supplied metropolitan power houses. The mine ceased operation in 2012</p>	 <p>Awaba State Colliery (Source: RPS)</p>

Attachment 2

Mandalong Mine

Overview of Operations

Mandalong Mine is an existing underground coal mine operation located approximately 35 kilometres south-west of Newcastle and approximately 130 kilometres north of Sydney within the Lake Macquarie and Central Coast Council Local Government Areas. Underground longwall mining operations commenced at Mandalong Mine in January 2005. Current approvals authorise the extraction of up to 6.5 million tonnes of coal per annum using a combination of continuous miner and longwall mining methods. The key infrastructure at the Mandalong Mine comprises the surface infrastructure including administration buildings, workshop and mine ventilation facilities at the Mandalong Mine Access Site, the ventilation facilities at the Cooranbong Entry Site and proposed new ventilation and mine support infrastructure at the Mandalong Surface Site.

Historic Heritage Commitments & Consent Conditions

Table 1 - Development Consent (SSD 5144)

Condition No.	Consent Condition	Addressed in HHMP/Implemented
Schedule 4 Condition 4	The Applicant must ensure that the development does not cause any exceedances of the performance measures in Table 7 , to the satisfaction of the Secretary.	Site specific measures of this Attachment identify an Extraction Plan will be prepared and approved prior to subsidence impacts occurring in accordance with Schedule 4 Condition 6(l). The Extraction Plan will address measures to monitor performance of measures in Table 1 of SSD_5144.
Schedule 4 Condition 6	The Applicant must prepare an Extraction Plan for all second workings on site, to the satisfaction of the Secretary. Each Extraction Plan must:	
Schedule 4 Condition 6 (l)	include a Heritage Management Plan, which has been prepared in consultation with OEH and Registered Aboriginal Parties, to manage the potential environmental consequences of the proposed second workings on both Aboriginal and non-Aboriginal heritage items, and reflects the requirements of condition 22 of Schedule 3;	Site specific measures of this Attachment identify an Extraction Plan will include consultation with OEH with the intent to manage potential environmental consequences of works within the Extraction Plan on non-Aboriginal heritage items.
Schedule 3 Condition 22	The Applicant must prepare and implement a Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:	

Condition No.	Consent Condition	Addressed in HHMP/Implemented
Schedule 3 Condition 22(a)	be prepared in consultation with OEH and Registered Aboriginal Parties;	Attachment 6 Consultation Log and Attachment 6A Consultation Comments identifies consultation completed with OEH.
Schedule 3 Condition 22(b)	be submitted to the Secretary for approval, prior to commencement of construction of the MSSS, or by 31 March 2016, whichever is sooner; and	Attachment 6 Consultation Log and identifies the draft Management Plan was submitted to the Secretary for approval on 24 March 2016. Attachment 6 Consultation Log and Attachment 6A Consultation Comments identify submission of this HHMP.
Schedule 3 Condition 22(c)	Include:	
	a description of the measures that would be implemented to:	
	protect, monitor and/or manage Aboriginal Cultural Heritage sites/items (including any proposed archaeological investigations and/or salvage measures);	The Northern Region Aboriginal Cultural Heritage Management Plan (ACHMP) Section 6 identifies management measures for Aboriginal cultural heritage identification, monitoring and management.
	manage the discovery of previously unidentified Aboriginal items;	The Northern Region ACHMP Section 6 identifies management measures for Aboriginal cultural heritage identification, monitoring and management.
	maintaining and managing reasonable access for Aboriginal stakeholders to heritage items on the Applicant's land;	The Northern Region ACHMP Section 5 identifies access will be provided for Aboriginal stakeholders to heritage items on Centennial land.
	ongoing consultation with Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage;	The Northern Region ACHMP Section 5 describes the Northern Region Aboriginal cultural heritage committee.

Condition No.	Consent Condition	Addressed in HHMP/Implemented
	a short-term and long-term strategy for the storage of any Aboriginal Cultural Heritage items salvaged on site; and	The Northern Region ACHMP Section 6 identifies management measures for Aboriginal cultural heritage identification, monitoring and management.
	a protocol for the management of impacts to Historic Heritage sites/items, including previously unidentified sites/items, including archival recording where impacts to Historic Heritage sites/items cannot be avoided.	Sections 6 Historic Heritage Management identifies management of historic heritage items where an impact to a site/item can not be avoided including archival recording.

Table 2 - Statement of Commitments (SSD 5144)

Commitment	Addressed in HHMP/Implemented
Six months prior to the commencement of construction activities associated with the Mandalong South Surface Site, Centennial Mandalong will ensure that the Landing Skid 2 is recorded by a qualified historic archaeologist.	Site Specific Management Measures within this Attachment identify the archival recording completed greater than six months prior to the commencement of construction activities associated with the Mandalong South Surface Site.
In the event that any addition non-Indigenous cultural heritage material is identified or uncovered during construction and/or exploration works, Centennial Mandalong will ensure that any surface works in the area ceases and will contact a heritage consultant to assess the condition of the item. Centennial Mandalong will adopt the appropriate mitigation measures, as provided by the Heritage consultant, before recommencement of work.	Section 6.4 Identification of Previously Unknown Heritage Sites or Skeletal Remains of this HHMP identifies where potentially unknown heritage sites are identified work will be stopped and an appropriately qualified heritage consultant engaged to provide advice.
Centennial Mandalong will ensure that all employees and contractors working within the Southern Extension Area will be made aware of their statutory obligation for non-Indigenous heritage under the NSW Heritage Act 1977 as part of the site induction process.	Section 7.2 Inductions identifies the minimum requirements for Centennial staff and contractors, presented in Table 2 Roles and Responsibilities.

Heritage Items within Mandalong Boundary

A total of 19 heritage items occur within the Mandalong boundary, twelve heritage items are listed and seven items are unlisted. There are no heritage items in the Mandalong boundary which are listed on the National Heritage Register, or the NSW SHR.

Eleven of the listed heritage items are itemised on the Lake Macquarie City Council Local Environmental Plan (LEP) (**Table 3, Figure 1**). There are two items on the NSW s170 Register for Sydney Trains which are state owned items. The Great Northern Railway is also listed as an item on the LEP.

There are seven unlisted items. Of these, five are in Centennial owned land and are described below.

Listed and unlisted heritage items are described in **Table 3**.

Impact Assessment and Management of Heritage Items in Centennial Land

There are five unlisted heritage items located on Centennial land (**Figure 1, Table 3**):

- Simpsons track;
- Landing skid 1;
- Landing skid 2;
- Landing skid 3;and
- Landing skid 4.

The five unlisted items were identified within the Heritage Impact Assessment for the Mandalong Southern Extension Project (RPS 2013). As unlisted items, there are no obligations to maintain these items (noting two are tracks). RPS (2013) concluded that none of the items possess heritage elements that meet local or State heritage significance. Of these unlisted items four will not be impacted by the Mandalong South Project. If surface works or other impacts are required in the vicinity of these items then a HIS should be prepared, refer to Section 5 of the main document.

Landing skid 2 will be impacted and has been archivally recorded in accordance with Section 6 of the main document. It is documented in an archival report (RPS 2017).

There are no listed heritage items on Centennial land.

Impact Assessment and Management of Heritage Items outside Centennial Land, but inside Mandalong Boundary

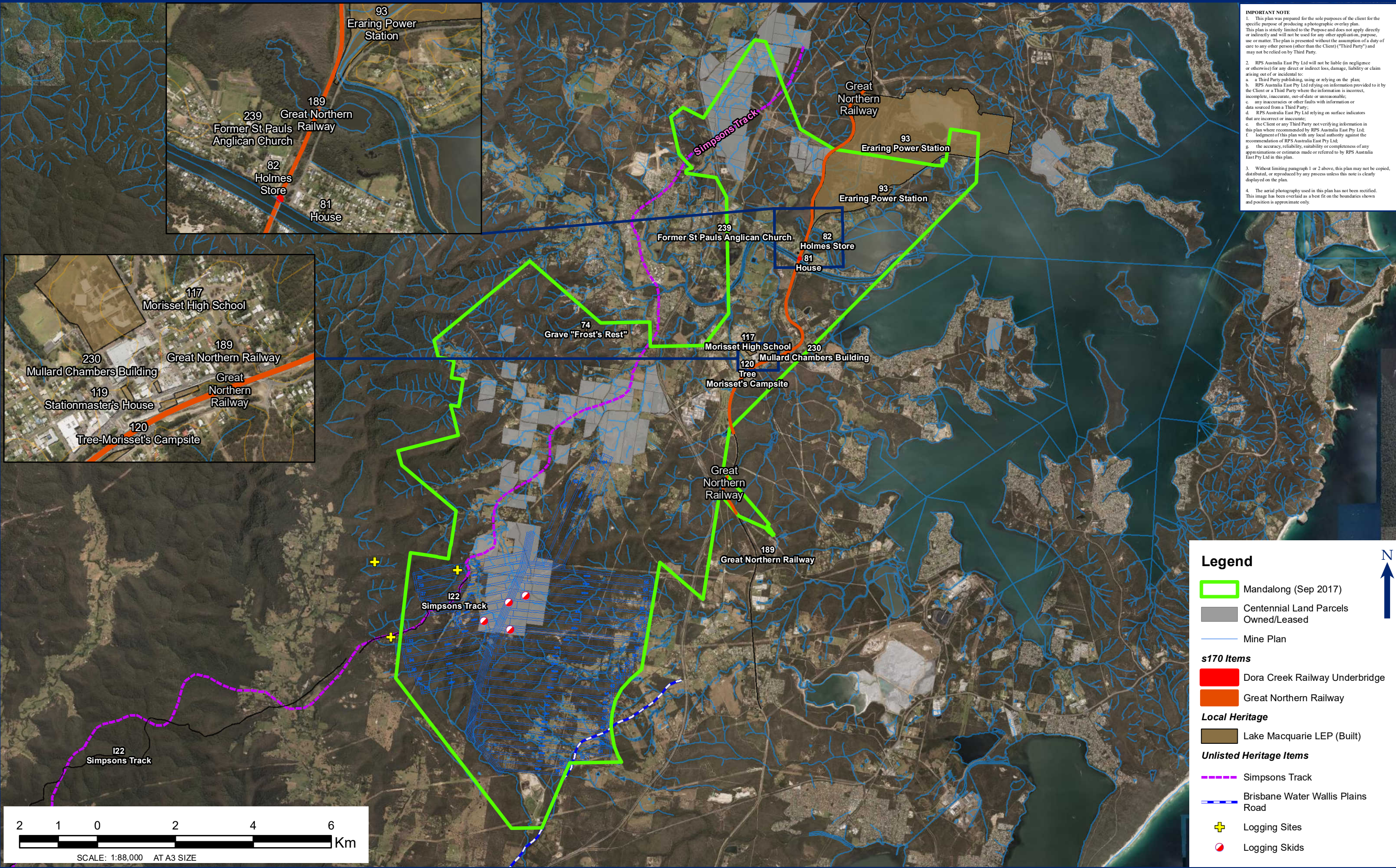
There are 12 listed heritage items and two unlisted heritage items not owned/leased by Centennial in the Mandalong Boundary. The supporting documents for the mine consent do not identify a risk of impact to these sites. No management measures are proposed for the sites outside Centennial Land, but inside the Mandalong boundary.

If surface works or additional impacts are identified to these items then a HIS should be prepared, refer to Section 5 of the HHMP.

Table 3 - Summary of Heritage Searches

Items	Address	Listing	Centennial owned or leased land
Dora Creek Railway Underbridge	Macquarie Street, Dora Creek.	s170 Register (4803388)	No
Eraring Power Station	268 and 294 Rocky Point Road, Eraring, and 115, 215, 235 and 260 Construction Road, Myuna Bay (Lots 10 and 11, DP 1050120; Lot 20, DP 840668; Lot 211, DP 840670; Lots 50 and 51, DP 840671)	LEP (93)	No
Great Northern Railway	Line passes through Lake Macquarie City from Garden Suburb to Wyee	LEP (189) + s170 register (4805752)	No
Morisset High School	33 Bridge Street (Lot 3, Section 40, DP 758707)	LEP (117)	No
Morisset Railway Station Group and Residences (listing includes LEP 119 as well)	58 Dora Street	S170 Railcorp register (SHI 4801056)	No
Stationmasters House, Morisset		LEP (119)	
Tree, Morisset's Campsite, Morisset	147 Macquarie Street (Lot 7045, DP 93593)	LEP (120)	No
Mullard Chambers Building, Morisset	71 Dora Street (Lot 1, DP 215590)	LEP (230)	No
Community Hall, Morisset	77 Dora Street (Lot 2, DP 590896)	LEP (231)	No
House, 16 Dora Street, Dora Creek	16 Dora Street (Lot 11, DP 533825)	LEP (81)	No
Holmes Store, Dora Creek	3 Watt Street (Lot 38, DP 528601)	LEP (82)	No

Items	Address	Listing	Centennial owned or leased land
Former St Pauls Anglican Church, Dora Creek	25 Coorumbung Road (Lot 101, DP 840020)	LEP (239)	No
Frost's Rest (grave)	154 Mannings Road (Lot 1, DP 919600)	LEP (74)	No
Simpsons Track	Corresponds roughly with Mandalong Road in south and extends northeast to Freemans Waterhole	Not Listed	No
Brisbane Water – Wallis Plains Road	Roughly follows route of Hue Hue Road, near Kiar	Not Listed	No
Former residence (adjacent to Simpsons Track)	West of junction of Mandalong and Curtis Roads	Not Listed	Centennial owned land
Landing skid 1	East of Morans Creek	Not Listed	Centennial owned land
Landing skid 2	East of Morans Creek	Not Listed	Centennial owned land
Landing skid 3	East of Morans Creek	Not Listed	Centennial owned land
Landing skid 4	East of Morans Creek	Not Listed	Centennial owned land



IMPORTANT NOTE

1. This plan was prepared for the sole purposes of the client for the specific purpose of producing a photographic overlay plan. This plan is strictly limited to the Purpose and does not apply directly or indirectly and will not be used for any other application, purpose, use or matter. The plan is presented without the assumption of a duty of care to any other person (other than the Client) ("Third Party") and may not be relied on by Third Party.

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f. lodgement of this plan with any local authority against the recommendation of RPS Australia East Pty Ltd;

g. the accuracy, reliability, suitability or completeness of any approximations or estimates made or referred to by RPS Australia East Pty Ltd in this plan.


3. Without limiting paragraph 1 or 2 above, this plan may not be copied, distributed, or reproduced by any process unless this note is clearly displayed on the plan.

4. The aerial photography used in this plan has not been rectified. This image has been overlaid as a best fit on the boundaries shown and position is approximate only.



Table 4 - Descriptions of Listed and Unlisted Heritage Items

ITEM: Dora Creek Railway Underbridge	 <p>Source: NSW Heritage Register Database</p>
ADDRESS: Macquarie Street, Dora Creek	
LISTING: NSW s170 Register (State owned items)	
DESCRIPTION Dora Creek Railway Underbridge is of local significance as a landmark railway structure. The 1950s bridge is one of a number of through-girders constructed on the Main Northern Line and is representative of typical bridge construction of the period.	
ITEM: Eraring Power Station	 <p>Source: NSW Heritage Register Database</p>
ADDRESS: Rocky Point Rd, Eraring	
LISTING: Lake Macquarie LEP	
DESCRIPTION: Eraring Power Station is the biggest industrial undertaking around the Lake and one of the biggest in the Hunter region. Eraring contrasts strongly with nearby Wangi P.S. in size of units (660 MW x 4 to Wangi's 50 MW x 3 & 60 MW x 3) and in design philosophy - Eraring was designed as a utilitarian structure, with minimal concessions to appearance, while Wangi was designed to express its function without sacrificing a pleasing appearance. Eraring represents the "State of the Art" in its technology, and is one of the biggest power stations in the State.	

ITEM: Great Northern Railway	<p>No photograph Available</p>
ADDRESS: Various	
LISTING: Lake Macquarie LEP & s170	
<p>DESCRIPTION:</p> <p>More correctly known as the Short North, the rail line between Newcastle and the northern bank of the Hawkesbury River (near present day Wondabyne) was opened in January 1888. The line connection was completed between Sydney and Newcastle with the opening of the bridge over the Hawkesbury River in 1889.</p>	
ITEM: Morisset High School	 <p>Source: NSW Heritage Database</p>
ADDRESS: 33 Bridge St, Morisset	
LISTING: Lake Macquarie LEP	
<p>DESCRIPTION: The school has a high local significance serving the community for over 100 years. It is an excellent example of standard Government Architecture design for a small rural school of the time. Its continued use as part of the high school reinforces its value to the community.</p>	
ITEM: Stationmaster's House, Morisset	 <p>Source: NSW Heritage Database</p>
ADDRESS: 58 Dora St, Morisset	
LISTING: Lake Macquarie LEP	
<p>DESCRIPTION: Opened in August 1887 the Stationmaster's House is an attractive example of railway housing of its period. The Victorian cottage holds a prominent position next to the station, maintaining its historic relationship with the station. Although only low regional significance the building holds a high local significance.</p>	



<p>ITEM: Tree, Morisset's Campsite, Morisset</p>	
<p>ADDRESS: 147 Macquarie St, Morisset</p>	
<p>LISTING: Lake Macquarie LEP</p>	
<p>DESCRIPTION: The tree is thought to be over 170 years old and hold the location of Major Morisset's camp site on his first journey over land from Newcastle to Sydney in 1823. The tree has a high regional significance and high (possibly very high) local significance since it holds the earliest passing of colonial explorers inland of the Lake.</p>	 <p>Source: NSW Heritage Database</p>
<p>ITEM: Mullard Chambers Building, Morisset</p>	
<p>ADDRESS: 71 Dora St, Morisset</p>	
<p>LISTING: Lake Macquarie LEP</p>	
<p>DESCRIPTION: Originally built in 1922 the Mullard Chambers is the only large commercial building in the main street of Morisset. The building holds moderate (possibly high) local level of significance.</p>	<p>No photo available</p>



<p>ITEM: Community Hall, Morisset</p>	 <p>Source: morissethall.org</p>
<p>ADDRESS: 77 Dora St</p>	
<p>LISTING: Lake Macquarie LEP</p>	
<p>DESCRIPTION: Built to commemorate the end of the First World War the hall has been extensively used by the community until the present day, due to this the hall holds a high local significance. The building is a large two-storey hall built with a Vernacular Modern front facade on an old timber framed hall.</p>	
<p>ITEM: House, 16 Dora Street, Dora Creek</p>	 <p>Source: NSW Heritage Database</p>
<p>ADDRESS: 16 Dora St</p>	
<p>LISTING: Lake Macquarie LEP</p>	
<p>DESCRIPTION: Built in 1898 the house holds high local significance due to its Victorian Gothic with added Federation detail architecture further set apart from other structures of the period by its fretwork bargeboards and bullnose veranda roof. Very few buildings of this period still exist in Dora Creek.</p>	
<p>ITEM: Holmes Store, Dora Creek</p>	 <p>Source: NSW Heritage Database</p>
<p>ADDRESS: 3 Watt St, Dora Creek</p>	
<p>LISTING: Lake Macquarie LEP</p>	
<p>DESCRIPTION: The only surviving commercial building in Dora Creek which predates WW2. The shop is designed to present an attractive front to the railway station and postdates the establishment of the station in 1889.</p>	

<p>ITEM: Former St Pauls Anglican Church, Dora Creek</p>	 <p>Source: Lake Macquarie Council</p>
<p>ADDRESS: 25 Coorumbung Road (Lot 101, DP 840020)</p>	
<p>LISTING: Lake Macquarie LEP</p>	
<p>DESCRIPTION:</p> <p>No description available.</p>	
<p>ITEM: Frost's Rest (Grave)</p>	 <p>Source: Lake Macquarie Council</p>
<p>ADDRESS: 154 Mannings Road (Lot 1, DP 919600)</p>	
<p>LISTING: Lake Macquarie LEP</p>	
<p>DESCRIPTION:</p> <p>The grave is pleasantly sited in bushland on a seldom used road. The gravestone and fence demonstrate the skills of regional craftsmen. The Frost family were pioneers of the Cooranbong locality, and a well known local family. This memorial to the Frost family has historical importance in Cooranbong and Lake Macquarie.</p>	

ITEM: Simpsons track	
ADDRESS: Various	
UNLISTED. Source: RPS 2013. Mandalong Southern Extension Project. Heritage Impact Assessment.	
<p>DESCRIPTION:</p> <p>Simpsons Track was a branch of the convict-built Great Northern Road. Named after Thomas Simpson, who had a landholding near Dora Creek at one point, Simpsons Track was considered as a potential main route to the Hunter Region however; the preferred route became Great North Road.</p> <p>Research has determined and given the evidence it is thought that the currently formed and bitumen sealed Mandalong Road is along the alignment of Simpsons Track. This is supported by The Convict Trail Project's (2006) comments that, "parts of the route of Simpsons Track have become today's roads, with the original track lying under or beside them". It would be reasonable to believe that material remains of Simpsons Track in the Mandalong area unlikely.</p>	<p>No photograph available</p>

ITEM: Brisbane Water – Wallis Plains Road	
ADDRESS: Hue Hue Road, Jilliby	
UNLISTED Source: RPS 2013. Mandalong Southern Extension Project. Heritage Impact Assessment.	
<p>DESCRIPTION:</p> <p>Other than the single road fragment remaining near Stockton Creek recorded by Nexus Archaeology in 2007, there is no other known archaeological material evidence to confirm the route of the Brisbane Water to Wallis Plains road in the Southern Extension Area. As with the route of Simpsons Track, further research using the NSW Department of Lands parish maps indicated that the line of the current Hue Hue Road is on a similar line to what was probably the Brisbane Water to Wallis Plains Road. This road intersects the Mandalong Project Area briefly in the south east corner, but given the construction methods used in modern day road construction it is unlikely that any remnants of the earlier road would survive.</p>	No photograph available
ITEM: Former residence (adjacent to Simpsons Track)	
ADDRESS: Olney State Forest	
UNLISTED Source: ERM 1995. Morisset Forestry District Environmental Impact Statement. Supporting Document 1, State Forests of NSW.	
<p>DESCRIPTION:</p> <p>Now known as Curtis's Paddock, this was the site of a former private residence later used as a forestry camp. While the house has been removed, a corrugated iron shed and remains of a post and rail stockyard remains. Of the house, the timber stumps and a brick and stone fireplace remain together with plantings of mature exotic trees and a rubbish dump.</p>	No photograph available

ITEM: Landing skid 1	 <p>Source: RPS</p>
ADDRESS: Olney State Forest	
UNLISTED Source: RPS 2013. Mandalong Southern Extension Project. Heritage Impact Assessment.	
<p>DESCRIPTION:</p> <p>This feature displayed two elevated ramps either side at the end of a track in the Olney State Forest. The soil is cut on both the east and west of the termination of the track, with horizontal and vertical timber supports placed in the cuts as retaining walls. When viewed from the south, the entire feature forms a rough, inverted “U” shape, with the track substantially lower than the sides.</p>	
ITEM: Landing skid 2	 <p>Source: RPS</p>
ADDRESS: Olney State Forest	
UNLISTED	
<p>DESCRIPTION:</p> <p>This item is a timber ramp elevated along the northern side of an existing track in the Olney State Forest. The soil is cut on the northern side of the track, with horizontal and vertical timber supports placed in the cut as retaining walls. Two skids are placed perpendicular to the horizontal beam, forming a ramp. The area between the skids is filled with soil to the level of the horizontal supports.</p>	

<p>ITEM: Landing skid 3</p>	
<p>ADDRESS: Olney State Forest</p>	
<p>UNLISTED. Source: RPS 2013. Mandalong Southern Extension Project. Heritage Impact Assessment.</p>	
<p>DESCRIPTION:</p> <p>This item presents as a timber ramp elevated along the northern side of a track in the Olney State Forest and is more legible and intact than the other examples investigated. As with the others, it displays a single horizontal log running above and parallel to the track elevated and supported underneath by soil. Its construction differs as there is only a single upright post positioned in the centre providing support. This support log is cut to form a roughly fashioned bracket for the first log to fit into.</p>	 <p>Source: RPS</p>
<p>ITEM: Landing skid 4</p>	
<p>ADDRESS: Olney State Forest</p>	
<p>UNLISTED. Source: RPS 2013. Mandalong Southern Extension Project. Heritage Impact Assessment.</p>	
<p>DESCRIPTION:</p> <p>This item is a ramp elevated and parallel to a track in the Olney State Forest. It comprises a single un-sawn log beam approximately eight metres in length supported by soil and two upright timber posts in front. Slots have been sawn out of the main horizontal beam to accommodate the vertical supports.</p> <p>Two log skids each approximately 12 metres long have been placed on top of, and perpendicular to, the horizontal beam. At the end of the skids where they meet the horizontal beam, the undersides have been sawn flat so they form a stable platform.</p>	 <p>Source: RPS</p>

Landing Skid 2

An archival recording was completed on Landing Skid 2 by a qualified historical archaeologist in January 2017 (RPS 2017). The recording was completed prior to the commencement of construction activities associated with the Mandalong South Surface Site. The recording identified the landing skid comprised a support log held in place on the southern end by a mature Eucalypt tree and chocked by timber on the northern end. This support held up two cross logs used to roll timber onto a delivery vehicle. No actions were recommended within the archival recording.

Extraction Plan

During the preparation of an Extraction Plan, Centennial Mandalong will use its best endeavours to undertake an archaeological survey of privately-owned land which was not surveyed during the EIS.

An Extraction Plan will be prepared by Centennial Mandalong to address SSD_5144 Schedule 4 Condition 6(l) to achieve performance measures identified in Schedule 4 **Table 1**. During the preparation of the Extraction Plan consultation will be undertaken with OEH.

Attachment 3

Myuna

Overview of Operations

Centennial Myuna operations are located on the western side of Lake Macquarie approximately 25 kilometres south-west of Newcastle and 140 kilometres north of Sydney in New South Wales (NSW). Underground bord and pillar mining operations under Centennial commenced in 2002 with the acquisition of the colliery from Powercoal. Current approvals authorise the extraction of up to 3 million tonnes coal for supply to Eraring Power Station using existing infrastructure. The key surface infrastructure at the Myuna Mine comprises administration buildings, workshop, coal washery and mine ventilation facilities at Myuna. A dedicated coal conveyor supplies nearby Eraring Power Station (**Figure 1**).

Historic Heritage Commitments & Consent Conditions

Table 1 - Myuna Consolidated Project Approval 10 - 0080

Condition No.	Consent Condition	Addressed in HHMP/Implemented
Schedule 3 Condition 29	The Applicant shall prepare and implement a Heritage Management Plan for the development, to the satisfaction of the Secretary. The following describes the condition of the Plan.	Attachment 6 Consultation Log and Attachment 6A Consultation Comments identifies consultation undertaken.
Schedule 3 Condition 29(a)	Be prepared in consultation with OEH and Registered Aboriginal Parties;	Attachment 6 Consultation Log and Attachment 6A Consultation Comments identifies consultation undertaken. Consultation with the Registered Aboriginal Parties is not relevant to the management plan. For consultation with Registered Aboriginal Parties, refer to the Northern Region Aboriginal Cultural Heritage Management Plan.
Schedule 3 Condition 21(b)	Be submitted to the Secretary for approval, prior to commencement of construction activities or by 31 March 2016, whichever is sooner;	Attachment 6 Consultation Log and Attachment 6A Consultation Comments identifies consultation undertaken.
Schedule 3 Condition 21(c)	Include consideration of the Aboriginal and non-Aboriginal cultural context and significance of the site;	Section 3 Historic Heritage Context for the Northern Region describes the cultural context of historic heritage within this Plan.

Condition No.	Consent Condition	Addressed in HHMP/Implemented
Schedule 3 Condition 21(d)	detail the responsibilities of all stakeholders;	Section 7 Roles and Responsibilities describes the responsibilities of all stakeholders.
Schedule 3 Condition 29 (e)	Include a description of the measures that would be implemented for the following:	
	Protection of the section of remnant railway line associated with the decommissioned Wangi Power Station that is located within the site;	<p>The remnant railway line associated with the decommissioned power station is listed in Table 2 Heritage Items within the Myuna boundary.</p> <p>If works were to be undertaken within the area of the railway line assessment of impacts would be required in accordance with Section 5 Historic Heritage Assessment and depending on the results of the impact assessment additional approvals would apply.</p>
	Dealing with previously unidentified Aboriginal objects (excluding human remains), including any need to halt works in the vicinity, assessment of significance, determination of appropriate mitigation measures (by a qualified archaeologist in consultation with Aboriginal stakeholders), re-commencement of works, notifying OEH, and registering the new site(s) in the OEH AHIMS register	The Northern Region ACHMP Section 6 identifies management measures for Aboriginal cultural heritage identification, monitoring and management.

Condition No.	Consent Condition	Addressed in HHMP/Implemented
	Dealing with any human remains which may be discovered, including halting of works in the vicinity; notifying NSW Police, OEH, the Department and Aboriginal stakeholders; and not recommencing any works in the vicinity unless authorised	<p>The Northern Region ACHMP Section 6 identifies management measures for Aboriginal cultural heritage identification, monitoring and management.</p> <p>Section 6.7 Identification of Unknown Heritage Sites or Skeletal Remains requires immediate notification to Police and to DPE, OEH and registered Aboriginal parties within 7 days..</p>
	Heritage induction for construction personnel (including procedures for keeping records of inductions)	Section 7.2 Inductions identifies induction requirements for historic heritage.
	Ongoing Aboriginal consultation and involvement (including procedures for keeping records of this	Northern Region ACHMP Section 5 describes the Northern Region Aboriginal Cultural Heritage Committee.

Condition No.	Consent Condition	Addressed in HHMP/Implemented
	Appropriate identification, management, conservation and protection of both Aboriginal and non-Aboriginal heritage items identified on the site	<p>Section 5 Historic Heritage Assessment and Section 6 Historic Heritage Management identify the identification and management of historic heritage items. Section 6.3 Heritage Sites Monitoring Program identifies heritage monitoring will be undertaken prior to and following mining. Myuna does not require or currently hold an Extraction Plan and will undertake site inspections in accordance with Section 6.3 Heritage Sites Monitoring Program.</p> <p>Myuna predominantly mines under Lake Macquarie and undermining of historic heritage items will be infrequent.</p> <p>The Northern Region ACHMP Section 6 identifies management measures for Aboriginal cultural heritage identification, monitoring and management.</p>
	Dealing with previously unidentified non-Aboriginal heritage items which may be discovered during the project	<p>The Northern Region ACHMP Section 6 identifies management measures for Aboriginal cultural heritage identification, monitoring and management.</p> <p>Section 6.7 Identification of previously unknown heritage sites or remains describes the process for managing an unexpected find. Figure 5 outlines the steps that must be followed, emphasising OEH must be consulted on the significance of any unexpected find prior to engaging with LMCC and obtaining approvals to undertake works.</p>

Heritage Items in Myuna Colliery Boundary

A search of the National Heritage Register database, the SHR and the Lake Macquarie City Council Local Environmental Plan (LEP) Schedule 5 (Environmental heritage) on the 18 July 2016, found the following:

National Heritage Register database:

There are no items in Myuna Colliery holdings listed on the National Heritage database.

State Heritage Register:

There are three items on the State Heritage Register within the Myuna Colliery Holdings: the Wangi Power Station (curtilage) (SHR1014); a portion of the Rathmines Park and Former Sea Plane Base (SHR1740); and Dobell House (SHR1985).

The SHR curtilage of Wangi Power Station Complex incorporates a wide area and includes the Myuna Colliery surface installations (**Figure 2**). The Former Wangi Power Station – A Conservation Management Plan (CMP) (Paul Davies Pty Ltd 2006) was developed to guide the future development of the approximately 22.5 hectare site of the former Wangi Power Station. The CMP provides a list of items considered part of the Complex. While including external items such as roads and the canal, the list does not include, or refer to the railway line (Paul Davies Pty Ltd 2006: 43-46).

The CMP describes two separate and distinct curtilages: the first encompasses the immediate power station building; the second the wider planned setting of the building. The broader curtilage was not considered of high significance; however it was considered important that the broad or distant views to the power station building and chimney stacks be retained (Paul Davies Pty Ltd 2006: 67-68).

Dobell House (SHR1985), Wangi Wangi is of state significance for its strong association with prominent Australian artist William Dobell and his work. As well as being Dobell's home from 1942-1970, it was also the place where he painted numerous works including 'Storm Approaching Wangi' (Wynn Prize 1948), 'Dr McMahon' (Archibald Prize 1959) and series of portraits of cosmetician Helena Rubenstein.

Lake Macquarie City Council LEP Schedule 5 (Environmental heritage):

The following are listed:

- Wangi Power Station (also listed on SHR -see above)
 - Emergency Radio Bunkers
 - Eraring Power Station
 - Rathmines Park, former Seaplane Base(also listed on SHR -see above)
 - Gun Emplacements (Wangi Wangi)
 - Catalina War Memorial (Rathmines)
 - Community Hall (Rathmines)
 - Catamaran Club (Rathmines)
 - Rathmines Holiday Camp
 - Dobell House, Wangi Wangi (also listed on SHR – see above)
-

- Pulbah Island (also listed as an Aboriginal Place)

Unlisted heritage items

The redundant Awaba – Wangi Railway Line extends from the Northern Railway line at Awaba to the Wangi Power Station. While the Wangi Power Station closed in 1986, it appears the line closed prior to that. The known remnants of the line include rail embankment, culverts, some sleepers and rail. A portion of the rail route, closest to Wangi Power Station is in the SHR curtilage and on Centennial owned land. A larger portion of the rail route is within the Centennial boundary.

Impact Assessment and Management of Heritage Items in Centennial Land

There are two heritage items on Centennial Land, the Wangi Power Station complex curtilage (SHR 1014 and locally listed LEP 190) and the Awaba to Wangi Railway line (unlisted).

The Awaba to Wangi railway line crosses into the into the Wangi Power Station Complex boundary and thus this section of the railway line is protected under the SHR listing and LEP listing of the Wangi Power Station Complex. Approximately 250m of the railway line occurs on Centennial land.

If surface works or other impacts are required in the item's vicinity then a HIS should be prepared, refer to Section 5 of this HHMP.

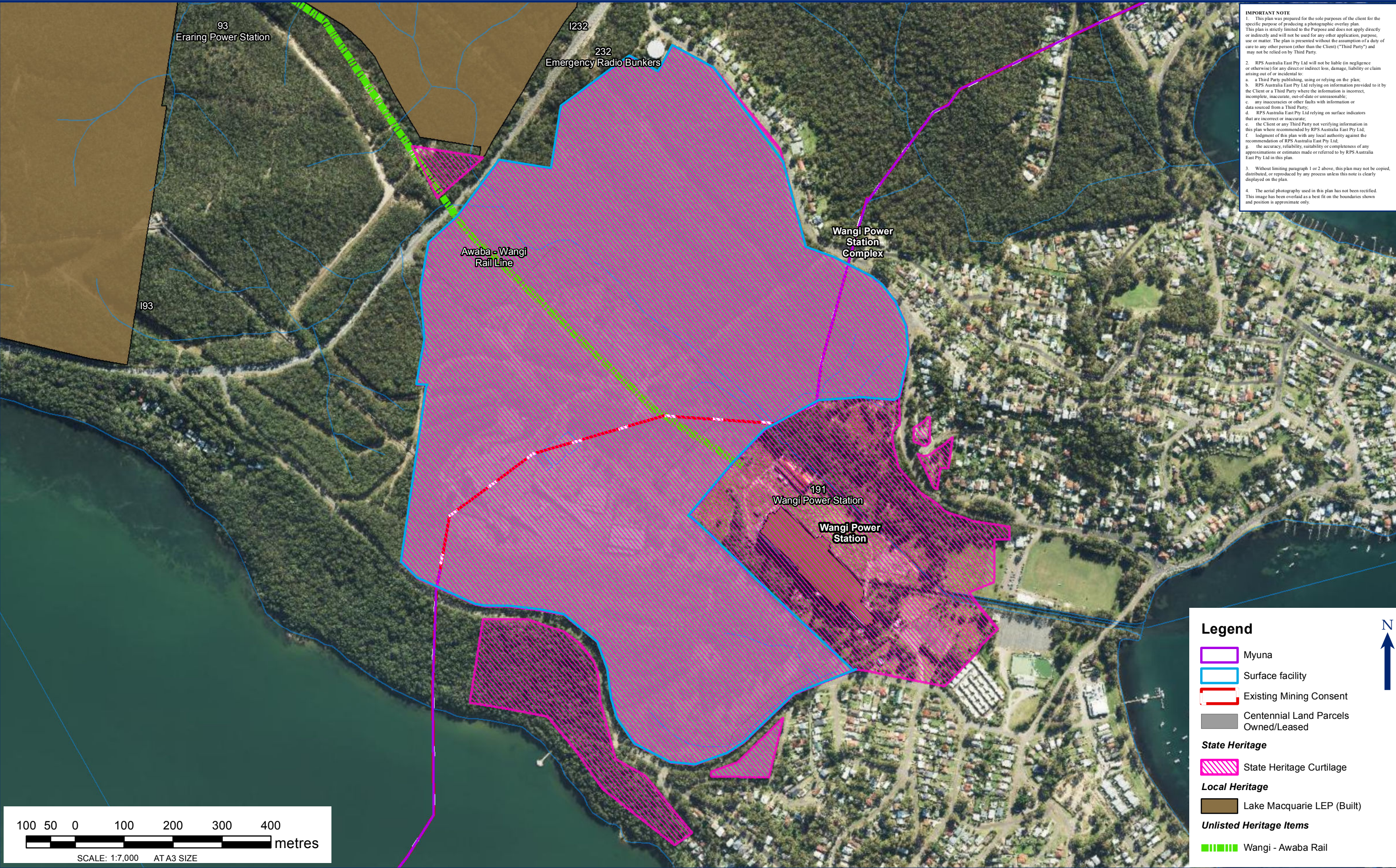
Impact Assessment and Management of Heritage Items outside Centennial Land, but inside Myuna Colliery Boundary

There are 11 listed heritage items in the Myuna Colliery boundary not owned by Centennial. The supporting documents for the mine consent did not identify a risk of impact to these sites, given they are not owned by Centennial; there is no obligation to maintain these items.

If surface works or additional impacts to the items are identified then a HIS should be prepared in accordance with Section 5 of this HHMP.

Table 2 - Summary of Heritage Searches – Myuna Colliery

Items	Address	Listing	Centennial owned or leased land
Wangi Power Station Complex Curtilage	Lot 101 DP 880089	SHR (1014)	Centennial owned land contains portion of site
Wangi Power Station		LEP (190)	
Rathmines Park, former RAAF Seaplane Base	Dorrington Road Rathmines	SHR (1740)	No
		LEP (244)	
Dobell House	47 Dobell Drive, Wangi Wangi	SHR (1985)	No
		LEP (190)	
Emergency Radio Bunkers	Parcel Code: MD Lot PT. 609	LEP (232)	No
Eraring Power Station	268 and 294 Rocky Point Road,	LEP (93)	No



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1. This plan was prepared for the sole purposes of the client for the specific purpose of producing a photographic overlay plan. This plan is strictly limited to the Purpose and does not apply directly or indirectly and will not be used for any other application, purpose, use or matter. The plan is presented without the assumption of a duty of care to any other person (other than the Client) ("Third Party") and may not be relied on by Third Party.

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Items	Address	Listing	Centennial owned or leased land
	Eraring, and 115, 215, 235 and 260 Construction Road, Myuna Bay (Lots 10 and 11, DP 1050120; Lot 20, DP 840668; Lot 211, DP 840670; Lots 50 and 51, DP 840671)		
Gun Emplacements	24 Reserve Road, Wangi Wangi	LEP (233)	No
Catalina War Memorial	1 Overhill Road, Rathmines	LEP (128)	
Pulbah Island	Lake Macquarie	LEP (L1)	No
		Aboriginal Place	
Community Hall	Stilling Street, opposite Dorrington Road, Rathmines	LEP (125)	No
Catamaran Club	1 Overhill Road, Rathmines	LEP (126)	No
Rathmines Holiday Camp	3 Stilling Street, Rathmines	LEP (133)	No
Nords Wharf	43c Nords Wharf Road	LEP (122)	No
Wangi - Awaba Railway Line	Extends south of Awaba Pit Top and continues south to Wangi	Not Listed	Centennial owned land contains portion of railway

Table 3 - Myuna Listed and Unlisted Heritage Items in the Northern Holdings - Myuna

STATE HERITAGE REGISTER ITEMS	
<p>ITEM: Wangi Power Station Complex</p>	
<p>ADDRESS: Lot 101 DP 880089</p> <p>(Figure 2 – State Heritage listed curtilage)</p>	
<p>LISTING: State Heritage Item: Number 1014</p> <p>Lake Macquarie LEP: 191</p>	
<p>DESCRIPTION: The Wangi Power Station is of State heritage Significance for its association with the evolution of coalfield power stations and power generation in New South Wales. It was the largest power station in NSW for at least its first five years. It played a pre-eminent role in relieving NSW from the drastic power shortages and blackouts during the late 1950s and the restoration of power supply to NSW following a statewide blackout in 1964. Wangi Power Station was the last of the Railway's power stations built and the last one to close. It represents the transition from Railways to Elcom as the predominant power generation authority in NSW.</p>	


Source: NSW Heritage Register Database

<p>Item: Rathmines Park, former RAAF Seaplane Base</p>	
<p>ADDRESS: Dorrington Road, Rathmines</p>	
<p>LISTING: State Heritage Item: Number 1740 Lake Macquarie LEP: I244</p>	
<p>DESCRIPTION:</p> <p>The Rathmines RAAF Base is on the western shore of Lake Macquarie. The design and construction of the base at the beginning of WWII resulted in a geometric layout of structures over the site which reflects its use for military purposes. When the base closed in 1956, there were more than 230 buildings and structures on site.</p>	
<p>ITEM: Dobell House</p>	
<p>ADDRESS: 47 Dobell Drive Wangi Wangi</p>	
<p>LISTING: State Heritage Item: Number 1985 Lake Macquarie LEP: 190</p>	
<p>DESCRIPTION:</p> <p>Dobell's House is significant as the former home and studio of the famous Australian artist, Sir William Dobell. Any architectural significance which may have applied to the house has been negated by the extensive alterations and additions it has undergone.</p> <p>Dobell House is also of state significance for its strong association with prominent Australian artist William Dobell and his work. As well as being Dobell's home from 1942-1970, it was also the place where he</p>	


Source: Rathmines Park Conservation Plan (Pratten and Irving 1997)


Source: NSW Heritage Register Database


<p> painted numerous works including 'Storm Approaching Wangi' (Wynn Prize 1948), 'Dr McMahon' (Archibald Prize 1959) and series of portraits of cosmetician Helena Rubenstein. </p>	
<p>LAKE MACQUARIE LEP SCHEDULE 5 ITEMS</p>	
<p>ITEM: Wangi Power Station</p>	<p>See above</p>
<p> ADDRESS: Lot 101 DP 880089 See Figure 2 – LEP curtilage </p>	
<p>LISTING: Lake Macquarie LEP: 191</p>	
<p>(See Description above)</p>	
<p>Item: Rathmines Park, former RAAF Seaplane Base</p>	<p>See above</p>
<p>ADDRESS: Dorrington Road, Rathmines</p>	
<p>LISTING: Lake Macquarie LEP: I244</p>	
<p>(See Description above)</p>	
<p>ITEM: Dobell House</p>	<p>See above</p>
<p>ADDRESS: 47 Dobell Drive Wangi Wangi</p>	
<p>LISTING: Lake Macquarie LEP (190)</p>	
<p>(See Description above)</p>	


<p>ITEM: Emergency Radio Bunkers</p>	
<p>ADDRESS: 115 Wangi Road, Rathmines</p>	
<p>LISTING: Lake Macquarie LEP – Schedule 5</p>	
<p>DESCRIPTION:</p> <p>Remote control receiving station. Part of the key communications infrastructure for the World War II Sea Plane Base at nearby Rathmines, erected just after the outbreak of war. The bunkers served as VHF/DF transmitting stations. They are semi-underground and were proofed against bomb blast and splinters and disguised by thick bush. The ground is now cleared and situated under power lines. The bunkers were equipped with their own water and power supply and were operated 24 hours a day by men and women. A large 'wind up' tower was also part of the site. During the 1950s and 60s the radio equipment in the Bunkers was taken by the amateur West Lakes Radio Club.</p> <p>Now described as concrete bunkers (2) 30 m long by 5 m wide and almost 5 m high. Built 10 m into the ground they were covered with soil to disguise their shape.</p> <p>Source and plate: Lake Macquarie Heritage Inventory.</p>	 <p>Source: NSW Heritage Register Database</p>

ITEM: Eraring Power Station	
ADDRESS: Rocky Point Rd, Eraring	
LISTING: Lake Macquarie LEP - Schedule 5	
<p>DESCRIPTION:</p> <p>Eraring Power Station was the largest industrial undertaking around the Lake, and one of the biggest in the Hunter region. Eraring contrasts strongly with nearby Wangi P.S. in size of units and in design philosophy - Eraring was designed as a utilitarian structure, with minimal concessions to appearance, while Wangi was designed to express its function without sacrificing a pleasing appearance. Eraring represents the "State of the Art" in its technology, and is one of the biggest power stations in the State. It is undoubtedly highly significant, although considering its youth, it is arguable whether Eraring yet qualifies as a heritage item.</p>	 <p>Source: NSW Heritage Register Database</p>

<p>ITEM: Gun emplacements (associated with Rathmines RAAF Base)</p>	
ADDRESS: 24 Reserve Road, Wangi Wangi	
LISTING: Lake Macquarie LEP (233)	
<p>DESCRIPTION:</p> <p>The Gun Emplacement site at Wangi Wangi played an important role in Australia's defence system during World War Two at a time when invasion from Japan was considered a real possibility. The guns provided</p>	 <p>Source: NSW Heritage Register Database</p>

<p>anti-aircraft protection for the Rathmines Catalina Sea Plane Base, where many RAAF officers were trained during the course of World War Two. The site remains important to the ex- military personnel who trained and served at the base, along with the wider Wangi community, who regard it as part of their history and heritage.</p>	
<p>ITEM: Catalina War Memorial</p>	
<p>ADDRESS: 1 Overhill Road, Rathmines</p>	
<p>LISTING: Lake Macquarie LEP (128)</p>	
<p>DESCRIPTION:</p> <p>The memorial was dedicated in 1993 to honour the memory of those who served at the Rathmines RAAF Base during and after WWII.</p>	
	<p>Source: NSW Heritage Register Database</p>

<p>ITEM: Pulbah Island</p>	
<p>ADDRESS: Lake Macquarie</p>	
<p>LISTING: Lake Macquarie LEP (L1) <i>and</i> Aboriginal Place.</p>	
<p>DESCRIPTION:</p> <p>An island about 68.8 hectares in area situated near the middle of the southern part of Lake Macquarie. The island is generally low and has no outstanding physical features. After the island was declared a reserve in 1929, a cottage & wharf were built & 12 acres were fenced as</p>	
	<p>Source: NSW Heritage Register Database</p>

an animal reserve. In 1930 concrete water tanks were built on the north side. After 1932 a picnic ground with a pavilion & windmill were constructed. The animals were removed during World War 2, and the structures became disused and were demolished or fell down. It is said that remains of the concrete tanks and the foundations of the wharf can still be seen.	
ITEM: Pulbah Island Aboriginal Place	See above
ADDRESS: Lake Macquarie	
LISTING: Aboriginal Place	
<p>DESCRIPTION:</p> <p>Ceremonial site. Pulbah Island associated with mythological stories was an important ceremonial site. Pulbah Island is a sacred site for the Awabakal people. The island's importance to local Aboriginal people was recorded by L.E. Threlkeld (1826). The island continues to be important to the local Awabakal Aboriginal community and is acknowledged in the role the community plays in managing the island. Pulbah Island is important to the Awabakal people because of two mythological stories. The Awabakal people believe that the island was formed by a spirit underground who tried to force its way to the surface, thus forming the island and other landmarks around Lake Macquarie. The sacred island is protected by a monster called Rogoyarran, who lives in deep water nearby and would overturn the canoes of those who ventured to close.</p>	
ITEM: Community Hall	
ADDRESS: Stilling Street, opposite Dorrington Road, Rathmines	
LISTING: Lake Macquarie LEP (125)	

<p>DESCRIPTION:</p> <p>The Other Ranks' Mess (or Airmen's' Recreational Centre) was vital in providing a recreational outlet for the hundreds of men who were bound to spend most of their time confined to this small area. Rathmines was the largest flying boat base in Australia, with "Seaplane Training Flight", seamanship & gunnery courses, trades training, main repair shops for all flying boats & major communications centre. Rathmines RAAF Base had a profound effect on post-WW2 development in Lake Macquarie.</p>	<p>Source: NSW Heritage Register Database</p>
<p>ITEM: Catamaran Club</p>	<div data-bbox="798 972 1455 1317" data-label="Image"> </div> <p>Source: NSW Heritage Register Database</p>
<p>ADDRESS: 1 Overhill Road, Rathmines</p>	
<p>LISTING: Lake Macquarie LEP 126</p>	
<p>DESCRIPTION:</p> <p>This former barracks or office building was one of probably a hundred or more identical barracks buildings use by the airmen to live or work in. Rathmines RAAF Base had a profound effect on post-WW2 development in Lake Macquarie. Rathmines was the largest flying boat base in Australia with "Seaplane Training Flight", seamanship & gunnery courses, trades training, main repair shops for flying boats & major communications centre.</p>	

<p>ITEM: Rathmines Holiday Camp</p>	<div data-bbox="798 367 1481 815" data-label="Image"> </div> <p data-bbox="791 837 1279 869">Source: NSW Heritage Register Database</p>
<p>ADDRESS: 3 Stilling Street, Rathmines</p>	
<p>LISTING: Lake Macquarie LEP 133</p>	
<p>DESCRIPTION:</p> <p>Warrant Officers and Sergeants' Mess. provided an essential meeting place where they could relax together. It is the sole example of a style of building no longer represented elsewhere on the site, and despite its neglect, it still embodies the significance of its time as the Sergeants' Mess in wartime. Rathmines was the largest flying boat base in Australia, with "Seaplane Training Flight", seamanship & gunnery courses, trades training, main repair shops for all flying boats & major communications centre.</p>	
<p>ITEM: Nords Wharf</p>	<div data-bbox="791 1167 1460 1601" data-label="Image"> </div> <p data-bbox="791 1624 1279 1655">Source: NSW Heritage Register Database</p>
<p>ADDRESS: 43c Nords Wharf</p>	
<p>LISTING: Lake Macquarie LEP 122</p>	
<p>DESCRIPTION: This jetty, at the end of a road named after a wharf, is probably the remnants of a larger structure, used in the days when the Lake ferries called at Nords Wharf. The timber deck at the end of this jetty appears to be a newish structure. It was said to have been rebuilt after fire. At least two of the piles look very old. The land end of the jetty is made from large stone rubble, with packed concrete run along the top surface for a walkway.</p>	

UNLISTED HERITAGE ITEMS

ITEM: Wangi – Awaba Railway Line

ADDRESS: Lot 2 DP585142

LISTING: Unlisted

DESCRIPTION: The seven km single track Wangi – Awaba Railway line was to service the Wangi Power Station (opened 1958). The railway line, built around 1951 initially for the transportation of construction materials from the Main Northern Line to the construction site. On completion of construction, the line carried coal to the power station from the Awaba State Mine.

The NSW Heritage Act lists Wangi Power Station as State significant. While the written citation for the power station does not include the railway line the curtilage for the SHR shown in mapping includes the portion of the rail line south of Wangi Road and a small parcel immediately north of Wangi Road (**Figure 2**).



Rail embankment obscured by vegetation and culvert



Rail embankment with sleepers

Attachment 4

Newstan

Overview of Operations

Newstan Colliery is an existing underground coal mine located within the Lake Macquarie Local Government Area approximately 140 kilometres north of Sydney and 25 kilometres south west of Newcastle in New South Wales. Newstan Colliery began mining operations in 1887. Coal is extracted using longwall underground mining methods.

Awaba Colliery operations overlap with areas of Newstan Colliery. The Awaba Colliery surface facilities identification, historical assessment and management measures are presented in the Awaba Colliery site specific Attachment of this HHMP.

Historic Heritage Commitments & Consent Conditions

Table 1 - Newstan Development Consent DA-73-11-98

Condition No.	Consent Condition	Addressed in HHMP/Implemented
Schedule 3 Condition 3.3 (A)	the applicant shall prior to construction of surface facilities or secondary workings within identified areas of archaeological sensitivity within the LEA:	
Schedule 3 Condition 3.3 (A)(i)	prepare an archaeology and cultural heritage management plan which shall include, but not be limited to:	
Schedule 3 Condition 3.3 (A)(i)(a)	(a) identification of any future salvage, excavation, monitoring, and protection of any heritage and archaeological items, within the area of the surface facilities, particularly the waste emplacement and coal stockpile areas, Awaba Colliery, and the area within the LEA prior to and during development;	No Historic heritage items require future salvage, excavation, monitoring or protection on the basis of current impacts.
Schedule 3 Condition 3.3 (A)(i)(b)	measures to undertake test excavations along Lords Creek to verify the archaeological potential of those areas identified as having low archaeological sensitivity at least one year prior to finalisation of the route of channelisation or other proposed works along Lords Creek;	Condition presented and addressed in Northern Region ACHMP (ACHMP) Newstan/Awaba site specific Attachment.

Condition No.	Consent Condition	Addressed in HHMP/Implemented
Schedule 3 Condition 3.3 (A)(i)(c)	If, during the course of construction of any surface facilities, or mining in the LEA, the Applicant becomes aware of any heritage or archaeological material not previously identified, all work likely to affect the material shall cease immediately and the relevant authorities consulted about an appropriate course of action prior to recommencement of work.	Section 6.47 Identification of Previously Unknown Heritage Sites or Skeletal Remains of this HHMP identifies where potentially unknown heritage sites are identified work will be stopped and an appropriately qualified heritage consultant engaged to provide advice.
Schedule 3 Condition 3.3 (A)(i)(d)	measures to protect Aboriginal sites from subsidence and mine working impacts, in consultation with OEH, the Aboriginal community and local residents to ensure integration of measures to protect Aboriginal sites.	Condition presented and addressed in Northern Region ACHMP Newstan/Awaba site specific Attachment.
Schedule 3 Condition 3.3 (A)(i)(e)	identification and documentation of Aboriginal cultural heritage issues;	Condition presented and addressed in Northern Region ACHMP Newstan/Awaba site specific Attachment.
Schedule 3 Condition 3.3 (A)(i)(f)	details of a monitoring program to document the effects of subsidence and mining works on Aboriginal sites and areas of archaeological sensitivity.	Condition presented and addressed in Northern Region ACHMP Newstan/Awaba site specific Attachment. Section 6.3 Historic Sites Monitoring Program identifies the requirements for a historic heritage monitoring program prior to and during mining. Newstan is in care and maintenance and no current plans exist for further mining. Future mining will be subject to development consent.

Condition No.	Consent Condition	Addressed in HHMP/Implemented
The plan shall be prepared in consultation with OEH, the Local Aboriginal Land Council, LMCC, and to the satisfaction of the Director-General, and shall be considered by the Applicant when completing the final underground mine layout;		
Schedule 3 Condition 3.3 (B)	The Applicant shall:	
Schedule 3 Condition 3.3 (B)(i)	submit to and have approved by the Director-General of OEH, a Consent to Destroy application under section 90 of the National Parks and Wildlife Act 1974 for Aboriginal archaeological sites that have been identified to be damaged or destroyed as a result of the development prior to this consent and/or by the archaeology and cultural management plan, prior to any disturbance of the identified sites by mining activity; and	Condition presented and addressed in Northern Region ACHMP Newstan/Awaba site specific Attachment.
Schedule 3 Condition 3.3 (B)(ii)	(ii) not undertake surface development works within the area of high archaeological sensitivity identified as the alluvial terrace along Lords Creek (within proposed Long Wall 42).	Condition presented and addressed in Northern Region ACHMP Newstan/Awaba site specific Attachment.
Schedule 3 Condition 3.3 (C)	If, during the course of construction of any surface facilities, or mining in the LEA, the Applicant becomes aware of any heritage or archaeological material not previously identified, all work likely to affect the material shall cease immediately and the relevant authorities consulted about an appropriate course of action prior to recommencement of work. The relevant authorities may include OEH, the NSW Heritage Office, and the Local Aboriginal Land Council. Any necessary permits or consents shall be obtained and complied with prior to recommencement of work.	Section 6.7 Identification of Previously Unknown Heritage Sites or Skeletal Remains of this HHMP identifies where potentially unknown heritage sites are identified work will be stopped and an appropriately qualified heritage consultant engaged to provide advice.

Condition No.	Consent Condition	Addressed in HHMP/Implemented
Schedule 3 Condition 3.3 (D)	General Terms of Approval - OEH The Applicant shall invite the Koompahtoo Local Aboriginal Land Council to collect the identified isolated artefacts within the area of the proposed surface facilities prior to construction within the relevant area.	Condition presented and addressed in Northern Region ACHMP Newstan/Awaba site specific Attachment.

Table 2 - Newstan Development Consent DA-73-11-98 Statement of Commitments

Commitment	Addressed in HHMP/Implemented
Prior to mining beneath any identified heritage item, the owner will be consulted to discuss possible impacts and proposed methods of mitigating any impacts.	Site specific measures of this Attachment identifies that prior to mining, the owner of the heritage item will be consulted. Newstan is in care and maintenance and no current plans exist for further mining. Future mining will be subject to development consent.
Inspections of heritage items will be provided pre mining and post mining in accordance with Section 4.13.4 of the Newstan 2010 EIS. Where undertaken the heritage assessment will be archivally recorded with the pre mining inspection. An assessment report of the inquiries and assessment will be provided to OEH. *Excluding NT2 Nomad Road, Toronto and NT3 6 Nomad Road Toronto.	Site specific measures of this Attachment identifies pre mining inspections will be undertaken on heritage items, and where assessed archival recording will be undertaken prior to mining. Section 6.3 Historic Heritage Monitoring Program identifies that a heritage site monitoring program will be undertaken and reported in the Annual Review. Newstan is in care and maintenance and no current plans exist for further mining. Future mining will be subject to development consent.
Inspections of buildings not identified in this assessment if identified prior to mining as having heritage potential are required to have a heritage assessment completed and provided to OEH.	Site specific measures of this Attachment identifies inspection of buildings will be undertaken prior to mining if there is potential for the buildings to be identified as heritage, and such report provided to OEH. Newstan is in care and maintenance and no current plans exist for further mining. Future mining will be subject to development consent.

Heritage Items in Newstan Colliery Boundary

A search of the National Heritage Register database, the SHR and the Lake Macquarie City Council Local Environmental Plan (LEP) Schedule 5 (Environmental heritage) has identified 40 heritage items

in the Newstan Colliery Boundary of which 32 are listed on heritage registers and 8 have been identified but are not listed, that is, do not meet the criteria for local heritage listing (**Figure 1**).

National Heritage Register database

There are no items in Newstan Colliery holdings listed on the National Heritage database.

State Heritage Register

There is one heritage item on the SHR within the Newstan Colliery Holding. This item is the Wangi Wangi Power Station (SHR 01014).

Lake Macquarie City Council LEP Schedule 5 (Environmental heritage)

There are 30 heritage items listed on the LEP, 26 are built heritage items and four are archaeological sites. The Wangi Wangi Power Station (I191) is also listed on the SHR. In addition there are two section 170 register items. Of these heritage items the majority are in the vicinity of the Lake Macquarie foreshore and outside the mine operations and areas of surface disturbance.

Table 3 provides a summary of the items identified during the search of heritage databases.

Table 3 - Summary of Heritage Searches

Items	Address	Listing	Centennial owned or leased land
Awaba railway jib crane and former cottage potential archaeological site	Adelaide Street, Toronto	LEP S.170 (Archaeological site)	No
Gatekeepers Cottage	154 Wilton Road, Awaba	LEP I7	No
Former Awaba Union Church	20 Gosford Street, Awaba	LEP I236	No
Railway Station Cottage	Adelaide Street, Toronto	LEP A1 (Archaeological site)	No
Fossil Tree Reserve	40 Aldon Crescent, Blackalls Park	LEP A2 (Archaeological site)	No
Fossil Tree Sections	Venetia Avenue, Blackalls Park	LEP A3 (Archaeological site)	No
Blackalls Park Railway Station (Fassifern to Toronto Branch Railway Line)	1c Reynolds Street, Blackalls Park	LEP I20	No
Toronto Railway Overbridge (Fassifern to Toronto Branch Railway Line)	1c Reynold Street, Blackalls Park (over Fassifern Road, Blackalls Park)	LEP I95	No

Items	Address	Listing	Centennial owned or leased land
Eraring Power Station	Rocky Point Rd, Eraring	LEP I93	No
Emergency Radio Bunkers	115 Wangi Road, Rathmines	LEP I232	No
Fassifern Railway Station	Tucker Close, Fassifern	LEP I94, also on s170 Railcorp register (SHI 4801046)	Yes
Fassifern Railway Cottage	Wallsend Road, Fassifern	LEP I96	No
Newstan Colliery		LEP A6 (Archaeological site)	No
Fassifern to Toronto Branch Railway Line	Fassifern Railway Station to Toronto Railway Station and then Toronto Wharf	LEP I21, also on s170 Railcopr register (SHI 4800229)	No
Railway Bridges	1c Reynolds Street, Blackalls Park	LEP I19	No
Rhondda Colliery	282 and 284 Rhondda Road, Teralba	LEP I167	No
Colliery Relics	155 Old Main Road, Booragul	LEP I29	No
Boatman's Cottage Lakefront; Boathouse and Winches Lakefront; and House	4 Arnott Avenue	LEP I171	No
Building Restaurant	6 Arnott Street, Toronto	LEP I172	No
Royal Motor Yacht Club Annexe	6 Arnott Ave, Toronto	LEP I173	No
Toronto Cemetery	354 Awaba Road, Toronto	LEP I174	No
House	16 Hunter Street, Toronto	LEP I178	No
Winn's House	19 Hunter Street, Toronto	LEP I179	No
Cottage	6 Renwick Street, Toronto	LEP I181	No
House	23 Renwick Street, Toronto	LEP I182	No
Convent of Mercy	26 Renwick Street, Toronto	LEP I183	No
House "Burnbrae"	32 Renwick Street, Toronto	LEP I184	No
Toronto Hotel	74 Victory Parade, Toronto	LEP I186	No
Former Railway Station (Toronto)	16 Victory Row, Toronto	LEP I187	No

Items	Address	Listing	Centennial owned or leased land
Toronto 2 Waste Water Pumping Station	Bath Street, Toronto	LEP S.170 Hunter Water (SHI 3630084)	No
Great Northern Railway	Line passes through Lake Macquarie City from Garden Suburb to Wyee	LEP I189	No
Wangi Power Station Complex (also listed on SHR)	Summerhill Drive, Wangi Wangi	LEP I191	No
		SHR 01014	

Unlisted Items

There are 8 unlisted heritage items that have not been included on heritage registers however, have been documented during previous studies or investigations.

These unlisted items have been tabulated because they were identified as having moderate-high local significance in the Umwelt (1998) report and/or the Suters Architects Snell (1993) and were not captured in a listing elsewhere. The Tunnels between Newstan Nos 1 and 2: Wakefield Belt Tunnel and Wakefield Travel Tunnel identified in Umwelt (1998) were not included as they are subsurface and were deemed to be captured in the Newstan Archaeological site LEP listing (A6). Sites identified as have little or no significance in the Umwelt (1998) report and/or the Suters Architects Snell (1993) report have not been included in the unlisted heritage items list.

The Archaeology Australia (2007) report for the Newstance Colliery Modification to Development Consent Statement of Environmental Effects identified eleven potential heritage items. However, this report did not assess their significance because they were not in the impact zone for the proposed development (Archaeology Australia 2007:38). There is not enough information in the Archaeology Australia (2007) report to identify their significance level and thus they have not been included in the unlisted heritage items list.

Table 4 provides a summary of the items assessed to have moderate-high local significance as stated in previous heritage studies. Table 4 also identifies the heritage studies that they were documented in.

Table 4 - Summary of unlisted heritage items

Location	Items	Documentation	Centennial Owned or Leased Land
Awaba	Awaba State Mine (AW-07)	Suters Architects Snell 1993	Centennial leased Crown land
Awaba	Awaba Public School (AW-02)	Suters Architects Snell 1993	No
Awaba	Water Pumping Station (AW-06)	Suters Architects Snell 1993	No
Fassifern	Bat Alley	RPS, Higginbotham 1997	Yes
Newstan	Tucker's House	Umwelt, 1998, Newstan Colliery Life Extension Project	Yes
Newstan	Arsenic Smelting Works	Umwelt, 1998, Newstan Colliery Life Extension Project	Yes
Ryhope	Site of Palmers Inn (AW-01)	Suters Architects Snell (1993)	No
Various – Awaba to Wangi	Awaba Wangi Railway Line (RT-13)	Suters Architects Snell 1993	Portion on Centennial owned land

Impact Assessment and Management of Heritage Items outside Centennial Land, but inside Newstan Colliery Boundary

There are 34 heritage items not owned by Centennial in the Newstan Colliery boundary. These heritage items have not been identified as being at risk of impact from the mining operations.

If surface works or additional impacts to the items are identified then a HIS should be prepared, refer to Section 5 of the Management Plan.

Items on Centennial leased land

There are six items on Centennial leased land. Of these, one is a locally listed heritage item and there are five unlisted heritage items are situated on Centennial leased land:

- Newstan Colliery [Lake Macquarie LEP Schedule 5 (A6)]- listed;
- Awaba State Mine (AW-07) - unlisted;
- Awaba to Wangi Power Station Branch Railway Line (RT-13)- unlisted;
- Bat Alley - unlisted;
- Tuckers House - unlisted; and
- Olstan Arsenic Smelter - unlisted.

Two of these unlisted items, Bat Alley and the Awaba – Wangi Railway Line, were proposed in the City of Lake Macquarie Heritage Study (Suters Architects Snell (1993), but were not adopted into the Lake Macquarie LEP. ‘Bat Alley’ was identified in assessment (Higginbotham 1997), but also not adopted into the Lake Macquarie LEP. Tuckers Hous and the Olstan Arsenic Smelter were identified as part of the Newstan Colliery Life Extension Project (Umwelt 1998).

The Awaba – Wangi Railway Line is the redundant railway line extends from the Northern Railway line at Awaba to the Wangi Power Station. A portion of the rail route, closest to Wangi Power Station is in the SHR curtilage and on Centennial owned land. A larger portion of the rail route is within the Centennial boundary. It was identified City of Lake Macquarie Heritage Study (Suters Architects Snell (1993).

Impact Assessment and Management of Heritage Items on Centennial Land

There are six heritage items located on Centennial owned or managed land. Of these only the Newstan Colliery archaeological area is listed on the Lake Macquarie LEP. The other heritage items are not on heritage registers, but have been documented during previous heritage investigations.

If surface works or other impacts are required in the item’s vicinity then a HIS should be prepared in accordance with Section 5 of the HHMP.

Site Specific Measures

Items on Centennial owned or managed land

If surface works or other impacts are required in the vicinity of the following items then a HIS will be prepared in accordance with Section 5 of this HHMP.

Newstan Colliery (archaeological site)

The Newstan Colliery is listed as an underground mine/archaeological feature and thus does not have built structures to be maintained. Investigated and assessed in the Cultural Heritage Impact Assessment: Northern Coal Services, Northern Coal Logistics Project (RPS 2013). The assessment identified no impacts to these items as part of the Northern Coal Logistics Project and thus no mitigation measures were required.

Awaba State Mine

Awaba State Mine operations overlap with areas of Newstan Colliery. The Awaba Colliery surface facilities identification, historical assessment and management measures are presented in the Awaba Colliery site specific Attachment of this HHMP.

Awaba to Wangi Power Station Branch Railway Line

The Awaba – Wangi Railway Line is the redundant railway line extends from the Northern Railway line at Awaba to the Wangi Power Station. While the Wangi Power Station closed in 1986, it appears the line closed prior to that. The known remnants of the line include rail embankment, culverts, some sleepers and rail. A portion of the rail route, closest to Wangi Power Station is in the SHR curtilage and on Centennial owned land.

Bat Alley

Bat Alley is a disused coal mine which is considered to be one of the earliest coal extraction sites in the region and has an association with the Northumberland Coal and Land Co. It comprises

underground mine workings and does not have built structures which need to be maintained. Investigated and assessed in the Cultural Heritage Impact Assessment: Northern Coal Services, Northern Coal Logistics Project (RPS 2013). The assessment identified no impacts to these items as part of the Northern Coal Logistics Project and thus no mitigation measures were required.

Tuckers House

This is an archaeological site. The house occupying the site was destroyed by fire in 1914.

Olstan Arsenic Smelter

This is an archaeological site. The kiln, brick stacks and condenser flues were still standing in the 1950's. The site has been subsequently demolished.

General measures

Newstan is in care and maintenance and no current plans exist for further mining. Future mining will be subject to development consent.

Prior to mining beneath any identified heritage item, the owner will be consulted to discuss possible impacts and proposed methods of mitigating any impacts.


If additional buildings of heritage potential are identified (above what is contained in this site specific Attachment) then a heritage assessment is to be completed and provided to OEH.



Table 5 - Summary of Heritage Items on Centennial owned land – Newstan Colliery

Location	Items	Listing
Newstan	Newstan Colliery LEP - A6	LEP (Schedule 5) - A6
Awaba	Awaba State Mine	Not listed
Various	Wangi - Awaba Railway Line (RT-13)	Not Listed
Newstan	Bat Alley	Not Listed
Newstan	Tucker's House	Not Listed
Newstan	Arsenic Smelting Works	Not Listed







Table 6 Newstan – Description of Listed and Unlisted Heritage Items in the Northern Holdings - Newstan





STATE HERITAGE REGISTER ITEMS	
<p>ITEM: Wangi Power Station Complex</p> <p>ADDRESS: Lot 101 DP 880089 (Figure 2 – State Heritage listed curtilage)</p> <p>LISTING: State Heritage Item: Number 1014 Lake Macquarie LEP: 191</p> <p>DESCRIPTION: The Wangi Power Station is of State heritage Significance for its association with the evolution of coalfield power stations and power generation in New South Wales. It was the largest power station in NSW for at least its first five years. It played a pre-eminent role in relieving NSW from the drastic power shortages and blackouts during the late 1950s and the restoration of power supply to NSW following a statewide blackout in 1964. Wangi Power Station was the last of the Railway's power stations built and the last one to close. It represents the transition from Railways to Elcom as the predominant power generation authority in NSW.</p>	 <p>Source: NSW Heritage Register Database</p>
LAKE MACQUARIE LEP SCHEDULE 5 ITEMS and NSW STATE AGENCY s.170.	
<p>ITEM: Great Northern Railway</p> <p>ADDRESS: Line passes through Lake Macquarie City from Garden Suburb to Wyee</p> <p>LISTING: Lake Macquarie LEP (I189)</p> <p>DESCRIPTION: The Great Northern Line profoundly changed the relationship of Newcastle with its hinterland and to the north whilst confirming the importance of Newcastle as a great coaling port. Later it opened the Lake to residential development and, since electrification, has become the commuting link to both Sydney and Newcastle for residents of Lake Macquarie.</p>	<p>No Photo Available</p>

<p>ITEM: Emergency Radio Bunkers</p>	 <p>Source: NSW Heritage Register Database</p>
<p>ADDRESS: 115 Wangi Road, Rathmines</p>	
<p>LISTING: Lake Macquarie LEP (I232)</p>	
<p>DESCRIPTION: The former remote control receiving station played a vital role in the communication operations of the State listed sea plane base at Rathmines during World War II.</p> <p>Its location and sitting in what was dense bushland demonstrate Australia's response to the threat of invasion and the need for secrecy.</p>	
<p>ITEM: Former Awaba Union Church</p>	 <p>Source: NSW Heritage Register Database</p>
<p>ADDRESS: 20 Gosford Street, Awaba</p>	
<p>LISTING: Lake Macquarie LEP (I236)</p>	
<p>DESCRIPTION: This modest building is typical of the early churches built by small rural communities around the turn of the century in NSW. Its prominence and influence in the community have been enhanced by its attractive hilltop setting. Unlike most other surviving churches in the area, it has retained its rural setting and modest pretensions.</p> <p>It is assessed as containing moderate local significance.</p>	

<p>ITEM: Gatekeepers Cottage</p> <p>ADDRESS: 154 Wilton Road, Awaba</p> <p>LISTING: Lake Macquarie LEP (I7)</p> <p>DESCRIPTION: A typical, mostly intact, and attractive example of railway housing of its period, in a prominent position next to the station, so that its historic relationship with the railway station is quite evident. Assessed as having moderate regional significance.</p>	 <p>Source: NSW Heritage Register Database</p>
<p>ITEM: Colliery Relics</p> <p>ADDRESS: 155 Old Main Road, Booragul</p> <p>LISTING: Lake Macquarie LEP (I29)</p> <p>DESCRIPTION: Archaeological site of high potential for interpretation in an attractive bushland setting which could be a valuable community asset as parkland with an interpreted industrial heritage site. The Booragul & West Wallsend ruins would be the most extensive 19th Century colliery ruins in the region. Production began in 1887 however infrastructure associated with the site likely comes from the 1890's. High level of regional significance.</p>	 <p>Source: NSW Heritage Register Database</p>
<p>ITEM: Eraring Power Station</p> <p>ADDRESS: Rocky Point Rd, Eraring</p> <p>LISTING: Lake Macquarie LEP (I93)</p> <p>DESCRIPTION: Eraring Power Station is the biggest industrial undertaking around the Lake, and one of the biggest in the Hunter region. Eraring contrasts strongly with nearby Wangi P.S. in size of units (660 MW x 4 to Wangi's 50 MW x 3 & 60 MW x 3) and in design philosophy - Eraring was designed as a utilitarian structure, with minimal concessions to appearance, while Wangi was designed to express its function without sacrificing a pleasing appearance. Eraring represents the "State of the Art" in its technology, and is one of the biggest power stations in the State.</p>	 <p>Source: NSW Heritage Register Database</p>

ITEM: Fassifern to Toronto Branch Railway Line	
ADDRESS: Fassifern Railway Station to Toronto Railway Station and then Toronto Wharf	
LISTING: Lake Macquarie LEP (I21)	
DESCRIPTION: Opened in 1891, the Fassifern-Toronto Branch Railway is unique in NSW as a railway built solely for transport to a holiday resort. Construction of the line promoted development of Toronto. The Line was an integral part of community life as Toronto grew, providing the main means of communication with Newcastle & the outside world for Toronto people until private cars became common. The railway at present is an unofficial footpath and contains a high level of state significance	No Photo Available
ITEM: Railway Bridges (Fassifern to Toronto Branch Railway Line)	
ADDRESS: 1c Reynolds Street, Blackalls Park	
LISTING: Lake Macquarie LEP (I19)	
DESCRIPTION: The Railway Bridges are vital in maintaining the historic transport link between Fassifern and Toronto (see I21).	
Source: NSW Heritage Register Database	
ITEM: Blackalls Park Railway Station (Fassifern to Toronto Branch Railway Line)	
ADDRESS: 1c Reynolds Street, Blackalls Park	
LISTING: Lake Macquarie LEP (I20)	No Photo Available
DESCRIPTION: Part of the original Fassifern to Toronto Railway (see I21). The platform has existed since at least 1923 and possibly earlier.	



<p>ITEM: Toronto Railway Overbridge (Fassifern to Toronto Branch Railway Line)</p>	 <p>Source: NSW Heritage Register Database</p>
<p>ADDRESS: 1c Reynold Street, Blackalls Park (over Fassifern Road, Blackalls Park)</p>	
<p>LISTING: Lake Macquarie LEP (I95)</p>	
<p>DESCRIPTION: The Railway Overbridge consists of a concrete arch bridge with an approximate span of seven metres. The overbridge is an integral part of the Fassifern to Toronto Branch Railway Line (see I21). This line was a major reason for the development of Toronto as a lakeside resort, & for many years made it possible for people to visit Toronto easily, for regattas, picnics and holidays, and later, for people to live in Toronto and commute to Newcastle to work.</p>	
<p>ITEM: Fassifern Railway Station</p>	 <p>Source: NSW Heritage Register Database</p>
<p>ADDRESS: Tucker Close, Fassifern</p>	
<p>LISTING: Lake Macquarie LEP (I94)</p>	
<p>DESCRIPTION: The construction of the Sydney to Newcastle Railway had a profound effect on the development of Lake Macquarie. Although the Fassifern station buildings do not date from the earliest days of the railway, they belong to a time of great expansion of the "Short North" when the lines were duplicated. The buildings have served the community well for 80 years and should continue to do so. The signal box on the station, although now partly disused, is important as a means of interpreting the operation of the station to the public. The station is also important for its connection with the Toronto Branch Line and with the Newstan Colliery & its predecessors.</p>	
<p>ITEM: Fassifern Railway Cottage</p>	 <p>Source: NSW Heritage Register Database</p>
<p>ADDRESS: Wallsend Road, Fassifern</p>	
<p>LISTING: Lake Macquarie LEP (I96)</p>	
<p>DESCRIPTION: A typical, mostly intact and attractive example of railway housing of its period. Fassifern Station was opened on 15th August 1887 and a contract for construction of this house was signed soon after on 24th August 1887.</p>	


<p>ITEM: Rhondda Colliery</p> <p>ADDRESS: 282 and 284 Rhondda Road, Teralba</p> <p>LISTING: Lake Macquarie LEP (I167)</p> <p>DESCRIPTION: Opened in 1900, Rhondda Colliery is significant for its early use of electric coal cutters, & for its long-term use of a private railway system. Existing buildings, particularly the Manager's House & the Stables, have potential for restoration & re-use in any future development of the site.</p>	 <p>Source: NSW Heritage Register Database</p>
<p>ITEM: Toronto Cemetery</p> <p>ADDRESS: 354 Awaba Road, Toronto</p> <p>LISTING: Lake Macquarie LEP (I174)</p> <p>DESCRIPTION: The Toronto Cemetery was dedicated in 1894 and reveals the early history of Toronto. The earliest graves within the cemetery are dated to December 1903.</p>	 <p>Source: NSW Heritage Register Database</p>
<p>ITEM: House 'Burnbrae'</p> <p>ADDRESS: 32 Renwick Street, Toronto</p> <p>LISTING: Lake Macquarie LEP (I184)</p> <p>DESCRIPTION: 'Burnbrae' possibly has historic significance connected with its early owners, but this has not been investigated. The house has many of the attributes of the traditional Federation Queen Anne style, applied to a rambling collection of hipped & gable roofed wings.</p>	 <p>Source: NSW Heritage Register Database</p>
<p>ITEM: Building Restaurant (former house)</p> <p>ADDRESS: 6 Arnott Street, Toronto</p> <p>LISTING: Lake Macquarie LEP (I172)</p> <p>DESCRIPTION: This building has been extensively altered, and takes most of its significance from its former connection with the well known Arnott's Biscuits family, and the time when Toronto was a Lakeside holiday resort for the gentry of the Hunter region.</p>	 <p>Source: NSW Heritage Register Database</p>

<p>ITEM: Royal Motor Yacht Club Annexe</p>	<div data-bbox="884 235 1350 584" data-label="Image"> </div> <div data-bbox="826 589 1230 616" data-label="Text"> <p>Source: NSW Heritage Register Database</p> </div>
<p>ADDRESS: 6 Arnott Ave, Toronto</p>	
<p>LISTING: Lake Macquarie LEP (I173)</p>	
<p>DESCRIPTION: This building has been extensively altered, and takes most of its significance from its former connection with the well-known Arnott's Biscuits family, and the time when Toronto was a Lakeside holiday resort for the gentry of the Hunter region.</p>	
<p>ITEM: Toronto 2 Waste Water Pumping Station</p>	<div data-bbox="888 701 1345 1003" data-label="Image"> </div> <div data-bbox="826 1008 1230 1034" data-label="Text"> <p>Source: NSW Heritage Register Database</p> </div>
<p>ADDRESS: Bath Street, Toronto</p>	
<p>LISTING: State Agency S.170 register</p>	
<p>DESCRIPTION: A good example of a brick built wastewater pumping station. The building is well detailed and landscaped within a park setting.</p>	


<p>ITEM: Toronto Hotel</p>	 <p>Source: NSW Heritage Register Database</p>
<p>ADDRESS: 74 Victory Parade, Toronto</p>	
<p>LISTING: Lake Macquarie LEP (I186)</p>	
<p>DESCRIPTION: The Toronto Hotel is a fine example of Victorian Filigree architecture, of which there are very few examples in the Hunter and Lake Macquarie Region. Originally built in 1887 on the site of Threlkeld's mission house, the Toronto hotel holds a high regional and local significance and has been in constant use by the local community for over 100 years.</p>	
<p>ITEM: Former Railway Station</p>	 <p>Source: NSW Heritage Register Database</p>
<p>ADDRESS: 16 Victory Row, Toronto</p>	
<p>LISTING: Lake Macquarie LEP (I187)</p>	
<p>DESCRIPTION: Toronto Station is important as an attractive and unusually well conserved and well maintained example of a small country station building. In this respect the ambience of the station is significant. Unlike former stations on many disused lines, this one has retained some of its infrastructure, including railway lines. The railway station holds a very high local significance and moderate state significance.</p>	
<p>ITEM: Boatman's Cottage, Lakefront Boathouse and Winches, Lakefront and House</p>	 <p>Source: NSW Heritage Register Database</p>
<p>ADDRESS: 4 Arnott Avenue</p>	
<p>LISTING: Lake Macquarie LEP (I171)</p>	
<p>DESCRIPTION: Arnott's Boatshed</p>	


ITEM: Convent of Mercy	 <p>Source: NSW Heritage Register Database</p>
ADDRESS: 26 Renwick Street, Toronto	
LISTING: Lake Macquarie LEP (I183)	
<p>DESCRIPTION: A relatively modern house, but built in a distinctive style of the 1930s of which there are very few representatives in Lake Macquarie.</p> <p>It is said to have been built by a well-known Newcastle commercial family, which has a long association with Toronto, and still owns property in the district. The house has adapted well to its present use as a convent.</p>	
ITEM: House	 <p>Source: NSW Heritage Register Database</p>
ADDRESS: 23 Renwick Street, Toronto	
LISTING: Lake Macquarie LEP (I182)	
<p>DESCRIPTION: Privately owned house with a moderate local significance due to its Federation Bungalow architectural style.</p>	
ITEM: Cottage	 <p>Source: NSW Heritage Register Database</p>
ADDRESS: 6 Renwick Street, Toronto	
LISTING: Lake Macquarie LEP (I181)	
<p>DESCRIPTION: A charming small cottage, with rather more elaborate decoration than most similar style worker's cottages in the district. It is said to have been built for a well-known Newcastle commercial family, which has a long association with Toronto.</p>	

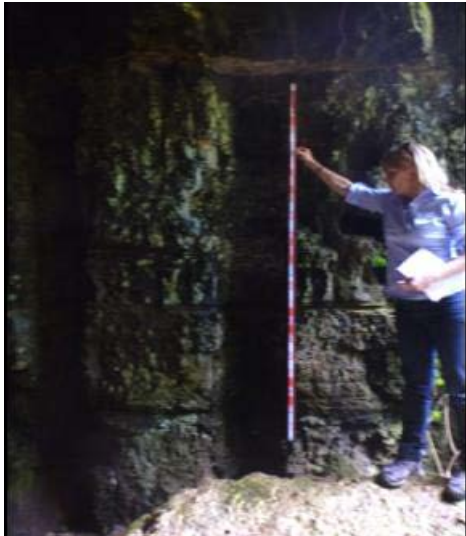


ITEM: House	 <p>Source: NSW Heritage Register Database</p>
ADDRESS: 16 Hunter Street, Toronto	
LISTING: Lake Macquarie LEP (I178)	
DESCRIPTION: A small bungalow appears to be complete in all its details externally. It is also possible that it also retains internal detailing. It could be used as an exemplar and guide for the restoration of other houses of its period and style. Architectural style consists of a vernacular version of a Californian Bungalow.	
ITEM: Winn's House	 <p>Source: NSW Heritage Register Database</p>
ADDRESS: 19 Hunter Street, Toronto	
LISTING: Lake Macquarie LEP (I179)	
DESCRIPTION: Domestic residents of the well-known shopkeepers the Wynn family.	


LAKE MACQUARIE LEP SCHEDULE 5 ARCHAEOLOGICAL SITES	
ITEM: Railway Station Cottage	 <p>Source: NSW Heritage Register Database (house since demolished and the same site as described below in the S170 Register)</p>
ADDRESS: Off Adelaide Street, Awaba	
LISTING: Lake Macquarie LEP (A1)	
DESCRIPTION: A typical and unusually intact example of railway housing of its period, in a prominent position in open ground close to the station, so that its historic relationship with the railway station is quite evident. This cottage is particularly important because of the survival of its separate kitchen wing, complete with brick fireplace and chimney. As an archaeological site this cottage has the potential to demonstrate working class household life in the late C19th.	

<p>ITEM: Awaba railway jib crane and former cottage potential archaeological site</p>	
<p>ADDRESS: Off Adelaide Street, Awaba</p>	
<p>LISTING: Section 170 Register</p>	 <p>Source: NSW Heritage Register Database (house since demolished)</p>
<p>DESCRIPTION: The curtilage boundary is a circle, 5m in diameter from the outside edges of the jib crane. The curtilage excludes the nearby railway station complex, which is not considered to have any heritage significance. Archaeological Site: North: consistent with former northern boundary fence line of residence, running east-west, about 40m south of Heaton Street. South: consistent with former northern boundary fence line of residence, running east-west, about 10m north of down platform. East: approximately 30m west of Adelaide Street road reserve West: consistent with existing RailCorp property fence line to rail corridor.</p>	
<p>ITEM: Fossil Tree Reserve</p>	 <p>Source: NSW Heritage Register</p>
<p>ADDRESS: 40 Aldon Crescent, Blackalls Park</p>	
<p>LISTING: Lake Macquarie LEP (A2)</p>	
<p>DESCRIPTION: The Fossil Tree Reserve is understood to have been covered with fossilized tree trunks, standing in the water. There is no longer any obvious trace of this petrified forest in the Reserve although some sections of tree trunk may survive underwater.</p>	<p>No Photo Available</p>
<p>ITEM: Fossil Tree Sections</p>	 <p>Source: NSW Heritage Register Database</p>
<p>ADDRESS: Venetia Avenue, Blackalls Park</p>	
<p>LISTING: Lake Macquarie LEP (A3)</p>	
<p>DESCRIPTION: The fossil pieces are important relics of an unusual former geological phenomenon of Lake Macquarie. They are the only substantial relics of this former geological formation known to exist in the district.</p>	

ITEM: Newstan Colliery	
ADDRESS: Fassifern Road, Fassifern	
LISTING: Lake Macquarie LEP (A6)	
DESCRIPTION: The colliery has much historical significance, but it is not known if any archaeological relics survive. Moderate local significance.	
Source: Higginbotham 1997	

UNLISTED HERITAGE ITEMS	
ITEM: Awaba State Mine (AW-07)	
ADDRESS: 17 Wilton Road, Awaba	
UNLISTED: Included in Suters 1993. Lake Macquarie Heritage Study.	
DESCRIPTION: The Awaba State Mine was developed and owned by the State Mine Control Authority. Commencing production in 1949 to supply to supply Wangi Power Station (commenced operation in 1956) in the interim it supplied metropolitan power houses. The mine ceased operation in 2012. It was assessed has having very high local significance (Umwelt 1998:5.6).	
ITEM: AW-02 Awaba Public School	No Photo Available
ADDRESS: 18 Nelinda Street, Awaba	
DESCRIPTION: Excellent example of standard Government architect’s design for a small rural school of the time (1891). Moderate local significance (Suters, 1993, Lake Macquarie Heritage Study). This item was also identified in the Newstan Colliery Life Extension Project and was assessed has having moderate local significance (Umwelt 1998:5.4).	
ITEM: AW-06 Water Pumping Station	No Photo Available
ADDRESS: Wilton Road, Awaba	
DESCRIPTION: Appears to date from the 1920s (Suters, 1993, Lake Macquarie Heritage Study). It was assessed to have moderate local significance in the Newstan Colliery Life Extension Project historic heritage assessment (Umwelt 1998:5.5) (Suters Architects Snell 1993).	

ITEM: Bat Alley	 <p>Source: RPS</p>
ADDRESS: Fassifern	
<p>DESCRIPTION: Bat Alley Tunnell is the common name of the drift of the original Northumberland No1 mine. Bat Alley is a well preserved coal mine and is considered one of the earliest coal extraction sites in the region from the late 19th century. Bat Alley has historic significance as it is associated with one of the largest coal companies of the 1880's, Northumberland Coal and Land Co. Bat Alley has been disused for a number of years and a heritage impact assessment report completed in 1997 (Higginbotham) recommended it be conserved.</p>	
ITEM: Tucker's House	 <p>Source: Umwelt 1998</p>
ADDRESS: Newstan Colliery	
<p>DESCRIPTION: Archaeological site. One of the earliest settlement sites in the immediate area, associated with the initial development of coal extraction. It was assessed to be rare in the historic assessment for Newstan Colliery Life Extension Project (Umwelt, 1998:3.10).</p>	
ITEM: Arsenic Smelting Works	 <p>Source: RPS 2012</p>
ADDRESS: Newstan Colliery	
<p>DESCRIPTION: A rare example of an arsenic smelting works, in collapsed condition but able to demonstrate the technology and processes used in production. It was assessed to be rare in the historic assessment for Newstan Colliery Life Extension Project (Umwelt, 1998:3.10).</p>	
ITEM: AW-01 Site of Palmers Inn	<p>No Photo Available</p>
ADDRESS: Palmers Road, Ryhope	
<p>DESCRIPTION: Site not located. Archaeological survey and further investigation required. Potentially significant local site (Suters, 1993, Lake Macquarie Heritage Study).</p>	

ITEM: Awaba Wangi Railway Line	
ADDRESS: Awaba/Wangi	
DESCRIPTION: The abandoned Awaba-Wangi rail line comprises a single track rail line on wooden sleepers. The line holds special significance due to its association with the Wangi power station and the Awaba Colliery to the north. It was assessed to be of very high local significance in the historic assessment for Newstan Colliery Life Extension Project (Umwelt, 1998:5.6).	Awaba Wangi rail embankment (Source: RPS)
ITEM: Tunnels between Newstan Nos 1 and 2: Wakefield Belt Tunnel and Wakefield Travel Tunnel.	No Photo Available
ADDRESS: Newstan	
DESCRIPTION: Comprises two tunnels to facilitate the movement of materials and communication between two operational mines. The Belt Tunnel contained a belt-conveyor which allowed transport of coal between the mine and processing facilities. The Travelling Tunnel allowed workmen and plant to be transported between the mines. The tunnels were assessed to be rare (moderate to high) in the historic assessment for Newstan Colliery Life Extension Project (Umwelt, 1998:5.6).	

The locations of the unlisted items have been plotted in the mapping on the basis of descriptions, interpolations from map figures or aerals, as annotated below.

Table 7 Newstan – Source of mapping location for Newstn heritage heritage items

Item	Code	Easting GDA94Zone 56	Northing GDA94 Zone 56	Source
Awaba Public School	AW-02	363433	6316612	As sighted on Google Earth Aerial
Water Pumping Station	AW-06	363793	6346078	As sighted on Google Earth Aerial
Tuckers House	Tuckers House	367645	6350487	Interpolated from map - Figure 3.1 Higginbotham 1997, as reproduced in Newstan Life Extension Project Historical Assessment Umwelt 1998:Figure 3.5
Arsenic Smelting	Arsenic	365949	6348639	Interpolated from map - Figure

Works	Smelting Works			3.1 Higginbotham 1997, as reproduced in Newstan Life Extension Project Historical Assessment Umwelt 1998:Figure 3.5
Site of Palmers Inn	AW-01	361921	6348870	Very approximate location based on junction of Wakefield, Cessnock and Palmers Road

Attachment 5

Northern Coal Services

Overview of Operations

Northern Coal Services operations are located on the western side of Lake Macquarie approximately 25 kilometres south-west of Newcastle and 140 kilometres north of Sydney in New South Wales (NSW). The Northern Coal Services operations comprises the water management and surface coal handling and processing facilities at the Newstan Colliery Surface Site and Mandalong Mine - Cooranbong Entry Site (Cooranbong Entry Site), along with existing private haul roads and rail loading infrastructure. The facilities of the Northern Coal Services operations are used by Centennial to process and wash coal from Mandalong and Newstan mines and to facilitate the distribution of coal to local power stations via private haul roads and rail, and also transport coal for export to the ports of Newcastle or Port Kembla by rail.

Historic Heritage Commitments & Consent Conditions

Table 1 - Northern Coal Services Development Consent SSD_5145

Condition No.	Consent Condition	Addressed in HHMP/Implemented
Schedule 3 Condition 21	The Applicant shall prepare and implement a Heritage Management Plan for the development, to the satisfaction of the Secretary. This plan must:	
Schedule 3 Condition 21(a)	be prepared in consultation with OEH and Registered Aboriginal Parties;	Attachment 6 Consultation Log and Attachment 6A Consultation Comments identifies consultation completed with OEH.
Schedule 3 Condition 21(b)	be submitted to the Secretary for approval, prior to commencement of construction activities or by 31 March 216, whichever is sooner; and	Attachment 6 Consultation Log and Attachment 6A Consultation Comments identify submission of this HHMP.
Schedule 3 Condition 21(c)	Include:	
	a description of the measures that would be implemented to:	
	protect, monitor and/or manage Aboriginal cultural heritage items including the scarred tree adjacent to Hawkmount Quarry identified as RPS COAL LOG 1 (AHIMS 45-7-0324);	Refer to the Northern Region ACHMP Appendix 5 Northern Coal Logistics site specific measures.

Condition No.	Consent Condition	Addressed in HHMP/Implemented
	manage the discovery of previously unidentified Aboriginal items;	Refer to the Northern Region ACHMP.
	maintaining and managing reasonable access for Aboriginal stakeholders to heritage items on the Applicant's land;	The Northern Region ACHMP Section 5 identifies access will be provided for Aboriginal stakeholders to heritage items on Centennial land.
	ongoing consultation with Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage;	The Northern Region ACHMP Section 5 describes the Northern Region Aboriginal cultural heritage committee.
	a short-term and long-term strategy for the storage of any Aboriginal cultural heritage items salvaged on site; and	Refer to the Northern Region ACHMP Appendix 5 Northern Coal Logistics site specific measures.
	a protocol for the management of impacts to historic heritage sites/items, including archival recording where impacts to historic heritage sites/items cannot be avoided.	Sections 6 Historic Heritage Management identifies management measures for historic heritage items where an impact to a site/item can not be avoided. Such measures include archival recording.

Table 2 - Northern Coal Services Statement of Commitments (SSD 5145)

Commitment	Addressed in HHMP/Implemented
If further non-Indigenous cultural heritage material is in the Project Application Area, any surface works in the vicinity will cease and a suitably qualified heritage consultant will be contacted to assess the item. Northern Coal Services will adopt the appropriate mitigation measures, as provided by the heritage consultant, before recommencement of work.	Section 6.7 Identification of Previously Unknown Heritage Sites or Skeletal Remains of this HHMP identifies where potentially unknown heritage sites are identified work will be stopped and an appropriately qualified heritage consultant engaged to provide advice.
All relevant Northern Coal Services employees and contractors will be made aware of their statutory obligations for non-Indigenous heritage under the <i>Heritage Act 1977</i> as part of the site induction process.	Section 7.2 Inductions identifies the minimum requirements for Centennial staff and contractors, presented in Table 2 Roles and Responsibilities.

Heritage Items in Northern Coal Logistics Boundary

There are no heritage items in the Northern Coal Logistics Boundary which are listed on the National Heritage Register, nor on the SHR.

Six heritage items were found in the Northern Coal Logistics Boundary (**Table 3, Figure 1**), three of which are listed on the Lake Macquarie City Council Local Environmental Plan (LEP) including one which is also listed on the NSW s170 Register for Sydney Trains (which is a register of state owned items). The other three items are unlisted.

Of the above heritage items, two are situated on Centennial freehold leased land: Newstan Colliery (archaeological site) [LEP] and Bat Alley (unlisted). RPS (2013) concluded that Bat Alley does not possess heritage elements that meet local or State heritage significance.

All listed and unlisted heritage items are described in **Table 2**.

Impact Assessment and Management of Heritage Items in Centennial Land

There are three heritage items located on Centennial land:

- Newstan Colliery (archaeological site) listed
- Awaba State Mine (unlisted); and
- Bat Alley (unlisted).

These sites were investigated and assessed in the Cultural Heritage Impact Assessment: Northern Coal Services, Northern Coal Logistics Project (RPS 2013). The assessment identified no impacts to

these items as part of the Northern Coal Logistics Project and thus no mitigation measures were required.

The Newstan Colliery is listed as an underground mine/archaeological feature and thus does not have built structures to be maintained. Bat Alley is a disused coal mine which is considered to be one of the earliest coal extraction sites in the region and has an association with the Northumberland Coal and Land Co. It comprises underground mine workings and does not have built structures which need to be maintained. The Awaba State Mine comprises building and subsurface structures.

If surface works or other impacts are required in the vicinity of these items then a HIS should be prepared in accordance with Section 5 of the HHMP

Impact Assessment and Management of Heritage Items outside Centennial Land, but inside Northern Coal Logistics Boundary

There are three heritage items which are in the Northern Coal Logistics boundary, but, are not owned by Centennial. The supporting documents for the mine consent (RPS 2013a) do not identify a risk of impact to these sites and as they are not owned by Centennial there is no obligation to maintain these items. The Wangi- Awaba Railway Line was concluded by RPS (2013) to not possess heritage elements that meet local or State heritage significance.

If surface works or additional impacts are identified to these items then a HIS should be prepared in accordance with Section 5 of the HHMP.

Table 3 - Summary of Heritage Searches

Items	Address	Listing	Centennial owned or leased land
Eraring Power Station	268 and 294 Rocky Point Road, Eraring, and 115, 215, 235 and 260 Construction Road, Myuna Bay (Lots 10 and 11, DP 1050120; Lot 20, DP 840668; Lot 211, DP 840670; Lots 50 and 51, DP 840671)	LEP (93)	No
Great Northern Railway	Line passes through Lake Macquarie from Wyee to Garden Suburb	LEP (189) + s170 register (4805752)	No
Newstan Colliery (archaeological site)	Fassifern Rd (various lots)	LEP (A6)	Yes
Bat Alley	Newstan Pit Top	Not Listed	Yes
Awaba – Wangi Railway Line	Extends south of Awaba Pit Top and continues south to Wangi	Not Listed	No
Awaba State Mine	Awaba Pit Top	Not Listed	Yes

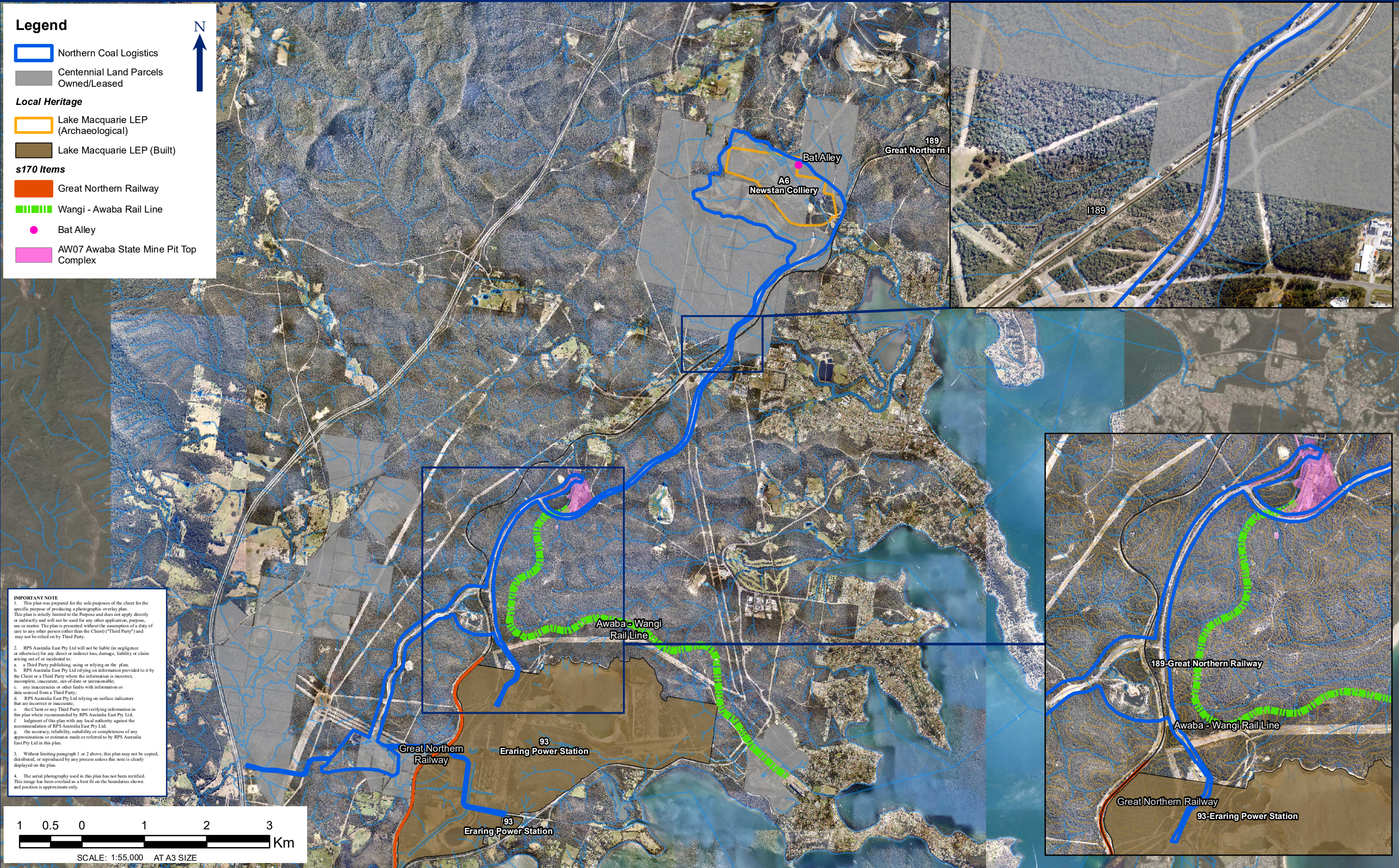





Table 4 - Descriptions of Listed and Unlisted Heritage Items

<p>ITEM: Newstan Colliery</p>	<p>No photo available</p>
<p>ADDRESS: Fassifern Rd</p>	
<p>LISTING: Lake Macquarie LEP</p>	
<p>DESCRIPTION: Newstan colliery is an underground mine which has had a continued mining presence in the region since 1887.</p> <p>Underground mining has been undertaken in the Young Wallsend; Great Northern; Fassifern; Borehole and West Borehole coal seams.</p>	
<p>ITEM: Eraring Power Station</p>	<div data-bbox="842 1064 1375 1352" data-label="Image"> </div> <p>Source: NSW Heritage Register Database</p>
<p>ADDRESS: Rocky Point Rd, Eraring</p>	
<p>LISTING: Lake Macquarie LEP</p>	
<p>DESCRIPTION:</p> <p>Eraring Power Station is the biggest industrial undertaking around the Lake, and one of the biggest in the Hunter region. Eraring contrasts strongly with nearby Wangi P.S. in size of units (660 MW x 4 to Wangi's 50 MW x 3 & 60 MW x 3) and in design philosophy - Eraring was designed as a utilitarian structure, with minimal concessions to appearance, while Wangi was designed to express its function without sacrificing a pleasing appearance.</p> <p>Eraring represents the "State of the Art" in its technology, and is one of the biggest power stations in the State. It is undoubtedly highly significant, although considering its youth; it is arguable whether Eraring yet qualifies as a heritage item.</p>	

ITEM: Great Northern Railway	No photo available
ADDRESS: Various	
LISTING: Lake Macquarie LEP & s170	
<p>DESCRIPTION:</p> <p>More correctly known as the Short North, the rail line between Newcastle and the northern bank of the Hawkesbury River (near present day Wondabyne) was opened in January 1888. The line connection was completed between Sydney and Newcastle with the opening of the bridge over the Hawkesbury River in 1889.</p>	
ITEM: Awaba - Wangi Railway Line	 <p>Source: nswrail.net</p>
ADDRESS: Awaba/Wangi	
UNLISTED	
<p>DESCRIPTION: The seven km single track Awaba - Wangi Railway line was to service the Wangi Power Station (opened 1958). The railway line, built around 1951 initially for the transportation of construction materials from the Main Northern Line to the construction site. On completion of construction, the line carried coal to the power station from the Awaba State Mine.</p> <p>The NSW Heritage Act lists Wangi Power Station as State significant. While the written citation for the power station does not include the railway line the curtilage for the SHR shown in mapping includes the portion of the rail line south of Wangi Road and a small parcel immediately north of Wangi Road.</p>	

ITEM: Bat Alley	
ADDRESS: Fassifern	
UNLISTED	
<p>DESCRIPTION: Bat Alley is a well preserved coal mine and is considered one of the earliest coal extraction sites in the region from the late 19th century. Bat Alley has historic significance as it is associated with one of the largest coal companies of the 1880's, Northumberland Coal and Land Co.</p> <p>Bat Alley has been disused for a number of years and a heritage impact assessment report completed in 1997 (Higginbotham) recommended it be conserved.</p>	 <p>Bat Alley - Ventilation shaft (Source: RPS)</p>
ITEM: Awaba State Colliery	
ADDRESS: Wilton Road, Awaba	
UNLISTED	
<p>DESCRIPTION:</p> <p>The Awaba State Mine was developed and owned by the State Mine Control Authority. Commencing production in 1949 to supply to supply Wangi Power Station (commenced operation in 1956) in the interim it supplied metropolitan power houses. The mine ceased operation in 2012.</p>	 <p>Awaba State Colliery (Source: RPS)</p>

Attachment 6

Consultation Log

Table 1 - Consultation Log

Consultation Log Date	Description of Consultation
30 October 2015	Letter to DPE seeking consolidation of Management Plans.
19 November 2015	Letter from DPE approving consolidation of Management Plans.
23 February 2016	Letter to OEH seeking comment on the HHMP.
24 March 2016	Letter to DPE seeking approval of final draft HHMP.
31 May 2016	Email from DPE providing comment on submitted final draft HHMP.
6 July 2016	Letter to DPE seeking approval of revised final draft HHMP.
15 September 2016	Letter from DPE approving HHMP.
3 October 2017	Letter to OEH, LMCC seeking comment on the HHMP.
19 October 2017	Letter from LMCC providing comment on the HHMP.
29 March 2018	Letter from Lake Macquarie City Council inviting applications for Local Heritage Places Grant 2018-2018
20 April 2018	Discussion with LMCC following above letter.
23 April 2018	Letter to DPE seeking approval of final draft HHMP.
23 May 2018	Email from DPE providing comment on submitted final draft HHMP.
7 June 2018	Email to Awaba CCC seeking comment on the draft HHMP.
8 June 2018	Email and consultation with Lake Macquarie and District Heritage Society seeking comment on the draft HHMP.
13 June 2018	Letter to LMCC responding to comment on draft HHMP.
25 June 2018	Email to DPE seeking approval of the final draft HHMP.
13 July 2018	Letter from DPE approving the HHMP.

Attachment 6A

Consultation Comments

Table 2 - Consultation Comments

Description of Consultation		How Addressed in Management Plan
31 May 2016 Email from DPE providing comment on submitted final draft Management Plan		
Page 5, Section 1.3: What were the outcomes of your consultation with OEH and Lake Macquarie City Council? Please include evidence of their satisfaction.	Attachment 6A identifies how consultation comments have been addressed within the Management Plan.	
Page 22, Section 9, Bibliography: Please check all references are include e.g. (RPS 2013)	References in the bibliography have been corrected.	
Attachments 1 and 2 Historic Heritage Commitments & Consent Conditions should be assigned a table number i.e. Table 2 and condition numbers should be referenced. Also the last bullet point is neither in the Mandalong nor the Northern Coal Services consent, please check and remove.	Table references have been included in all Attachments. Bullet point removed.	
Please provide more background on what assessments/studies/surveys have been completed to date for each operation and what were the outcomes. Please summarise all identified sites, and what impacts are expected, if any.	Attachments 1 to 5 have been updated to include sections on impact assessment, a list of sites within lease boundaries and management measures identified for listed sites.	
Attachment 1 Mandalong		
Please address condition 21 of Schedule 3 and condition 8 of Schedule 4 of SSD 5144	Condition 21 Schedule and Condition 8 of Schedule 4 SSD_5144 has been updated to reflect current condition of consent.	
Please address the first commitment in Appendix 8 of SSD 5144 that requires Landing Skid 2 to be recorded by a qualified historic archaeologist.	Mandalong Mine SSD_5144 Landing Skid statement of commitment has been updated within Table 2. The recording of Landing Skid 2 has been completed and the results are presented in Attachment 4 Mandalong Mine site specific measures.	
Please explain how this HHMP interacts with the Heritage Management Plan required under condition 6(l) of Schedule 4 and further described under condition 4 of Schedule 6.	Section 1.3 Interaction of Regional Management Plans and Extraction Plans have been included within this document.	
Please explain why the 5 unlisted items do not	Centennial is currently in consultation with Lake	

Description of Consultation	How Addressed in Management Plan
require listing, i.e. summarise the results of the significance assessment in RPS' HIA.	Macquarie Council over the listing status of these items.
For the 12 items outside of Centennial land, please conclude if any mitigation measures are required?	No measures are presented in the Mandalong Attachment. The Northern Region HHMP outlines assessment procedures should there be proposed impacts to items.
Attachment 2 Please explain why the 2 unlisted items do not require listing.	The two unlisted items in the Mandalong Attachments have been assessed by a heritage consultant as not meeting the criteria for local heritage listing.
19 October 2017 Letter from LMCC providing comment on the Management Plan	
<p>Identification of Previously Unknown Heritage Sites</p> <p>The flow chart for management of unexpected finds – Figure 5 and the table identifying roles and responsibilities – Table 2, should be revised to include:</p>	
<ul style="list-style-type: none"> under the third caption 'Contact': CONTACT site manager to notify heritage consultant, the Heritage Division of the NSW Office of Environment & Heritage (Heritage Division) and the Local Council Heritage Officer 	Figure 5 Flow Chart Protocol for Unexpected Finds has been updated in the 'Contact' section has been revised to identify the Heritage Division of the NSW Office of Environment and Heritage, local Council Heritage Officer and the heritage consultant.
<ul style="list-style-type: none"> under the first caption 'Implement' in the Yes column: IMPLEMENT heritage mitigation measures following consultation with the NSW Office of Environment & Heritage (Heritage Division) and the Local Council Heritage Officer and having obtained any necessary approvals and/or written notification provided, with Centennial arranging for works to be undertaken by a suitably qualified Heritage Consultant/Archaeologist/Conservation Specialist as required 	Figure 5 Flow Chart Protocol for Unexpected Finds has been updated in the 'Implement' section has been revised to refer to measures following consultation with the Heritage Division of the NSW Office of Environment and Heritage, the Local Heritage Officer, and having obtained any necessary approvals or notifications, with Centennial to engage a suitably qualified heritage consultant to undertake the works.
<p><u>Roles and Responsibilities</u></p> <p>Under 7.1 <i>Penalties and Consequences for non-compliance</i> it should be added: Environmental Planning & Assessment Act 1979</p>	Section 7.1.2 has been inserted into the document to identify the penalty for infringement notices under the Environmental Planning and Assessment Act 1979.

Description of Consultation	How Addressed in Management Plan
<p>Penalty Infringement Notices can be issued under Section 76A <i>Development that needs consent</i> of the Act for unauthorised works that require consent, this includes changes to the fabric of a Heritage Item. Additionally Orders can be issued under Section 121B of the Act in relation to works.</p>	
<p><u>Unlisted Items</u> The plan has identified a number of identified heritage items on Centennial owned land that are not currently listed as Heritage Items under Schedule 5 in the Lake Macquarie City Council Local Environmental Plan (LEP) 2014, these being:</p> <ul style="list-style-type: none"> • Awaba State Mine • Awaba to Wangi Power Station Branch Railway Line • Bat Alley [early coal mine] • Tuckers House [archaeological site] • Olstan Arsenic Smelter [archaeological site] <p>In order to provide for the long term protection of these items Council recommends Centennial Coal request these heritage items be listed in the LEP, by way of amendment. A letter of support from Centennial Coal at this stage, would allow for the process of LEP amendment to be commenced.</p>	<p>Centennial provided a written response to LMCC 15 June 2018. The written response clarified Centennial owned and leased land.</p> <p>The items requested by LMCC to be listed are on land Centennial leases from the Crown (Awaba State Mine), freehold land leased by Centennial (Bat Alley, Tuckers House, Olstan Arsenic Smelter) and approximately 250m of the 10km Awaba to Wangi Power Station Branch line is on Centennial land at Myuna.</p>
<p><u>Minor Amendments</u> The following minor amendments are suggested:</p> <ul style="list-style-type: none"> • The reference to 'Wyang Shire Council (WSC)' in the second paragraph under 2.2 <i>Statutory Planning & Management Documents</i> (pg. 5) is updated to reference Central Coast_Council. 	<p>References to Wyong Shire Council have been deleted from the document.</p> <p>A reference to the Central Coast City Council has been inserted in the document replacing Wyong Shire Council. Acronyms and Definitions table identifies CCCC as Central Coast City Council.</p>
<ul style="list-style-type: none"> • Change 'no' to not in the last sentence of the last paragraph under 5.1 <i>Heritage Impact Assessment Procedure</i> (pg. 13). 	<p>Section 5.1, last paragraph, last sentence 'no' has been replaced with 'not'.</p>
<ul style="list-style-type: none"> • Change 'Approval' to approvals in the first sentence under 5.2 <i>Heritage Act</i> 	<p>Section 5.2, first paragraph 'Approval' has been</p>

Description of Consultation	How Addressed in Management Plan
<i>Approvals Procedure</i> (pg. 14).	amended to approval.
<ul style="list-style-type: none"> Further to the above, please find enclosed an image as taken by Lake Macquarie City Council that can be used in reference to St Pauls Anglican Church, 25 Coorumbung Road, Dora Creek. 	St Pauls Anglican Church, image supplied by Lake Macquarie City Council, has been included in Attachment 2 Mandalong.
Letter from LMCC inviting applications for Local Heritage Places Grant 2018-19	
Invitation for grants sent to owner or manager of a heritage item 33 Summerhill Drive Wangi Wangi (Myuna).	Discussion with LMCC 20 April 2018 discussed Awaba to Wangi Railway line section of the railway line (approximately 250m of 10km length) occurring in Centennial land, and being inaccessible to the public makes the site not appropriate for interpretative signage and public use.
Email from DPE 23 May 2018 providing comment on resubmitted draft Management Plan	
Attachment A – Consolidated Feedback	
<p>Chapter 6.3</p> <p>Please confirm where “Phase 1” and “Phase 2” monitoring results will be reported?</p> <p>Please confirm how soon after mining the “Phase 2” inspection will take place.</p> <p>Please provide detail of any subsequent routine inspections to heritage items in accordance with the subsidence management plan.</p> <p>Please update HHMP to include contingency plan to manage impacts on heritage items, if items show significant variation between inspections.</p>	<p>Section 6 Historic Heritage Management has been updated:</p> <ul style="list-style-type: none"> to refer that results of historic heritage monitoring will be reported in accordance with an approved Extraction Plan Historic Heritage Management Plan or where an Extraction Plan is not required in the Annual Review for the operation. to provide the time of “Phase 2” inspections as within three months of undermining. to identify further monitoring inspections will be identified in an approved Extraction Plan Historic Heritage Management Plan. to include Contingency Plan will be developed for any impacts on heritage items identified between inspections in accordance with an approved Extraction Plan Historic Heritage Management Plan. to identify where monitoring is undertaken outside of an Extraction Plan Historic Heritage Management Plan contingencies will be

Description of Consultation	How Addressed in Management Plan
	<p>developed in consultation with a qualified heritage consultant.</p> <p>Myuna is currently mining, and proposed future mining operations are mostly located under Lake Macquarie not likely to interact with historic heritage sites.</p> <p>Newstan is in care and maintenance and no current plans exist for further mining. Future mining will be subject to development consent.</p>
<p>Chapter 6.4</p> <p>Please update Figure 5 (page 18) of the plan to show who assesses the significance of an unexpected find.</p> <p>Please confirm that Centennial will seek OEH advice regarding the significance of any unexpected find before recommencement of work.</p> <p>Please include a step in Figure 5 to update or review the HHMP in the event of an unexpected find.</p>	<p>Figure 5 has been updated to identify a qualified heritage consultant will assess the significance of an unexpected find, and consultation with OEH on the significance of an unexpected find will be undertaken prior to engaging with LMCC Heritage Officer and obtaining approvals to undertake further works. Figure 5 has a new section added identifying this Management Plan will be reviewed if required by an unexpected find.</p> <p>Figure 6 incorporates an unexpected find as a trigger for review of this Management Plan.</p>
<p>Chapter 6.4.2</p> <p>Please ensure that the process for human remains listed in the HHMP is consistent with the ACHMP.</p> <p>Please advise when Centennial will notify the OEH, the Department and Aboriginal stakeholders regarding any discovery of human remains.</p>	<p>Section 6.7 identification or previously unknown heritage sites or skeletal remains has been updated consistent with the ACHMP.</p> <p>Centennial will provide immediate notification to the Police and within 7 days' notice to DPE, OEH and registered Aboriginal parties following identification of discovered human remains identified in Section 6.4.2.</p>
<p>Monitoring and Reporting</p> <p>Please update HHMP to include protocol for managing and reporting incidents, complaints, non-compliances and exceedances. If this is generally covered in the EMS, please reference where the protocol can be found.</p>	<p>Section 6 Historic Heritage Management has been updated to incorporate the management and reporting of incidents, complaints, non-compliances and exceedances.</p>
<p>Site Boundaries</p> <p>The site boundaries provided in the HHMP for Awaba Colliery, Mandalong Coal Mine and Newstan Colliery all differ from the site boundaries stipulated in the respective conditions of consent.</p> <p>Can you please review the boundaries, and:</p> <ul style="list-style-type: none"> • Provide an explanation for the discrepancy; or • Amend the boundaries in the HHMP. 	<p>Centennial Regional Management Plans have been developed to incorporate boundaries of Centennial's Colliery holding boundary, which extends past Centennial operations development consent boundaries.</p> <p>This Regional Management Plan approach commenced in 2011 with the development of the Centennial Northern Region ACHMP and has been used in subsequent regional management plan.</p>

Description of Consultation	How Addressed in Management Plan
<p>Attachment 1, 3 and 4</p> <p>Please confirm if Centennial has now considered the LMCC request to list the heritage items located on its land in the LMCC LEP:</p> <ul style="list-style-type: none"> • Bat Alley [early coal mine] • Awaba State Mine • Awaba to Wangi Power Station Branch Railway Line • Tuckers House • Olstan Arsenic Smelter <p>Please confirm how you intend to manage impacts to heritage items on Centennial-owned land.</p>	<p>Centennial provided a written response to LMCC 15 June 2018. The written response provided clarification of Centennial owned and leased land.</p> <p>Impacts from underground mining on items held on Centennial owned land will be managed in accordance with an Extraction Plan outlined in Section 6.3 Heritage Sites Monitoring Program.</p>
<p>Attachment 1 and 3</p> <p>Please provide more detail on the protection measures for the:</p> <ul style="list-style-type: none"> • Awaba-Wangi railway line • Wangi Power Station • Awaba Colliery 	<p>Approximately 250m of the 10km Awaba-Wangi Railway line occurs on Centennial land at Myuna Colliery. The Railway line is protected from any surface works unless approval is sought in accordance with Attachment 3 Myuna, where a Heritage Impact Statement must be completed in accordance with Section 5 Historic Heritage Assessment.</p> <p>Myuna is included in the “curtilage” of the Wangi Power Station. The “curtilage” was placed around the Power Station to protect its scenic value. Centennial does not have management of or input on the protection of Wangi Power Station.</p> <p>The protection measures for Awaba Colliery are detailed in Attachment 1. Any further works at Awaba Colliery will require assessment in accordance with Section 5 Historic Heritage Assessment.</p>
<p>Attachment 3</p> <p>Please provide recommendations for the long-term management and/or use of the Awaba Colliery and Awaba-Wangi Railway.</p> <p>Please include 1987 drift portal in Appendix A.</p>	<p>Measures for the long term management of the Awaba Colliery are detailed in Attachment 1 Awaba Site Specific Measures – Awaba Colliery Building Protection. Attachment 1 does not propose changes to the current site of Awaba Colliery, and identifies if construction of new facilities was to occur the following would be undertaken:</p> <ul style="list-style-type: none"> • a preference for new surface facilities to be established to the east of the 1987 drift portal and north of conveyor structures; and • new facilities or structure should not exceed

Description of Consultation	How Addressed in Management Plan
	<p>three stories.</p> <p>The Awaba-Wangi Railway largely does not occur on Centennial owned land. Approximately 250m of the railway occur on land at Myuna. There are no proposed measures for protection of the railway due to the short length on Centennial land. Refer to correspondence with Lake Macquarie City Council 20 April 2018 discussing opportunities for funding of heritage items at Myuna.</p> <p>The Awaba 1987 Awaba Drift Portal has been included in Awaba Site Specific Appendix Table 4 - Actions required for Awaba Buildings prior to being altered or removed.</p>
<p>Attachment 6 and 6A</p> <p>Please provide evidence of consultation with OEH in the preparation of completing this management plan.</p> <p>Please confirm if the most recent version of the HHMP has been sent to OEH, requesting their comment.</p> <p>Please provide evidence of consultation with the CCC and the local historical society.</p>	<p>A copy of consultation has been provided to DPE with the return of this HHMP.</p> <p>Incorporation of consultation with the Newstan CCC and Lake Macquarie and District Historical Society Inc. is included in Attachment 6 Consultation Log. Any comments received from the Newstan CCC and Lake Macquarie and District Historical Society Inc. will be addressed as received.</p> <p>Centennial provided a copy of the NRHHMP the revised version (version 2) of the HHMP to OEH Heritage Branch on 3 October 2017. Centennial received an email response from OEH on 8 December 2017 identifying the HHMP had not yet been reviewed and asking if comments would be considered. Centennial responded by email to OEH on 8 December 2017 identifying Centennial would appreciate any feedback on the HHMP and any feedback would be addressed and incorporated regardless of when it was received. Centennial contacted OEH by telephone on 31 May 2018 following up on the previous email. OEH highlighted comments will only be made by formal request from DPE.</p>