Upgrade of the Pacific Highway, Ourimbah Street to Parsons Road, Lisarow

ROADS AND MARITIME SERVICES

Upgrade of the Pacific Highway, Ourimbah Street to Parsons Road, Lisarow Statement of Heritage Impact

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Executive Summary

Roads and Maritime Services (Roads and Maritime) propose to upgrade the Pacific Highway, Ourimbah Street to Parsons Road, Lisarow (the proposal) from a current single lane in each direction to a dual carriageway, with two lanes in each direction separated by a central median. This would improve traffic flow and increase safety for road users, including cyclists and pedestrians. In addition, there are also a number of associated local road adjustments including the upgrade of traffic control signals at Chamberlain Road, new signals at Macdonalds Road and Railway Crescent with a new rail over bridge replacing the existing bridge over the Main North Rail Line at Railway Crescent.

As part of preparing the Review of Environmental Factors (REF), this Statement of Heritage Impact (SOHI) identifies the non-Aboriginal heritage items within or near to the proposed works area, assesses the potential impacts on the heritage items from the proposal, and develops measures to address impacts. The SOHI assessment addresses archaeology, heritage items and conservation area in accordance with NSW Heritage Branch guidelines, and the Australia ICOMOS Charter for Places of Cultural Significance (Burra Charter)(Australia ICOMOS 2000).

The proposal is a 1.6 kilometre long upgrade to a four-lane urban arterial road between Ourimbah Street and Parsons Road, Lisarow (refer to Figure 1-1). The proposal is located around eight kilometres north of Gosford.

A review of previous heritage studies for the proposal and a search of relevant heritage registers were undertaken. A site inspection of the study area was carried out on 22 May 2014. Two historical heritage items were identified within or near the proposal. These are the Pryor Brothers Store located at 12A Railway Crescent and the Lisarow Anglican Cemetery located at 960 Pacific Highway, around 200 metres to the South of Ourimbah Street, Lisarow. Both heritage items are identified within the Gosford Local Environment Plan 2014 as being of local significance.

The Pryor Brothers Store has previously been assessed as part of a development application made to the Gosford City Council in 2013. Approval for the demolition of the Pryor Brothers Store was granted by Council on 13 August 2013; therefore it is not assessed as part of this assessment.

The Lisarow Anglican Cemetery will be directly and potentially indirectly impacted by the proposal and includes:

- Removal and relocation of the cemetery gates
- Potential accidental physical damage to the headstones and the above ground components of the graves
- Potential physical damage to the headstones and the above ground components of the graves due to vibration.

The potential for unmarked graves in the Lisarow Anglican Cemetery close to the Pacific Highway was previously identified and archaeologically tested. The test excavations revealed that there are no unmarked graves within the construction footprint of the proposal.

Due to the substantial amount of heritage and archaeological investigation that has been undertaken in the study area there are not likely to be any additional heritage constraints for the proposal.

Mitigation measures are recommended to manage the proposal’s heritage impacts to an acceptable level. A summary of the mitigation measures that will need to be implemented for each of the potential impacts identified above are outlined as follows:

Removal and relocation of the cemetery gates

- Prior to the gates’ removal, number each stone of the gate with a non-permanent marking to ensure that they can be restored in the exact same order
- Remove the stone and the gates from the construction site and store securely to prevent loss or theft of the original material
- Remove and relocate the gates using an appropriately qualified stonemason
• The existing cemetery gates would be relocated and incorporated into the stairs / retaining wall structure that would be constructed along the cemetery boundary. The exact location of the new gate would be identified in detailed design but would be situated as close as possible to its existing location. The sandstone stones that form the existing gate would be re-used in the new gate and the retaining wall in this location would be finished such that it ties in with the heritage values of the cemetery.

Removal of vegetation along the cemetery boundary
• Once the works are completed, plantings of fast growing tree species along the new boundary of the cemetery are required. More permanent, slow growing species must also be planted to become a replacement for the fast growing trees (refer to the Visual Impact, Landscape Character and Urban Design Report).

Potential accidental physical damage to the headstones and the above ground components of the graves
• To ensure that there is no accidental damage to the headstones and the rest of the above ground components of the graves, prior to the commencement of the works; temporary, non-intrusive barrier fencing must be installed between the graves and the proposal with a buffer of five metres between the graves and the fencing. The fencing must not intrude into the ground surface of the cemetery.

• No machinery or vehicles are to be used or parked within the boundary of the cemetery. All mechanical works must be undertaken from the road and road reserve. When required, workers may work within the boundary of the cemetery only if they are on foot.

Potential physical damage to the headstones and the above ground components of the graves due to vibration
• Construction methods with reduced levels of vibration, and monitoring of vibration levels would be required in accordance with the Noise and Vibration Assessment for the proposal. A structural audit including a photographic record of the graves must be undertaken prior to construction commencing, and the condition reassessed following the completion of construction. Ongoing monitoring of the condition of headstones and other grave components must also take place throughout construction. If any damage occurs during construction, additional protection of the headstones and grave components is required. Protective measures may include; the erection of support structures; shoring up of the headstones and above ground components of the graves; or stabilisation, reconstruction or restoration of the susceptible headstones and grave components. Decisions about protective measures should be made with input from a suitably qualified heritage consultant and a qualified stonemason. Where damage to the above ground components of the graves has occurred, it must be repaired once construction is complete. Repairs must be undertaken by a suitably qualified stonemason with input from a qualified heritage consultant.

In addition general mitigation measures for the management of the potential impacts on non-Aboriginal heritage items from the proposal must be implemented. These include a procedure for managing unexpected finds of non-Aboriginal heritage materials, features or deposits, a procedure for managing the discovery of human remains, and the provision of heritage induction training for staff and contractors working on the construction of the proposal. The implementation of these mitigation measures would minimise impacts on non-Aboriginal heritage to an acceptable level to proceed with the proposal as assessed.

As the gate of the Lisarow Anglican Cemetery will be impacted by the proposal and requires relocation, consultation with Gosford City Council must be undertaken under Clause 14 of the State Infrastructure Planning Policy 2007 (Infrastructure) (ISEPP). According to ISEPP Roads and Maritime is required to notify Council of the impacts of the proposal to any locally listed heritage item/s and submit a copy of the SOHI for Council’s consideration. Further, Roads and Maritime are required to take into consideration any response to the Clause 14 ISEPP that is received from the Council within 21 days after the notice being given. Consultation with Gosford City Council under Clause 14a of the ISEPP has occurred and Council has indicated that the relocation of the cemetery gates and the replanting of the vegetation along the new boundary of the cemetery are acceptable mitigation measures for the impacts to the Lisarow Anglican Cemetery. The response was received on 6 August 2014.
1. Introduction

1.1 Proposal description

Roads and Maritime Services (Roads and Maritime) have commissioned Jacobs to undertake a Review of Environmental Factors (REF) for the Upgrade of the Pacific Highway, Ourimbah Street to Parsons Road, Lisarow (the proposal). Currently Roads and Maritime have developed a 20 per cent concept design, refer to Figure 1-2. The main features of the proposal include:

- Widening to include two additional 3.3 metre wide lanes (one northbound and one southbound)
- Widening of shoulders by up to 2.0 metres, for consistent widths along the length of the proposal
- Maintaining a 60 kilometres per hour design and posted speed limit
- A new rail overbridge replacing the existing bridge over the Main Northern Railway Line located to the south of the intersection of the Pacific Highway and Railway Crescent
- Intersection upgrades at:
  - Chamberlain Road and Pacific Highway intersection: Line work and relocation of traffic lights
  - Rail maintenance access road: Relocation of the access road about 100 metres to the east, with all vehicle movements permitted at the intersection
  - Macdonalds Road and Pacific Highway intersection: Relocated around 25 metres to the south to align with Tuggerah Street and new traffic lights installed at the intersection
  - Tuggerah Street and Macdonalds Road intersection: Relocation and realignment of the intersection so that priority would be given to traffic on Tuggerah Street and traffic on Macdonalds Road is required to give way
  - Railway Crescent and Pacific Highway intersection: Providing a wider radius of the curve approaching the Pacific Highway, and traffic lights at the intersection
  - Dora Street and Railway Crescent intersection: Adjusting the intersection to the south-west by about 30 metres, and enforcing a no right turn from Dora Street to Railway Crescent
- Raised concrete median along the length of the proposal, and at the approaches to intersections at Railway Crescent, Macdonalds Road and Chamberlain Road
- Eight retaining walls at:
  - Pacific Highway, south west of Chamberlain Road, next to the southbound lane
  - Pacific Highway, south west of Macdonalds Road, next to the southbound lane
  - Pacific Highway, south of the rail overbridge, on both sides of the road
  - Corner Pacific Highway and Railway Crescent, directly north of the rail overbridge
  - Pacific Highway, north of Railway Crescent, on both sides of the road
  - Along the boundary of the rail corridor between the Lisarow Train Station access road and the Lisarow Rail Overbridge
- New road surface for the length of the proposal and tie ins to existing roads
- Shared pedestrian cycleways and footpaths throughout the proposal area. Safety fencing will be provided for pedestrians in steep areas
- Removal of unused bus stops immediately north of Railway Crescent on the northbound carriageway and on both sides of Macdonalds Road
- Installation of two permanent operational water quality basins that would also act as sediment control basins during construction
- Kerb and guttering the length of the proposal
• Use of ancillary construction facilities, including site compounds and stockpile sites and hardstands
• Relocation of utilities
• Property acquisition and adjustment.

The Pacific Highway north of Gosford is an urban arterial road that provides access to Gosford’s northern suburbs and to the Pacific Motorway (M1) at Ourimbah. It is currently a single lane in each direction, and experiences congestion during peak periods. This has initiated the NSW State Infrastructure Strategy to progressively upgrade the highway to a four-lane urban arterial road between North Gosford and the M1.

1.2 Aim and scope of the assessment

As part of preparing the REF, this Statement of Heritage Impact (SOHI) identifies the non-Aboriginal heritage items within or near to the proposed works area, assesses the potential impacts on the heritage items from the proposed proposal activities, and develops measures to address impacts. An impact assessment (refer to Section 6 has also been prepared for the Lisarow Anglican Cemetery. The SOHI addresses archaeology, heritage items and conservation area in accordance with NSW Heritage Branch guidelines, and the Australia ICOMOS Charter for Places of Cultural Significance (Burra Charter) (Australia ICOMOS 2000).

The assessment was based on the Concept Design (80 per cent completion) supplied by Roads and Maritime.

1.3 Location of the proposed works

The proposal is a 1.6 kilometre long upgrade to a four-lane urban arterial road between Ourimbah Street and Parsons Road, Lisarow (refer to Figure 1-1 and Figure 1-2). The proposal area is located eight kilometres north of Gosford.

1.4 Authorship of report

This report has been prepared by Rebecca Andrews (Project Archaeologist, Jacobs) with assistance from Dr Karen Murphy (Historical Archaeologist, Jacobs). Mapping was provided by Kahli Macnab (GIS Analyst, Jacobs) and Kate O’Loan (GIS Analyst, Jacobs). A practice review was undertaken by Vanessa Edmonds (Senior Archaeologist, Jacobs) and a technical review was undertaken by Karen Murphy.
Figure 1-2 | Locality map

Legend
- 80 percent concept design
- Road
- Railway
- Watercourse
- Water body
- NPWS Reserve
- State forest
- Local Government Area

NON-ABORIGINAL HERITAGE ASSESSMENT
Upgrade of the Pacific Highway, Ourimbah Street to Parsons Road, Lisarow
Legend
- 80 percent concept design
- Retaining wall
- Water quality basin
- Watercourse
- Railway
- Cadastre

NON-ABORIGINAL HERITAGE ASSESSMENT
Upgrade of the Pacific Highway, Ourimbah Street to Parsons Road, Lisarow
Figure 1-2b | The proposal

NON-ABORIGINAL HERITAGE ASSESSMENT
Upgrade of the Pacific Highway, Ourimbah Street to Parsons Road, Lisarow
2. Legislative framework

2.1 State legislation

2.1.1 Environmental Planning and Assessment Act 1979

The Environmental Planning and Assessment Act 1979 (EP&A Act) requires that environmental impacts are considered in land-use planning, including impacts on Aboriginal and non-Aboriginal heritage. Part 5 of the EP&A Act is designed to ensure public authorities fully consider environmental issues before they undertake or approve activities that do not require development consent.

2.1.2 State Environmental Planning Policy (Infrastructure) 2007

The State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) aims to facilitate the effective delivery of infrastructure across the State. Clause 94 of the ISEPP permits development on any land for the purpose of road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent. The proposal can therefore be assessed under Part 5 of the EP&A Act by Roads and Maritime as both the proponent and the determining authority. Development consent from the Gosford City Council is not required.

There are several divisions and clauses in the ISEPP that refer to heritage matters. Clause 14 states that where a development may be carried out without consent (determined by Clause 94), and that development is likely to have an impact that is not minor or inconsequential on a local heritage item (other than a local heritage item that is also a State heritage item) or a heritage conservation area then:

‘(2) A public authority, or a person acting on behalf of a public authority, must not carry out development to which this clause applies unless the authority or the person has:
(a) had an assessment of the impact prepared, and
(b) given written notice of the intention to carry out the development, with a copy of the assessment, to the council for the area in which the heritage item or heritage conservation area (or the relevant part of such an area) is located, and
(c) taken into consideration any response to the notice that is received from the council within 21 days after the notice is given.’

As a public authority, this clause applies to Roads and Maritime. This SOHI would fulfil the requirement under subclause (2) (a). Under Clause 14 written notification of the proposal is required. In addition a copy of the SOHI needs to be submitted to Council identifying any potentially impacted local heritage items and an assessment of the impacts. Roads and Maritime are required to take into consideration any response to the notice that is received from the Council within 21 days after the notice is given.

2.1.3 Heritage Act (NSW) 1977

The Heritage Act 1977 (Heritage Act) provides a number of mechanisms by which items and places of heritage significance may be protected. The Heritage Act is designed to protect both listed heritage items, such as standing structures, and potential archaeological remains or relics. Different parts of the Heritage Act deal with these different situations.

2.1.3.1 State Heritage Register

The Heritage Council of NSW maintains the State Heritage Register (SHR). Only those items which are of state-level heritage significance in NSW are listed on the SHR. Listing on the SHR controls activities such as alteration, damage, demolition and development. When a place is listed on the SHR, the approval of the Heritage Council of NSW is required for any major work, including the following:
• Demolishing the building or work
• Carrying 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
• Altering the building, work, relic or moveable object

An application under Section 60 of the Heritage Act must be made to the Heritage Council in order to carry out such activities to State-listed heritage items.

In some circumstances a Section 60 permit may not be required if works are undertaken in accordance with the Standard Exemptions for Works Requiring Heritage Council Approval (NSW Heritage Council 2009). For example, Standard Exemption 7 covers works that would have little or no adverse impact on the heritage significance of the heritage item. An Exemption Notification Form, Section 57(2), is required to be submitted to the NSW Heritage Branch with appropriate supporting information (such as a SOHI completed for State-listed heritage items impacted by any proposed works).

2.1.3.2 Archaeological relics

Part 6 Division 9 of the Heritage Act protects archaeological ‘relics’ from being ‘exposed, moved, damaged or destroyed’ by the disturbance or excavation of land. This protection extends to the situation where a person has ‘reasonable cause to suspect’ that archaeological remains may be affected by the disturbance or excavation of the land. It applies to all land in NSW that is not included in the SHR. A ‘relic’ is defined by the Heritage Act as:

Any deposit, object of material evidence which relates to the settlement of the area that comprises NSW, not being Aboriginal settlement, and has local or state significance.

Section 139 of the Heritage Act requires any person who knows or has reasonable cause to suspect that their proposed works will expose or disturb a ‘relic’ to first obtain an Excavation Permit from the Heritage Council of NSW (pursuant to section 140), unless there is an applicable exception (pursuant to Section 139(4)). If there is an exception, an Excavation Permit Exception Notification Form must be submitted and endorsed by the Director of Heritage Branch for places not listed on the SHR.

In some circumstances a section 140 permit may not be required when excavating land in NSW. In accordance with the NSW Government Gazette (no 110, 5 September 2008) Schedule of Exceptions to subsection 139 (1) and (2) of the Heritage Act 1977, made under subsection 139 (4):

Excavation or disturbance of land of the kind specified below does not require an excavation permit under section 139 of the Heritage Act, provided that the Director-General is satisfied that [certain criteria] have been met and the person proposing to undertake the excavation or disturbance of land has received a notice advising that the Director-General is satisfied that:

(c) a statement describing the proposed excavation demonstrates that evidence relating to the history or nature of the site, such as its level of disturbance, indicates that the site has little or no archaeological research potential.

An Excavation Permit Exception Notification Form is required to be submitted to the NSW Heritage Branch with appropriate supporting information (such as this heritage assessment). If the Director of the Heritage Branch is satisfied of the relevant matters relating to the proposal, a copy of the form will be endorsed by the Heritage Branch and returned to the applicant.

Section 146 of the Heritage Act requires any person who is aware or believes that they have discovered or located a relic must notify the Heritage Council of NSW providing details of the location and other information required.
2.1.3.3 Works

The Heritage Act identifies ‘works’ as a category separate to relics. ‘Works’ refer to past evidence of infrastructure which may even be buried, and so therefore ‘archaeological’ in nature and with the potential to provide information that contributes to our knowledge. Exposure of a ‘work’ does not trigger reporting obligations under the Heritage Act. However, good environmental practice recognises the archaeological potential of such discoveries and the need to balance these against the requirements of development. Roads and Maritime uses its Standard Management Procedure: Unexpected Heritage Items (Roads and Maritime Services 2013) to manage the discovery of such items. This provides guidance for the way such finds are to be managed when uncovered during construction and other activities.

2.1.3.4 Section 170 Heritage and Conservation Registers

Government agencies have responsibilities under Section 170 of the Heritage Act. Section 170 requires agencies to identify, conserve and manage heritage assets owned, occupied or managed by that agency. Section 170 requires government agencies to keep a Register of heritage items, which is called a Heritage and Conservation Register or more commonly, a Section 170 Register.

The Heritage Act obliges government agencies to maintain their assets with due diligence in accordance with State-Owned Heritage Management Principles approved by the Minister on the advice of the Heritage Council and notified by the Minister to government instrumentalities from time to time.

2.2 Commonwealth heritage legislation

2.2.1 Environment Protection and Biodiversity Conservation Act 1999

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) includes ‘national heritage’ as a matter of National Environmental Significance and protects listed places to the fullest extent under the Constitution. It also establishes the National Heritage List and the Commonwealth Heritage List.

The following is a description of each of the Heritage Lists and the protection afforded places listed on them.

2.2.1.1 National Heritage List

The National Heritage List (NHL) is a list of places with outstanding heritage value to Australia, including places overseas. This means that a person cannot take an action that has, will have, or is likely to have, a significant impact on the national heritage values of a national heritage place without the approval of the Commonwealth Minister for the Environment, Heritage and the Arts. The person appointed with the responsibility for a proposed action needs to undertake a ‘self-assessment’ to decide whether or not a proposed action is likely to have a ‘significant’ adverse impact on the National Heritage values of the place. If so, that action must be referred to the Minister for a decision.

2.2.1.2 Commonwealth Heritage List

The Commonwealth Heritage List (CHL) is a list of places managed or owned by the Australian Government. A person cannot take an action that has, will have, or is likely to have, a significant impact on the Commonwealth heritage values of a Commonwealth heritage place without the approval of the Commonwealth Minister for the Environment, Heritage and the Arts. The person appointed with the responsibility for a proposed action needs to undertake a ‘self-assessment’ to decide whether or not a proposed action is likely to have an adverse or ‘significant’ impact on the Commonwealth Heritage values of the place. That action must be referred to the Minister for a decision.

2.2.1.3 Register of the National Estate

The Australian Heritage Council compiled and maintained the Register of the National Estate (RNE) under the Australian Heritage Council Act 2003 (AHC Act). Places on the RNE that are in Commonwealth areas, or subject to actions by the Australian Government, are protected under the EPBC Act by the same provisions that
protect Commonwealth Heritage places (see above). Following amendments to the AHC Act, the RNE was frozen on 19 February 2007, which means that no new places could be added, or removed. From February 2012 all references to the RNE were removed from the EPBC Act and the AHC Act. The RNE is maintained on a non-statutory basis as a publicly available archive.
3. **Background**

3.1 **Historical context**

The area of Gosford and Wyong was originally known as Brisbane Waters and first surveyed in 1788 when Governor Phillip was searching for arable land for the colony. There were two additional expeditions in 1789; however arable land was located at Windsor, in the Hawkesbury region, which was closer to the existing Sydney colony and easier to reach via the rivers. The area was also deemed to be unsuitable for settlement due to the proximity of the Newcastle convict settlement, which the Governor decided needed to be kept isolated. The land between Newcastle and Sydney was opened for settlement in 1821 when the convict settlement was moved to Port Macquarie (Lewczak 2010:10-11).

The major industry of the Gosford area in the early phase of settlement was timber-getting. The cedar and ironbark trees were cleared and sold in Sydney. The presence of cedar in the region also prompted the development of the ship building industry. Once the land was cleared it was used for grazing or cultivating crops such as maize, onions and potatoes (Lewczak 2010:11).

The development of the road infrastructure in the early 1840s encouraged both population and industrial growth. By the 1850s, sawmills had been established in the towns surrounding Gosford, therefore the major industry shifted to focus on grazing, dairy processing and flour milling (Lewczak 2010:12).

The completion of the railway between Newcastle and Sydney was completed in the 1880s. This encouraged the subdivision of land into smaller properties, which allowed for smaller farmers to establish themselves. Government loans were also available to people who could not purchase the land outright upfront. The railway also enabled certain markets to expand significantly, notably the citrus industry (Lewczak 2010:12).

The Lisarow Anglican Cemetery was part of the Church of England from around 1858, when a temporary church was built on the land grant of Robert Cox. The land grant was subdivided in 1889 with the northern and western sections being sold for housing when the cemetery was officially established. There are 261 reported, unmarked burials within the 17 rows of burials within the cemetery. The first recorded burial took place on 21 January 1840 (Central Coast Family History Society n.d.; Lewczak 2010: 13-15).

3.2 **Heritage context**

3.2.1 **Previous studies**

There have been six previous heritage assessments conducted within and around the proposal. The proposal has been altered as the design has been refined.

*Manns Road, Narara to Railway Crescent, Lisarow, Preliminary Environmental Impact Assessment – Indigenous and non-Indigenous Heritage (Lewczak and Coroneos 2010)*

In 2010 Cosmos Archaeology completed the Preliminary Environmental Impact Assessment for the Pacific Highway Upgrade between Narara and Lisarow. The area assessed was substantially larger than the area that is being assessed by this report. The area included three route options for the Pacific Highway upgrade. During the assessment, eight heritage places were identified. Seven of the identified heritage places are a sufficient distance from the current proposal alignment and are not included in this report. One heritage place, the Lisarow Footbridge is in close proximity to the current proposal area and is listed in the Preliminary Environmental Impact Assessment as being on the RailCorp Section 170 heritage register. The Lisarow Footbridge appears to have been removed from the heritage register since 2010 and would not be impacted by the current proposal.
Cosmos Archaeology completed a SOHI for Stage 3A of the Pacific Highway Upgrade between Lisarow and Ourimbah. Three non-Aboriginal heritage places were identified by the assessment; the Lisarow Store (Pryor Brothers Store), the Lisarow Anglican Cemetery and the Ourimbah Thai Restaurant Building. The proposal designs were altered to avoid any impact to the Ourimbah Thai Restaurant Building and the Lisarow Store (Pryor Brothers Store) was assessed as not being impacted by the proposal. Therefore, the SOHI focused on the Lisarow Cemetery.

The assessment identified that there was the potential for the proposed works to disturb any unmarked graves between the Pacific Highway and the current eastern extent of the cemetery boundary. An archaeological test excavation of the area was suggested to determine the presence or absence of any unmarked graves. It was also recommended that the stone and metal original entrance gates be left in place. If they were required to be moved they should be replaced as close as possible to their current location. If the extension of Lisarow Road is reconsidered at a later date, additional archaeological work would be required to assess the presence or absence of unmarked graves in that area.

Global Benefits Group Australia (GBG) completed a ground penetrating radar (GPR) study of the section of the Lisarow Anglican Cemetery parallel to the Pacific Highway in preparation for the proposed highway upgrade. There were a number of marked graves within the area that could not be analysed with the GPR. There were also some areas close to the current boundary of the cemetery which were not able to be surveyed due to limited access. The presence of graves within these areas is confirmed. The GPR survey revealed anomalies within the surveyed area which were interpreted as potential graves, including 45 probable graves (greater than 80 per cent certainty) and 25 possible graves (less than 50 per cent certainty). The results from the GPR were compared with a magnetic survey. There were a number of similarities between the GPR results and the magnetic survey results, including seven areas where both surveys indicated an anomaly. The difference between the total number of potential graves identified in both surveys may be due to the magnetic survey not being an appropriate method of analysis for the site, as it requires specific soil types for accuracy, and the processing of the data after it was collected as it may not have been detailed enough to show potential graves. The potential graves that were identified in the GPR survey would potentially be impacted by the expansion of the Pacific Highway at Lisarow.

Australian Heritage Management Solutions (AHMS) investigated seven of the areas identified by GBG during the GPR survey (see above). The seven anomalies which were investigated were within the road reserve of the Pacific Highway immediately next to Lisarow Anglican Cemetery. The investigation did not extend into the cemetery grounds. The area was tested using mechanical and manual test excavation. The top layers of soil were removed by machine. Once sub-fill deposits were observed, the excavation was carried out manually. The testing in the area indicated that there were no graves present, and that there were no other features, such as grave cuts which could suggest the presence of graves within the road reserve. The excavation suggested that the anomalies identified in the GBG report were mostly associated with the sub-surface services which were present in the area. The excavation also suggested that additional archaeological work within the area was unnecessary.

Cosmos Archaeology completed a SOHI for the Pryor Brothers Store (Gosford LEP Item 103, see below) in April 2013 as part of the Pacific Highway Upgrade at Lisarow. There were four possible options for the route of the highway upgrade, all of which involved the demolition of the Pryor Brothers Store. As part of the SOHI, relocating the building was considered, however, as the location of the building was a key factor in the significance, it was decided that moving the building would be of little worth. Prior to demolition, an archival photographic survey was recommended as a way of mitigating the removal of the building. There was minimal
potential for archaeological deposits expected at the site from either the orchard which was planted on the block prior to the subdivision of the original property or the construction of the Pryor Brothers Store. A development approval for the demolition of the Pryor Brothers Store was issued by Gosford City Council on 13 August 2013.

**Lisarow Anglican Cemetery Draft Management Guidelines (Betteridge 2013)**

In 2013 MUSEcape drafted management guidelines for the Lisarow Cemetery. The guidelines outline management recommendations for the upkeep and the continual usage of the cemetery. The majority of the report is focused on the preservation of the above ground components of the graves and the vegetation of in the cemetery. Management guidelines which are relevant to the current proposal include:

- It is preferred that the gates remain in their current location
- If the gates are required to be moved, they should be reinstalled in the closest position as possible to their original place
- Any vegetation along the boundary of the cemetery that is removed is also required to be replanted
- If any new structures need to be introduced to the cemetery, they should be made of similar materials to the structures which area currently within the cemetery

### 3.2.2 Heritage register search results

A search of all available non-Aboriginal heritage registers was undertaken to identify heritage places within or near to the proposal. The following registers were searched using a combination of online databases and where available using spatial data using Geographic Information Systems (GIS) software on 14 May 2014.

- NSW State Heritage Register
- Section 170 Heritage and Conservation Registers
- Gosford LEP 2014
- Wyong LEP 2013
- Commonwealth Heritage List
- National Heritage List
- World Heritage List
- Register of the National Estate

There were two heritage places located immediately next to the proposal (refer to *Table 3.1* and *Figure 3-1*). Further information on identified heritage items is available in *Table 5.1*.

**Table 3.1 : List of non-Aboriginal heritage items located within or next to the proposal**

<table>
<thead>
<tr>
<th>Item no</th>
<th>Item name</th>
<th>Register</th>
<th>Number</th>
<th>Significance</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lisarow Anglican Cemetery</td>
<td>Gosford LEP</td>
<td>102</td>
<td>Local</td>
<td>960 Pacific Highway, Lisarow around 200 metres to the South of Ourimbah Street Lisarow</td>
</tr>
<tr>
<td>2</td>
<td>Post office, shop and outbuildings (Pryor Brothers)</td>
<td>Gosford LEP</td>
<td>103</td>
<td>Local</td>
<td>12A Railway Crescent, Lisarow</td>
</tr>
</tbody>
</table>

### 3.2.3 Summary

Due to the substantial amount of heritage and archaeological investigation that has been undertaken in the proposal there is not likely to be any additional heritage items of relevance identified as part of this assessment.
Figure 3-1 | Location of heritage items relative to the proposal

Legend

- 80 percent concept design
- Railway
- LEP heritage item
- Retaining wall
- Watercourse
- Cadastre
- Water quality basin

Ref_Design7D.dwg
Roads and Maritime Services 2014
AUSIMAGE 2014
LPI 2014
NON-ABORIGINAL HERITAGE ASSESSMENT
Upgrade of the Pacific Highway, Ourimbah Street to Parsons Road, Lisarow
4. Site inspection

4.1 Aim and method

The aim of the site inspection was to confirm and record known non-Aboriginal heritage items, unrecorded non-Aboriginal heritage items and assess the potential for archaeological deposits within or near to the proposal. Potential impacts of the proposal were considered during the site inspection.

A number of heritage assessments (refer to Section 3.2.1) have been completed previously in the area surrounding the proposal during the development of the strategic concept design. This includes a Statement of Environmental Effects and Statement of Heritage Impacts completed as part of a development application (DA) submitted under Part 4 of the EP&A Act for the demolition of the Pryor Brothers Store. Gosford City Council approved the DA on the 14 August 2013. Consequently, the site inspection focused on the Lisarow Anglican Cemetery. Photographs were taken throughout the cemetery. Notes were made regarding relevant description and condition details and potential impacts of the proposed works. The field survey was carried out by Rebecca Andrews (Project Archaeologist, Jacobs) on 22 May 2014.

4.2 Results

4.2.1 Known heritage items and areas of archaeological potential

The Lisarow Anglican Cemetery was assessed using the above methodology. Photographs of the cemetery have been included; refer to Plate 4-1 to Plate 4-8. During the site inspection it was observed that there were graves in very close proximity to the current Pacific Highway; the closest of the graves is about 10 metres from the current edge of the bitumen seal (refer to Plate 4-4, Plate 4-5, and Plate 4-8, highlighted in blue in Figure 4-1). Row 1 of the Lisarow Anglican Cemetery (refer to Figure 4-1, the area highlighted in red) has the most recent burials of the cemetery. Further detail of the condition of the graves is contained within Section 5.2.1.

The cemetery gates are located around three metres from the current edge of the sealed road (refer to Plate 4.5). The gates are comprised of four sandstone block pillars with metal gates. One of the gates has been removed. There is a memorial plaque attached to the southern of the two central pillars (refer to Plate 4-7). There is currently no other traces of any continuation of the original fence line around the cemetery extent. Further detail of the condition of the cemetery gates are contained within Section 5.2.1.

4.2.2 Previously unknown heritage items and areas of archaeological potential

No heritage items or areas of archaeological potential that were previously unknown were identified during the site inspection.
Plate 4-1: View south east towards graves near the cemetery entrance which have been damaged by a tree.

Plate 4-2: View north from the western edge of the cemetery showing the graves in rows stepped down the hill.

Plate 4-3: View south west towards the grave closest to the Pacific Highway, with two fallen headstones.

Plate 4-4: View east towards the cemetery gates and the Pacific Highway.

Plate 4-5: View south showing the limited space between the current edge of the sealed road and cemetery gates.

Plate 4-6: Damage to the northern of the two centre posts of the cemetery gate, view south west.
Plate 4-7: View south west showing the memorial plaque on the southern of the central posts

Plate 4-8: View south west from grave closest to the Pacific Highway showing the proximity of the current road to the edge of the grave

Figure 4-1: Map of the section of Lisarow Anglican Cemetery closest to the Pacific Highway, from Lisarow Anglican Cemetery Book 1999
5. Cultural heritage significance

5.1 Basis for assessment

The concept of cultural heritage significance helps in estimating the value of places. Places which are likely to be significant are those which 'help an understanding of the past or enrich the present, and which will be of value to future generations' (Australia ICOMOS 2000). In Australia, the significance of a place is generally assessed according to the following values:

- Aesthetic value
- Historic value
- Scientific value
- Social value

The NSW Heritage Council has adopted specific criteria for heritage assessment, which have been gazetted pursuant to the *Heritage Act 1977*. The seven criteria upon which the following assessment of significance is based are outlined below:

- Criterion (a) an item is important in the course, or pattern, of NSW cultural or natural history
- Criterion (b) an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW cultural or natural history
- Criterion (c) an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW
- Criterion (d) an item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons
- Criterion (e) an item has potential to yield information that will contribute to an understanding of NSW cultural or natural history
- Criterion (f) an item possesses uncommon, rare or endangered aspects of NSW cultural or natural history
- Criterion (g) an item is important in demonstrating the principal characteristics of a class of NSW cultural or natural places or cultural or natural environments

5.2 Significance assessment and statement of significance

The statement of significance for Lisarow Anglican Cemetery has been taken from the entry from the Gosford LEP. An assessment of significance on the impacts of the proposal on the Lisarow Anglican Cemetery is included in Table 5.1. The Lisarow Anglican Cemetery is of local heritage significance.

5.2.1 Description and history

The Lisarow Anglican Cemetery is an extensive settlement cemetery on a hillside above the Pacific Highway. It includes graves of many early settlers such as the Wamsley, Cottrell, Jaques, Chasling, Foott, Robley and Goldie families. There are a number of stone and marble headstones existing within the cemetery. There are also some mature trees and plantings throughout the cemetery. There are also plantings along the boundary of the cemetery. The stone gateposts to the Pacific Highway are part of the original entrance to the cemetery. The remnants of wooden post and rail fence are present immediately to the north of the gate posts. A wide variety of funeral monuments indicative of periodic styles, including examples of majolica are present within the cemetery. The Lisarow Anglican Cemetery is located on between the Pacific Highway and Eagle Close, Lisarow, NSW.

As described in Section 4.2.1 the graves are in very close proximity to the current Pacific Highway; the closest of the graves is number 5 row 1 as identified in Figure 4-1 (shown in blue) is around 10 metres from the current edge of the bitumen seal refer to Figure 4-1 (shown in red). In addition the remaining graves in row 1, numbers 1-4 contain the most recent burials of the cemetery with the most recent occurring in 2009. This row of graves is
around 20 metres from the current edge of the bitumen seal of the Pacific Highway. The condition of the graves varies. The above ground components of the older graves (refer to Plate 4-3, dating to 1880) have substantial cracking and subsidence, and the more recent graves are in very good condition.

The cemetery gates are located around three metres from the current edge of the sealed road (refer to Plate 4-5). The gates are comprised of four sandstone block pillars with metal gates. One of the gates has been removed. There is a memorial plaque attached to the southern of the two central pillars (refer to Plate 4-7). The cemetery is still accessible from the original gate. Additionally there is an entrance to the cemetery off Lisarow Street in the north west corner. This entrance is very overgrown with plants and is not signposted.

The posts have become worn, with the mortar starting to chip and the bottom block of the northern of the two central posts has split (refer to Plate 4-6). There is currently no other traces of any continuation of the original fence line around the cemetery extent.

5.2.2 Significance assessment

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A – Important in the pattern of NSW’s history</td>
<td>The Lisarow Anglican Cemetery is associated with the early settlement of the district in the 1840s.</td>
</tr>
<tr>
<td>B – Strong or special associations with life or work of person or group of persons</td>
<td>Does not meet this criterion.</td>
</tr>
<tr>
<td>C – Aesthetic characteristics and/or creative or technical achievement</td>
<td>Set above the Pacific Highway, the location of the Lisarow Anglican Cemetery is an important feature of the local landscape.</td>
</tr>
<tr>
<td>D – Strong of special associations with particular community or cultural group</td>
<td>The Lisarow Anglican Cemetery is associated with a number of the pioneering families still resident within the district.</td>
</tr>
<tr>
<td>E – Potential to yield information</td>
<td>Does not meet this criterion.</td>
</tr>
<tr>
<td>F – Uncommon or rare</td>
<td>The Lisarow Anglican Cemetery is a rare local feature associated with the early settlement of the district.</td>
</tr>
<tr>
<td>G – Principal characteristics</td>
<td>Does not meet this criterion.</td>
</tr>
</tbody>
</table>

5.2.2.1 Statement of significance

The Lisarow Anglican Cemetery at the corner of the Pacific Highway and Eagle Close, Lisarow, has local historic and social significance as a mid-19th century cemetery associated with the early settlement of the district. Set above the Pacific Highway, the cemetery is an important feature of the landscape. The cemetery is a rare item associated with the early settlement of the district which is surviving today.
6. Assessment of impacts – Lisarow Anglican Cemetery

6.1 Proposed works

The main features of the proposal are described in Section 1.1. The works which are most likely to impact on the cemetery include:

- Construction of a second lane in both directions, this includes widening the existing highway to include two additional 3.3 metre wide lanes (one northbound and one southbound)
- Construction of a sealed shoulder in both directions, this will be up to two metres, for consistent widths along the length of the proposal
- Construction of a shared pedestrian-cycleway on the western side of the highway
- Construction of a retaining wall to the north of Railway Crescent, up to but outside the cemetery boundary, including stairs to the cemetery gates
- Kerb and guttering along the length of the proposal
- Removal of the vegetation along the current cemetery boundary

6.2 Impact assessment

*The following aspects of the proposal respect or enhance the heritage significance of the item or conservation area for the following reasons:*

The works will not enhance the heritage significance of the Lisarow Cemetery. The works associated with the proposal are unlikely to impact on any unknown graves either within the current boundary of the cemetery or in the area between the cemetery and the existing highway. The area outside of the cemetery boundary, in the road reserve of the Pacific Highway, was investigated using GPR and excavation in 2011 and 2012 (Figure 6.1) and no unmarked graves were found (see Section 3.2.1 for full details). No excavation will be taking place within the boundary of the cemetery for the proposed works, therefore there is unlikely to be any impact to any unmarked graves within the cemetery.

*The following aspects of the proposal could detrimentally impact on the heritage significance. The reasons are explained as well as the measures to be taken to minimise impacts:*

The proposed works will be situated outside the boundary of the Lisarow Anglican Cemetery. The boundary of the cemetery was considered a hard boundary throughout the design process. The design of the proposal includes the construction of a retaining wall along the boundary of the cemetery. A batter slope was considered for the location along the cemetery boundary; however the retaining wall has a substantially smaller footprint and will therefore have less impact on the cemetery. Given the constraints of the hard boundaries of the cemetery, road reserve and railway reserve in this location, and the requirement to construct a second lane in both directions, there are no practical alternatives to the proposed design.

**Removal and relocation of the cemetery gates**

The cemetery gates are currently situated on the cemetery boundary where the retaining wall is proposed to be constructed. For the works to be completed, the gates will need to be removed from their current location and relocated. The cemetery gates are an important component of the cemetery which contributes to its heritage significance and should be retained as the Pacific Highway entrance to the Lisarow Cemetery. To minimise impact on the heritage significance of the cemetery, the following must be undertaken:

- Prior to the gates’ removal, number each stone of the gate with a non-permanent marking to ensure that they can be restored in the exact same order
- Remove the stone and the gates from the construction site and store securely to prevent loss or theft of the original material
- Remove and relocate the gates using an appropriately qualified stonemason
- The existing cemetery gates would be relocated and incorporated into the stairs / retaining wall structure that would be constructed along the cemetery boundary. The exact location of the new gate would be identified in detailed design but would be situated as close as possible to its existing location. The sandstone stones that form the existing gate would be re-used in the new gate and the retaining wall in this location would be finished such that it ties in with the heritage values of the cemetery.

**Removal of the vegetation along the cemetery boundary**

There are plantings along the edge of the current cemetery boundary which will be removed during the works. Once the works associated with the proposal are completed, plantings of fast growing tree species along the new boundary of the cemetery are required (refer to the Visual Impact, Landscape Character and Urban Design report). More permanent, slow growing species must also be planted that would become a replacement for the fast growing trees.

**Potential physical damage to headstones and above ground components of the graves due to accidental contact from construction machinery and vehicles**

There are known graves with above ground components in close proximity to the proposal. To ensure that there is no accidental damage to the headstones and the rest of the above ground components of the graves, prior to the commencement of the works, temporary, non-intrusive barrier fencing must be installed between the graves and the proposal with a buffer of five metres between the graves and the fencing. The fencing must not intrude into the ground surface of the cemetery.

No machinery or vehicles are to be used or parked within the boundary of the cemetery. All mechanical works must be undertaken from the road and road reserve. When required, workers may work within the boundary of the cemetery only if they are on foot.

**Potential physical damage to headstones and above ground components of the graves due to vibration from construction works**

Some of the above ground components of the graves have cracks in the fabric and have the potential to be impacted by construction vibration. Construction methods with reduced levels of vibration, and monitoring of vibration levels would be required in accordance with the Noise and Vibration Assessment for the proposal. A structural audit including a photographic record of the graves must be undertaken prior to construction commencing, and the condition reassessed following the completion of construction. Ongoing monitoring of the condition of headstones and other grave components must also take place throughout construction. If any damage occurs during construction, additional protection of the headstones and grave components will be required. Protective measures may include; the erection of support structures; shoring up of the headstones and above ground components of the graves; or stabilisation, reconstruction or restoration of the susceptible headstones and grave components. Decisions about protective measures should be made with input from a suitably qualified heritage consultant and a qualified stonemason. Where damage to the above ground components of the graves has occurred, it must be repaired once construction is complete. Repairs must be undertaken by a suitably qualified stonemason with input from a qualified heritage consultant.
Figure 6-1 | Location of the GPR anomalies and the previous excavation at Lisarow Anglican Cemetery
7. Mitigation measures and statutory requirements

Overall, the level of impact on the Lisarow Anglican Cemetery by the proposal is moderate. The implementation of the general and site-specific mitigation measures listed below would minimise impacts on the Lisarow Anglican Cemetery to an acceptable level to proceed with the proposal as assessed.

7.1 Site-specific mitigation measures and statutory requirements

Removal and relocation of the cemetery gates. To minimise impact on the heritage significance of the cemetery, the following must be undertaken:

- Prior to the gates’ removal, number each stone of the gate with a non-permanent marking to ensure that they can be restored in the exact same order.
- Remove the stone and the gates from the construction site and store securely to prevent loss or theft of the original material.
- Remove and relocate the gates using an appropriately qualified stonemason.
- The existing cemetery gate would be relocated and incorporated into the stairs / retaining wall structure that would be constructed along the cemetery boundary. The exact location of the new gate would be identified in detailed design but would be situated as close as possible to its existing location. The sandstone stones that form the existing gate would be re-used in the new gate and the retaining wall in this location would be finished such that it ties in with the heritage values of the cemetery.

Removal of the vegetation along the cemetery boundary.

- Plantings of fast growing tree species along the new border of the cemetery are required (refer to the Visual Impact, Landscape Character and Urban Design Report). More permanent, slow growing species should also be planted that would become a replacement for the fast growing trees.

Potential physical damage to the headstones and the above ground components of the graves.

- To ensure that there is no accidental damage to the headstones and the rest of the above ground components of the graves prior to the commencement of the works barrier fencing must be installed between the graves and the proposal works with a buffer of five metres between the graves and the fencing. The fencing must not intrude into the ground surface of the cemetery.
- No machinery or vehicles are to be used or parked within the boundary of the cemetery. All mechanical works must be undertaken from the road and road reserve. When required, workers may work within the boundary of the cemetery only if they are on foot.

Potential physical damage to the headstones and the above ground components of the graves due to vibration.

- Construction methods with reduced levels of vibration, and monitoring of vibration levels would be required in accordance with the Noise and Vibration Assessment for the proposal. A structural audit including a photographic record of the graves must be undertaken prior to construction commencing, and the condition reassessed following the completion of construction. Ongoing monitoring of the condition of headstones and other grave components must also take place throughout construction. If any damage occurs during construction, additional protection of the headstones and grave components is required. Protective measures may include; the erection of support structures; shoring up of the headstones and above ground components of the graves; or stabilisation, reconstruction or restoration of the susceptible headstones and grave components. Decisions about protective measures should be made with input from a suitably qualified heritage consultant and a qualified stonemason. Where damage to the above ground components of the graves has occurred, it must be repaired once construction is complete. Repairs must be undertaken by a suitably qualified stonemason with input from a qualified heritage consultant.
Statutory requirements

As the gate of the Lisarow Anglican Cemetery will be impacted by the proposal and requires relocation, consultation with Gosford City Council must be undertaken under Clause 14 of the ISEPP. According to ISEPP Roads and Maritime is required to notify Council of the impacts of the proposal to any locally listed heritage item/s and submit a copy of the SOHI for Council’s consideration. Further, Roads and Maritime are required to take into consideration any response to the Clause 14 ISEPP that is received from the Council within 21 days after the notice being given. Consultation with Gosford City Council under Clause 14a of the ISEPP has occurred and Council has indicated that the relocation of the cemetery gates and the replanting of the vegetation along the new boundary of the cemetery are acceptable mitigation measures for the impacts to the Lisarow Anglican Cemetery. The response was received on 6 August 2014.

7.2 General management measures and approval requirements

7.2.1 Discovery of non-Aboriginal heritage material, features or deposits

If at any time during construction of the proposal, non-Aboriginal heritage materials, features and/or deposits are found the Roads and Maritime Standard Management Procedure: Unexpected Heritage Items (Roads and Maritime Services 2013) would be followed. Specifically the following actions would be undertaken:

- All construction that could potentially harm the non-Aboriginal heritage materials, features or deposits would cease (including stopping all construction within at least 10 metres). Only construction that is required to comply with occupational and environmental health and safety standards and/or to protect the non-Aboriginal heritage would occur. Construction that does not have the potential to harm the non-Aboriginal heritage would continue only if it is outside the minimum 10 metres buffer
- The on-site supervisor would inform Roads and Maritime environment staff of the discovery
- A suitably qualified and experienced archaeologist (the archaeologist) would be contacted as soon as practicable in relation to the unexpected discovery of any non-Aboriginal heritage and would be responsible for recording, in detail, the location and context of any non-Aboriginal heritage. Any materials, features and/or deposits would be analysed and/or catalogued and any official site records would be created or updated (where appropriate). The archaeologist would also make recommendations for the management of the non-Aboriginal heritage in relation to the proposal
- It is preferable to avoid impacts on non-Aboriginal heritage where possible. If avoidance is not possible, the archaeologist would conduct a salvage excavation. The aims of the salvage excavation would be to obtain as much information as possible from the non-Aboriginal heritage materials, features and/or deposits
- The archaeologist would provide a report detailing the excavation, salvage and analysis results to the Heritage Branch of the OEH) at the completion of the salvage
- Roads and Maritime would be responsible for the costs associated with the assessment, cataloguing, labelling, packaging etc of any non-Aboriginal heritage materials, features and/or deposits
- Work would recommence within the area of exclusion:
  - When the appropriate protective measures have been implemented
  - Where the relevant records have been updated and/or completed
  - Where all parties agree there is no other prudent or feasible course of action

7.2.2 Discovery of human remains

In the event that construction of the proposal reveals possible human skeletal material (remains) the following procedure would be implemented:

- As soon as remains are exposed, all construction would halt at that location immediately and the on-site supervisor would be immediately notified to allow assessment and management
- The on-site supervisor would notify the Environmental Representative, Roads and Maritime Project Manager and Roads and Maritime Senior Environmental Officer
• The on-site supervisor would contact police
• The on-site supervisor would contact OEH’s Environment Line on 131 555 and the Heritage Branch of OEH on (02) 9873 8500
• A physical or forensic anthropologist would inspect the remains in situ (organised by the police unless otherwise directed by the police) and make a determination of ancestry (Aboriginal or non-Aboriginal) and antiquity (pre-contact, historic or forensic)
• If the remains are identified as forensic, the area would be deemed a crime scene
• If the remains are identified as Aboriginal, the site would be secured and OEH and all Aboriginal stakeholders would be notified in writing
• If the remains are identified as non-Aboriginal (historical) remains, the site would be secured and the Heritage Branch of OEH would be contacted

The above process functions only to appropriately identify the remains and secure the site. From this time, the management of the area and remains would be determined through one of the following means:

• If the remains are identified as a forensic matter, management of the area would be determined through liaison with the police
• If the remains are identified as Aboriginal, management of the area would be determined through liaison with Roads and Maritime, OEH, the Department of Planning and Infrastructure (DP&I) and registered Aboriginal stakeholders
• If the remains are identified as non-Aboriginal (historical), management of the area would be determined through liaison with Roads and Maritime, the Heritage Branch of OEH and the DP&I
• If the remains are identified as not being human, then work would recommence once the appropriate clearances have been given

7.2.3 Heritage induction training

Non-Aboriginal heritage awareness training would be provided for contractors prior to commencement of construction works to ensure understanding of potential heritage items that may be impacted during the proposal, and the procedure required to be undertaken in the event of discovery of non-Aboriginal heritage materials, features or deposits, or the discovery of human remains.
8. References


Central Coast Family History Society n.d. Lisarow Cemetery Forget Us Not Unmarked Graves, Central Coast Family History Society Lisarow


Wilson, G. 2012 Pacific Highway Upgrade Between Narara and Lisarow, NSW (Stage 4) - Historical archaeological Test Excavation, Lisarow Anglican Cemetery Unpublished Report to Roads and Maritime Service
Appendix A. Consultation with Gosford City Council
Vazey, Rachel

**Subject:** FW: Lisarow Cemetery

**From:** LECKIE Craig W [mailto:Craig.LECKIE@rms.nsw.gov.au]
**Sent:** Friday, 8 August 2014 7:14 AM
**To:** TING Teresa S; Vazey, Rachel
**Subject:** Lisarow Cemetery

Rachael  FYI

Regards

Craig

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**From:** m.k.lewis@bigpond.com [mailto:m.k.lewis@bigpond.com]
**Sent:** Thursday, 7 August 2014 6:11 PM
**To:** LECKIE Craig W
**Subject:** Fw: Follow up site vist re RMS rooad widening

Dear Craig,

I am forwarding to you the decision regarding the gates at Lisarow Cemetery made by myself and Rebecca Cardy after a meeting on site.

With best wishes,

Keith Lewis

---

**From:** Rebecca Cardy
**Sent:** Wednesday, August 06, 2014 4:20 PM
**To:** m.k.lewis@bigpond.com
**Subject:** Follow up site vist re RMS rooad widening

Dear Keith,

It was lovely to meet up with you on site last week and to discuss the proposed road widening adjacent to the cemetery and the potential effects this will have on the heritage significance of the place.

I can confirm the opinion I expressed on site and that is for my preference that the entry gates remain adjacent to the Pacific Highway and in as close to their existing position as possible. In this regard I understand that it would be necessary for some stairs to be erected down into the cemetery grounds from the gate.

I am also of the opinion that it would be optimal for the planting of some fast growing tree species along this boundary line. The planting should be at the rear of the Camphor Laurels to be removed as part of the RMS works. More permanent tree species could then be planted behind them that would eventually be the landscape replacement of the Camphor Laurels which at present provide screening and contribute to the visual character of the cemetery. It is important to provide screening to the cemetery as at the moment it is the screening which is protecting the headstones etc from vandalism.

Hope this comments help Keith and I am happy to discuss further.

Yours sincerely

Rebecca
Rebecca Cardy  
Heritage Program Co-ordinator - 9th floor | Community & Cultural Development  
Gosford City Council  
PO Box 21  
Gosford NSW 2250  
P  (02) 43258869  
E  Rebecca.Cardy@gosford.nsw.gov.au

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