Northern Beaches Hospital – Stage 2: Network Enhancement Works

Statement of Heritage Impact

Frenchs Forest, NSW

Prepared by:

RPS MANIDIS ROBERTS PTY LTD
Level 9, 17 York Street
Sydney NSW 2000

T: +61 2 8270 8300
F: +61 2 8270 8399
E: sydney@rpsgroup.com.au

Client Manager: Lyndall Thornhill
Report Number: PR120633
Version / Date: Draft C, April 2015

Prepared for:

SMEC
PO Box 1052
NORTH SYDNEY NSW 2059

T: +61 2 9925 5555
F: +61 2 9925 5566
IMPORTANT NOTE

Apart from fair dealing for the purposes of private study, research, criticism, or review as permitted under the Copyright Act, no part of this report, its attachments or appendices may be reproduced by any process without the written consent of RPS Manidis Roberts Pty Ltd. All enquiries should be directed to RPS Manidis Roberts Pty Ltd.

We have prepared this report for the sole purposes of SMEC (“Client”) for the specific purpose of only for which it is supplied (“Purpose”). This report is strictly limited to the purpose and the facts and matters stated in it and does not apply directly or indirectly and will not be used for any other application, purpose, use or matter.

In preparing this report we have made certain assumptions. We have assumed that all information and documents provided to us by the Client or as a result of a specific request or enquiry were complete, accurate and up-to-date. Where we have obtained information from a government register or database, we have assumed that the information is accurate. Where an assumption has been made, we have not made any independent investigations with respect to the matters the subject of that assumption. We are not aware of any reason why any of the assumptions are incorrect.

This report is presented without the assumption of a duty of care to any other person (other than the Client) (“Third Party”). The report may not contain sufficient information for the purposes of a Third Party or for other uses. Without the prior written consent of RPS Manidis Roberts Pty Ltd:

(a) this report may not be relied on by a Third Party; and
(b) RPS Manidis Roberts Pty Ltd will not be liable to a Third Party for any loss, damage, liability or claim arising out of or incidental to a Third Party publishing, using or relying on the facts, content, opinions or subject matter contained in this report.

If a Third Party uses or relies on the facts, content, opinions or subject matter contained in this report with or without the consent of RPS Manidis Roberts Pty Ltd, RPS Manidis Roberts Pty Ltd disclaims all risk and the Third Party assumes all risk and indemnifies and agrees to keep indemnified RPS Manidis Roberts Pty Ltd from any loss, damage, claim or liability arising directly or indirectly from the use of or reliance on this report.

In this note, a reference to loss and damage includes past and prospective economic loss, loss of profits, damage to property, injury to any person (including death) costs and expenses incurred in taking measures to prevent, mitigate or rectify any harm, loss of opportunity, legal costs, compensation, interest and any other direct, indirect, consequential or financial or other loss.

Document Status

<table>
<thead>
<tr>
<th>Version</th>
<th>Purpose of Document</th>
<th>Orig</th>
<th>Review</th>
<th>Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft A</td>
<td>Draft for client review</td>
<td>D. Farina</td>
<td>E. Williams</td>
<td>22/01/2015</td>
</tr>
<tr>
<td>Draft B</td>
<td>Draft following client review</td>
<td>D. Farina</td>
<td>E. Williams</td>
<td>06/02/2015</td>
</tr>
<tr>
<td>Draft C</td>
<td>Draft following confirmation of impact on pear tree</td>
<td>D. Farina</td>
<td>E. Williams</td>
<td>23/04/2015</td>
</tr>
<tr>
<td>Final</td>
<td>Final following Department of Planning &amp; Environment input</td>
<td>D. Farina</td>
<td>E. Williams</td>
<td>26/06/2015</td>
</tr>
</tbody>
</table>

Approval for Issue

<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erin Williams</td>
<td></td>
<td>26/06/2015</td>
</tr>
</tbody>
</table>
## Contents

EXECUTIVE SUMMARY ............................................................................................................................ 1

1.0  INTRODUCTION AND PROJECT DESCRIPTION ................................................................................. 3
    1.1  Introduction .................................................................................................................................. 3
    1.2  Background .................................................................................................................................. 3
    1.3  Project location ............................................................................................................................ 4
    1.4  Project Description ...................................................................................................................... 4
    1.5  Report Structure ........................................................................................................................... 6
    1.6  Methodology ................................................................................................................................. 8
        1.6.1  Significance assessment methodology ............................................................................. 9
    1.7  Limitations .................................................................................................................................. 10
    1.8  Authorship .................................................................................................................................. 10
    1.9  Legislative context ..................................................................................................................... 10
        1.9.1  Heritage Act 1977 .............................................................................................................. 10
        1.9.2  Environmental Planning and Assessment Act 1979 ....................................................... 11
        1.2.1  State Environmental Planning Policy (State and Regional Development) 2011 .......... 11
        1.2.2  Warringah Local Environmental Plan 2011 .................................................................. 12
        1.2.3  The Burra charter: the Australia ICOMOS charter for places of cultural significance 2013 ........................................................................................................................................ 12

2.0  HISTORICAL CONTEXT ....................................................................................................................... 13
    2.1  Historical development of the study area ................................................................................ 13
        2.1.1  Early development .............................................................................................................. 13
        2.1.2  James French .................................................................................................................... 13
        2.1.3  William Hews ................................................................................................................... 13
        2.1.4  John Holland ................................................................................................................... 15
        2.1.5  Suburban development .................................................................................................... 15
        2.1.6  Discussion ........................................................................................................................ 16
    2.2  Recorded non Aboriginal heritage ........................................................................................... 16
        2.2.1  World heritage .................................................................................................................. 17
        2.2.2  National and Commonwealth heritage .......................................................................... 17
        2.2.3  State heritage ................................................................................................................... 17
        2.2.4  Section 170 heritage and conservation registers ............................................................ 17
        2.2.5  Local heritage ................................................................................................................... 17
        2.2.6  Register of the National Estate ......................................................................................... 18
        2.2.7  Register of the National Trust ......................................................................................... 18
        2.2.8  Other Heritage items ....................................................................................................... 18
    2.3  Previous heritage assessments ............................................................................................... 20

3.0  VISUAL INSPECTION .......................................................................................................................... 21
3.1 General description of the study area ................................................................. 21
   3.1.1 Heritage items within the study area .......................................................... 21
3.2 Visual inspection results and summary ............................................................. 22
4.0 HISTORICAL ARCHAEOLOGICAL POTENTIAL ........................................... 23
5.0 SIGNIFICANCE ASSESSMENT ...................................................................... 24
   5.1 Former Holland’s Orchard and Commemorative Grove .............................. 24
   5.2 Former Hews’ Brick Pit ............................................................................... 25
   5.3 Summary of heritage significance ............................................................... 26
6.0 STATEMENT OF HERITAGE IMPACT ....................................................... 28
   6.1 Impact of proposed works on the Former Holland’s Orchard and Commemorative Grove and Former Hews’ Brick Pit ................................................................. 28
      6.1.1 Summary of proposed works ............................................................... 28
      6.1.2 Alternative alignment options ......................................................... 28
      6.1.3 Consideration of alternative alignments ............................................ 30
      6.1.4 Confirmation of preferred Stage 2 option ........................................... 32
   6.2 Impact assessment and discussion ............................................................... 32
      6.2.1 Former Holland’s Orchard and Commemorative Grove .................. 32
      6.2.2 Former Hews’ Brick Pit ................................................................. 33
   6.3 Visual impact ............................................................................................... 35
   6.4 Summary of heritage impact ....................................................................... 35
7.0 MITIGATION, CONCLUSION AND RECOMMENDATIONS .......................... 37
8.0 REFERENCES ................................................................................................. 39
Tables

Table 1-1 Report structure ................................................................. 6
Table 1-3 NSW criteria for assessing heritage significance ........................................ 9
Table 1-4 Grading of significance .......................................................... 9
Table 1-5 Acknowledgements ............................................................... 10
Table 3-2 Summary of listed and unlisted heritage items in and within 250 metres of the study area .......... 22
Table 5-1 Heritage items within the study area .............................................. 26

Figures

Figure 1-1 Study area ........................................................................... 7
Figure 2-1: Location of non Aboriginal heritage items assessed in the Stage 2 study area .................. 19
Figure 6-1: Tunnel (roadheader option) ............................................... 29
Figure 6-2: Tunnel (cut and cover option) ............................................. 30
Figure 6-3: Underpass and road widening ............................................. 30
Figure 6-4: Impact on former Hews’ Brick Pit ..................................... 34

Plates

Plate 1: Hews’ Timber Cottage, c. 1886 (Courtesy, Warringah Council Library) ......................... 14
Plate 2: Hews’ brickworks, c. 1905 (Courtesy, Warringah Council Library) ................................. 14
Plate 3: Hews’ permanent home, c.1900 (Courtesy Warringah Council Library) ....................... 15
Plate 4: Group outside the (former) Methodist Church, Frenchs Forest, c. 1925 (Courtesy

Warringah Council Library) .................................................................. 15
Plate 5: 1943 Aerial of Frenchs Forest (Imagery courtesy of Land & Property Information) ........... 16
Plate 6: Brick Pit Reserve, park area (RPS, 2014) ........................................................................ 21
Plate 7: The former Hews’ Brick Pit (RPS, 2014) ....................................................................... 22

Appendices

Appendix 1 Concept design Stage 2
Appendix 2 OEH Listing for Holland’s Orchard (former)
Executive Summary

Roads and Maritime Services propose to undertake road upgrades to provide network enhancements around the Northern Beaches Hospital at Frenchs Forest. RPS has been commissioned by SMEC to provide a non-Aboriginal heritage assessment and statement of heritage impact which will form part of the Stage 2 Environmental Impact Statement.

The Northern Beaches Hospital Connectivity and Network Enhancement project is being assessed under Part 5.1 of the *Environmental Planning and Assessment Act 1979* as a State Significant Infrastructure project.

The Stage 2 Network Enhancement Works (the project) is directed towards broader network capacity enhancement particularly along Warringah Road.

The Environmental Impact Statement for the Stage 1 works has been completed and included a Statement of Heritage Impact (SoHI) report prepared to identify and assess the significance of all heritage items across the concept proposal area and assess any impacts on items within Stage 1 (the *Northern Beaches Hospital – Connectivity and Network Enhancements, Heritage Constraints: Concept Proposal, Statement of Heritage Impact Stage 1* (RPS 2014)).

The scope of this investigation was to prepare a Statement of Heritage Impact for the heritage items located within the study area which may be affected by the Stage 2 proposed works. The current Statement of Heritage Impact should be read in conjunction with the earlier Statement of Heritage Impact for Stage 1 and will be used to inform the Environmental Impact Statement prepared for Stage 2.

There is one listed heritage item within the Stage 2 study area, being the Former Holland’s Orchard and Commemorative Grove. This item is located on the boundary of the Stage 1 and Stage 2 areas and its management as part of the Stage 2 works will be dictated by any impact on it by the Stage 1 works. In the event that it is not impacted by the Stage 1 works, it is assessed that the pear tree will be partially impacted by the Stage 2 works. In addition, an unlisted item, the former Hews brick pit, is located on the south west of the intersection of Warringah Road and the Wakehurst Parkway, and was identified by research during the assessment of the Stage 1 study area (RPS 2014). This item will also be impacted by the Stage 2 works.

The heritage and archaeological significance of both of these items was assessed in the Stage 1 report and are reproduced in this report. Both items are considered to have local heritage significance. The impact of the works proposed for Stage 2 on the heritage items has been assessed in this report. As noted above, assuming the tree is not impacted by the Stage 1 works, the Former Holland’s Orchard and Commemorative Grove will be partially impacted by the Stage 2 works. The proposed works will affect the last remaining tree of the former Holland’s orchard, being a pear tree, currently on the verge of Warringah Road. The Commemorative Grove comprises cuttings of the original tree and are located within the grounds of the Forest High School. The Commemorative Grove will not be impacted. Mitigation measures for the tree are discussed in Section 6 of this report. The recommended course of action is examination of the tree by a qualified arborist with a view to moving the tree to within the Commemorative Grove. This will need to be done in consultation with Warringah Council and the Department of Education).

With regard to the former Hews brick pit, there will be some physical impact proposed by the works, being the widening of Warringah Road and the Wakehurst Parkway, however it is concluded that due to the nature of the item, (i.e., a cavity formed through clay extraction), the erosion caused through water and soil slip and the nil to low potential for archaeological relics to be uncovered as a result of ground disturbance through erosion and recreational use, that there is a low potential for impact on the heritage significance of the item by the proposed Stage 2 works.
The following general mitigation measures and management recommendations have been formulated with consideration of all available information and have been prepared in accordance with the relevant legislation.

**Recommendation 1 – Management of pear tree**

In the event that the pear tree is not impacted by the Stage 1 works, it is recommended that it be examined by a suitably qualified and experienced arborist prior to any management measures being undertaken. If the arborist concludes that it is healthy enough to be relocated, then consultation should be undertaken with Warringah Council and the Department of Education regarding relocation. Should the arborist conclude that it is not healthy enough to be relocated; it is recommended that the tree be propagated from cuttings and planted in the NBH grounds. A garden for these plants and a commemorative sign would be subject to discussion with HI.

**Recommendation 2 – Heritage induction**

It is recommended that a heritage induction be carried out in advance of the proposed works. All relevant site staff, contractors and subcontractors should be made aware of the location of heritage items, their statutory obligations for heritage under the *Heritage Act 1977* in relation to built heritage and archaeological relics and procedures to follow.

**Recommendation 3 – Unexpected archaeological finds**

If unexpected archaeological remains are uncovered during the works, all works must cease in the vicinity of the material/find. Should non Aboriginal archaeological deposits/relics be discovered, the Heritage Council of NSW must be notified in writing as per the Roads and Maritime Services Standard Management Procedure: *Unexpected Heritage Items* and in accordance with s146 of the *Heritage Act 1977*. Copies of this Procedure should be on site and available at all times to all staff.
1.0 Introduction and project description

1.1 Introduction

Roads and Maritime is now seeking approval for the Stage 2 Project Network Enhancement Works (Stage 2 Project) which forms part of the Northern Beaches Hospital – Road Connectivity and Network Enhancements Project Concept Proposal. The approval is sought under Part 5.1 (State significant infrastructure) of the *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act).

The Stage 2 Project comprises road upgrades directed towards broader network capacity enhancement of the existing road network surrounding the Northern Beaches Hospital at Frenchs Forest, within the Warringah local government area (LGA) on Sydney’s Northern Beaches (refer to Figure 1.1). These upgrades focus on Warringah Road which caters for the dominant traffic movement.

1.2 Background

Roads and Maritime Services (Roads and Maritime) placed the EIS for the Concept Proposal and Stage 1 Project Hospital Connectivity Works on public exhibition between 22 October 2014 to 21 November 2014. A Submissions Report which responds to issues raised during exhibition has been prepared and is currently being considered by the Department of Planning and Environment as part of its assessment. Based on this assessment the Department will decide whether to recommend concept approval of the Northern Beaches Hospital – Road Connectivity and Network Enhancements Project, and Project approval for the Stage 1 Project.

Northern Beaches Hospital is proposed by NSW Health Infrastructure (HI) and would be located at the intersection of Warringah Road and Wakehurst Parkway. The hospital concept proposal and the first stage (clearing and utility works) of the hospital project were approved on 22 June 2014, and the second stage of the Northern Beaches Hospital project (hospital construction and operation) was approved on 29 June 2015.

*The Long Term Transport Master Plan* (Transport for NSW, 2012) identifies Warringah Road as a key strategic transport corridor linking Dee Why and Chatswood. Heavy traffic flows and congestion along Warringah Road during commuter peak periods and, to a lesser degree, during business hours result in low average peak travel speeds, unreliable travel times and disruptions to traffic movements. This impacts both road users and the adjoining community. Warringah Road is already operating at or beyond capacity during peak periods and is expected to experience continued traffic growth in the future.

Based on the anticipated future land use changes, both within and surrounding the Northern Beaches Hospital Precinct, under Warringah Council's structure plan (currently being prepared by Warringah Council), and the current level of congestion on Warringah Road (a key strategic transport corridor linking Dee Why and Chatswood), the Stage 2 Project is needed at a strategic level to:

- Assist in the management of journeys in connection with anticipated future intensification of medical, commercial and residential land uses surrounding the new hospital
- Mitigate the worsening of traffic congestion on the Warringah Road and Wakehurst Parkway arterial road corridors and their principal feeder roads
- Enhance access arrangements by car, bus and active transport for the Northern Beaches Hospital employees, patients, outpatients and visitors
- Facilitate improved access to the Northern Beaches Hospital and the surrounding employment precincts
- Have key infrastructure components in place for the proposed hospital opening in 2018.
1.3 Project location

The Stage 2 Project is generally proposed to be carried out in the following locations:

- Warringah Road between west of Fitzpatrick Ave East to west of Allambie Road
- Forest Way between Warringah Road and the Stage 1 Project tie in (about 100 metres north of the Warringah Road intersection)
- Wakehurst Parkway from the intersection with Warringah Road to about 120 metres south of Aquatic Drive
- Aquatic Drive for about 100 metres east from the intersection with Wakehurst Parkway
- Allambie Road between Warringah Road and Rodborough Road.

On Warringah Road, the Stage 2 Project is incorporated largely within the existing road-reserve to the north, and extends beyond the existing road-reserve to the south by up to 30 metres.

The indicative location of the Stage 2 Project is shown in Figure 1-1.

1.4 Project Description

The Stage 2 Project would broadly include the following key project elements (subject to detailed design):

- Widening of Warringah Road from west of Fitzpatrick Avenue East to west of Allambie Road to accommodate:
  - Westbound travel lanes, at surface level on the southern side of the Warringah Road corridor for the length of the Stage 2 project.
  - Eastbound travel lanes, at surface level on the northern side of the Warringah Road corridor (using existing road pavement), for the length of the Stage 2 project.
  - A two-way four-lane divided road (two lanes in each direction) within an open sub-surface slot to provide additional capacity, and cater for through traffic, along Warringah Road.
- Access and egress for through traffic to the Warringah Road slot would be provided from the intersection of Fitzpatrick Avenue East to about 400 metres east of the Wakehurst Parkway grade separated intersection
- Provision of a two-lane on-ramp (merging into one lane) from Wakehurst Parkway (southbound) into the slot (westbound). No access or egress at other locations would be provided to, or within, the slot.
- A minimum vertical height clearance of 5.5 metres under covered sections at Forest Way, Hilmer Street and Wakehurst Parkway grade separated intersections
- A centrally located concrete median of variable width for the entire length of the project, including the full length of sub-surface road.
- Provision of two movable barriers sections within the slot, of about 20 meters in length, for incident management.
- Upgrades to Warringah Road and its intersection with Forest Way, Hilmer Street and Wakehurst Parkway at surface level to retain all existing traffic movements and to provide subsurface grade separated through traffic.
- Upgrades or adjustments to existing intersections of Warringah Road with the following local roads and approaches:
Fitzpatrick Avenue East (including the closing of the left turn into Fitzpatrick Avenue East from Warringah Road westbound).

Bantry Bay Road (including closing of the right turn into Bantry Bay Road from Warringah Road eastbound however maintaining the existing left in / left out arrangement from Warringah Road westbound).

Rodborough Road.

Allambie Road.

Widening of Wakehurst Parkway from the intersection of Warringah Road to south of Aquatic Drive to provide:

- Two through lanes in each direction
- Two northbound turning lanes to Warringah Road (eastbound)
- Two northbound turning lanes to Warringah Road (westbound).

Provision of a new connection (not signalised) at Aquatic Drive including right in (northbound), a left turn slip lane into Aquatic Drive, and left out movements from Wakehurst Parkway.

The following provisions for public transport facilities:

- Retention of existing bus stops, with adjustments to locations where required for road widening, with the exception of the westbound stop south of Fitzpatrick Avenue East which would be removed.
- Provision of an extended bus bay to cater for two buses at the southbound bus stop on Forest Way opposite the Forestway Shopping Centre
- Provision of a new bus stop on Warringah Road at Hilmer Street and at the hospital access.
- Provision of an indented bus bay on Wakehurst Parkway (southbound) north of Aquatic Drive.
- Retention of the southbound bus lane at the approach and departure from the intersection of Forest Way and Warringah Road.
- Retention of the westbound bus lane on Warringah Road at the intersection with Wakehurst Parkway.

Provision of new 3 metre shared paths within footpath reservations generally of 3.5 metres wide at the following locations:

- Southern side of Warringah Road from Fitzpatrick Avenue East to Allambie Road
- Northern side of Warringah Road from Forest Way to Wakehurst Parkway
- Eastern side of Forest Way from the intersection with Warringah Road to the Stage 1 Project tie in (about 170 metres north of the intersection).
- Eastern side of Wakehurst Parkway from Warringah Road to Aquatic Drive.
- Allambie Road between Warringah Road and Rodborough Road.

Provision of shared pedestrian and cyclist bridges at the following locations:
- Removal and replacement of the existing pedestrian bridge across Warringah Road, about 45 metres west of the intersection of Forest Way.

- An existing surface crossing would be removed and replaced with a new pedestrian bridge across Warringah Road, on the western side of the intersection with Hilmer Street.

- Posted speed limits of:
  - 70 kilometres per hour on Warringah Road, Forest Way and Wakehurst Parkway
  - 60 kilometres per hour on Allambie Road (south of Warringah Road)
  - 50 kilometres per hour on Aquatic Drive and Hilmer Street

The Stage 2 Project would also include drainage works, landscaping, property acquisition and adjustments, utility relocations (which may be required to extend into surrounding streets), as well as ancillary works during construction. The ancillary works would include but not be limited to, construction compounds, and stockpile sites. For the purposes of this EIS, the scope of the Project would not include ongoing maintenance works.

The Stage 2 Project is subject to detailed design during which, further investigation may result in refinements to the Project.

1.5 Report Structure

The structure of this report is as follows:

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1</td>
<td><em>Project description, background and legislative context</em>: An overview of the project and legislation relevant to historical heritage values within the study area.</td>
</tr>
<tr>
<td>Section 2</td>
<td><em>Historical background of the study area</em>: Discusses the search results of relevant historical site registers and provides a history of the study area and its surroundings.</td>
</tr>
<tr>
<td>Section 3</td>
<td><em>Field assessment and results</em>: Outlines the methodology and results of the field investigation.</td>
</tr>
<tr>
<td>Section 4</td>
<td><em>Historical research assessment and results</em>: Outlines the results of historical document archive research.</td>
</tr>
<tr>
<td>Section 5</td>
<td><em>Summary of heritage significance and constraints</em>: A discussion of the heritage values identified during the field survey.</td>
</tr>
<tr>
<td>Section 6</td>
<td><em>Impacts assessment</em>: Outlines the impacts of proposed Stage 2 development on historic heritage values within the study area.</td>
</tr>
<tr>
<td>Section 7</td>
<td><em>Recommendations</em>: Presents the recommendations to mitigate potential impacts to historical heritage values within the study area.</td>
</tr>
</tbody>
</table>
Figure 1: Study Area
1.6 Methodology

As part of this stage of the project, the Secretary’s Environmental Assessment Requirements (SEARs) have specified the following in relation to non Aboriginal heritage:

- Impacts to non-Aboriginal heritage (including heritage items and archaeology) should be assessed, including through survey where appropriate. Where impacts are identified, the assessment shall:
  - Outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the guidelines in the NSW Heritage Manual (Heritage Office and Department of Urban Affairs and Planning 1996).
  - Be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria).
  - Include a statement of heritage impact for all heritage items (including significance assessment).
  - Consider impacts from vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment.
  - Where required, develop an appropriate archaeological assessment methodology, including research design, in consultation with Planning & Environment and the Heritage Council of New South Wales, to guide physical archaeological test excavations and include the results of these excavations.

This report has been prepared in response to the above requirements.

In accordance with the SEARs, this report was prepared to assess the impacts to “non-Aboriginal heritage (including heritage items and archaeology)” in the study area. Previously identified heritage items in the study area were located through a search of heritage registers. These searches were conducted on 6 October 2014 with an additional search undertaken on 13 January 2015. The searches included the following heritage registers:

- World Heritage List – The World Heritage List is maintained by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and includes items of international heritage significance.
- National Heritage List - The National Heritage List has been established to list places of outstanding heritage significance to Australia. It includes natural, non Aboriginal and Aboriginal places.
- State Heritage Register - The SHR is a list of places and objects of particular importance to the people of NSW and is administered by the Heritage Branch of the Office of Environment & Heritage (OEH). To be listed, an item must be deemed to be of heritage significance for the whole of NSW.
- Section 170 Registers – Section 170 (s170) Registers are created by government bodies and are registers of all heritage listed items that are owned, occupied or managed by those bodies.
- Warringah Local Environmental Plan (LEP) 2011 – The Warringah LEP 2011 includes a schedule and maps of local heritage items within the LGA.
- Register of the National Estate - The Register of the National Estate (RNE) is a list of natural, Aboriginal and non Aboriginal heritage places throughout Australia. It was originally established under the Australian Heritage Commission Act 1975. Under that Act, the Australian Heritage Commission entered more than 13,000 places in the register. Following amendments to the Australian Heritage Council Act 2003, the RNE was frozen on 19 February 2007, and ceased to be a statutory register in February 2012. The RNE is now maintained on a non-statutory basis as a publicly available archive and educational resource.
- Register of the National Trust - The Register of the National Trust was established in 1949 and is maintained by the National Trust of Australia. It is a non-statutory register.
In addition, the following documentary sources were consulted:

- State Library of New South Wales mapping.
- 1943 Aerial photographs (via SixViewer).
- Parish of Manly Cove maps (via the Historical Lands Record Viewer).
- Newspaper archives (Trove).
- Historic photographs (Trove).

This information formed the basis of the desktop assessment. A visual inspection to ground-truth identified heritage items was undertaken of the study area on 2 April 2014 by RPS Cultural Heritage Consultant, Deborah Farina. Further details regarding the visual assessment are set out in Section 3 below.

### 1.6.1 Significance assessment methodology

The significance assessment has been prepared in accordance with *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance* (*Burra Charter*) (Australia ICOMOS 2013) and associated Guidelines as well as best practice standards set by the NSW Heritage Division. Best practice guidance followed in this report includes ‘Assessing Heritage Significance’ (NSW Heritage Office 2001).

Using the below assessment criteria, items are assessed at meeting the level of significance as either Local or State.

<table>
<thead>
<tr>
<th><strong>Table 1-3 NSW criteria for assessing heritage significance</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criterion</strong></td>
</tr>
<tr>
<td>A – Historical Significance</td>
</tr>
<tr>
<td>B – Associative Significance</td>
</tr>
<tr>
<td>C – Aesthetic Significance</td>
</tr>
<tr>
<td>D – Social Significance</td>
</tr>
<tr>
<td>E – Research Potential</td>
</tr>
<tr>
<td>F – Rarity</td>
</tr>
<tr>
<td>G – Representative</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Table 1-4 Grading of significance</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grading</strong></td>
</tr>
<tr>
<td>Exceptional</td>
</tr>
<tr>
<td>High</td>
</tr>
<tr>
<td>Moderate</td>
</tr>
</tbody>
</table>
### 1.7 Limitations

Although every effort was made to establish the non Aboriginal heritage items within the study area through visual inspection, consultation, research and other reference materials, it should be mentioned that the baseline research for identifying heritage items is through searches of Federal, State and local government heritage databases. Reliance is therefore placed on the accuracy of information contained in the relevant heritage databases as of the date of searches.

### 1.8 Authorship

This report has been prepared by RPS Heritage Manager, Deborah Farina, and reviewed by RPS Senior Heritage Manager, Erin Williams. Both Deborah and Erin are fully qualified heritage consultants. Assistance with mapping has also been provided RPS Senior GIS Analyst Hamidreza Karimi.

RPS would like to acknowledge its appreciation to the following in completing this investigation:

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lyndall Thornhill</td>
<td>RPS</td>
</tr>
<tr>
<td>Braith Gilchrist</td>
<td>SMEC</td>
</tr>
<tr>
<td>Amy Louis</td>
<td>SMEC</td>
</tr>
</tbody>
</table>

### 1.9 Legislative context

The following section provides an overview of the legislative framework relating to the protection and management of non Aboriginal heritage.

#### 1.9.1 Heritage Act 1977

The NSW *Heritage Act 1977* provides protection for natural and cultural heritage places, buildings, works, relics, moveable objects or precincts, identified as significant based on historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic values. These include items of Aboriginal and non Aboriginal heritage significance. State significant items are listed on the NSW State Heritage Register (SHR) and protected against any activity that may impact on its heritage significance.

Sections 139 to 146 of the Act require that excavation or disturbance of land that is likely to contain, or is believed may contain, archaeological relics is undertaken in accordance with an excavation permit issued by the Heritage Council of NSW, or in accordance with a gazetted exception under Section 139(4) of the Act.

The *Heritage Act 1977* defines an archaeological relic as:

> Any deposit, artefact, object or material evidence that:

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

The Heritage Act also requires all government agencies to identify and manage heritage assets in their ownership and control. Under Section 170 of the Heritage Act, government agencies must establish and keep a register which includes all items of environmental heritage listed on the SHR, an environmental planning instrument, or which may be subject to an interim heritage order that are owned, occupied or managed by that government body.

The NSW Heritage Council, constituted under the Heritage Act 1977, is appointed by the Minister for Heritage and is responsible for heritage management 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. The work of the NSW Heritage Division includes:

- Working with communities to help them identify their important places and objects.
- Providing guidance on how to look after heritage items.
- Supporting community heritage projects through funding and advice.
- Maintaining the NSW Heritage Database, an online list of all statutory heritage items in NSW.

The 1996 NSW Heritage Manual, published by the then NSW Heritage Branch and Department of Urban Affairs and Planning, provides guidelines for conducting assessments of heritage significance. The Manual includes specific criteria for addressing the significance of an item and this assessment has been completed in accordance with those guidelines. These criteria are contained in Section 1.3.1 above.

1.9.2 Environmental Planning and Assessment Act 1979

The 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 and Environmental Impact Statements should address cultural heritage where relevant. Statutory planning documents such as LEPs and State Environmental Planning Policies (SEPPs) typically contain provisions for heritage.

The EP&A Act also requires that local governments prepare planning instruments (such as LEPs and Development Control Plans (DCPs)) in accordance with the EP&A Act to provide guidance on the level of environmental assessment required. The current study area falls within the boundaries of Warringah LGA.

1.2.1 State Environmental Planning Policy (State and Regional Development) 2011

Under the EP&A Act, the SEPP (State and Regional Development) was enacted to replace the former Part 3A of the EP&A Act. The SEPP (State and Regional Development) defines assessment categories for State significant projects as either State Significant Development (SSD) or State Significant Infrastructure (SSI). This project has been designated as SSI. As a result, a number of approvals normally required under State legislation for development that may have a negative environmental impact do not apply to SSI projects. Although permits normally required under the National Parks & Wildlife Act 1974 or the Heritage Act 1977 are not necessary for SSD or SSI projects, if there is potential for impacts on Aboriginal or non Aboriginal heritage, the Secretary of Planning and Environment may require assessments for these as part of the EIS.

1.2.1.1 Secretary’s Environmental Assessment Requirements (SEARs)

As noted above, if a project is designated as an SSD or an SSI project, the Secretary of Planning and Environment may require additional environmental or other assessments as part of the EIS. These
requirements are known as the “Secretary’s Environmental Assessment Requirements” or SEARs. The relevant SEARs have been discussed under Section 1.3 above.

1.2.2  Warringah Local Environmental Plan 2011

All known local heritage items in the Warringah LGA are listed in the Warringah Local Environmental Plan 2011 (Warringah LEP). Heritage items are listed in Schedule 5 of the LEP. For SSI projects, the assessment requirement usually requires consultation with Council when a locally listed heritage item is impacted or potentially impacted by the proposed works.

1.2.3  The Burra charter: the Australia ICOMOS charter for places of cultural significance 2013

The Burra Charter is a set of best practice principles and procedures for heritage conservation. It was developed by Australia ICOMOS (International Council for Monuments and Sites), the Australian group of the international professional organisation for conservation. Although without statutory weight, the Burra Charter underpins heritage management in NSW and Australia. The policies and guidelines of the Heritage Council of NSW and the NSW Heritage Division are consistent with and guided by the Burra Charter.
2.0 Historical Context

2.1 Historical development of the study area

2.1.1 Early development

The Northern Beaches area was first visited by Europeans in April 1788, when a party comprising Governor Philip, Lieutenant Henry Ball, Lieutenant George Johnston, the Judge Advocate David Collins and colony surgeon John White, attended by three soldiers and two seamen set out from Sydney Cove to explore the north shore of Sydney Harbour and its coastal hinterland. In the area roughly near present day Frenchs Forest, Surgeon John White described the land as:

"...an immense wood, the trees of which were very high and large, with little under or brushwood. The ground was not very good, although it produced a luxuriant coat of a kind of sour grass growing in tufts or brushes which, at some distance, has the appearance of a meadowland." (White 1790:122)

From 1820, readily accessible water transport became more prevalent, allowing for limited settlement to commence on the northern side of Sydney Harbour. Gradually, as land was acquired, settlers moved further north, with Simeon Henry Pearce and his brother, James, acquiring 200 acres by 1853, in the area bounded by Fitzpatrick Avenue, Rabbett Street, Frenchs Forest Road and Allambie Road. This land became known as “Pearce’s 200 acres” and later as Rodborough (Champion 1988:11). Further grants were made in the area in the 1850s, including those to James William Bligh, Jane Beard, George Hooper, William Redman, James Jones, William G. Ainsworth and Henry Smith. Another series of grants was made in the 1870s to Launcelot Edward Threlkeld and Alexander Bowman. None of these grantees appear to have lived in the area, however, merely holding the land for speculation (Champion 1988:11).

2.1.2 James French

In 1851, James Harris French, for whom Frenchs Forest was named, was sworn in as a Special Constable and Ranger of Crown Lands under Simeon Henry Pearce, the Crown Lands Bailiff. He was also granted 41 acres adjoining Pearce’s grant, later acquiring Pearce’s 200 acres as well. French was nicknamed ‘Darby’, as *darbies* was a colloquialism for handcuffs.

Once in possession of Pearce’s 200 acres in 1856, French set up a timber getting business (Souter 2004). The land at the time was described as:

“The greater portion of this land is of a good light soil timbered with stringy bark and gum. There is but scanty herbage, the ground being covered with scrub. There is a good supply of water in the creeks. The rock is sandstone with ironstone boulders occasionally appearing on the surface.” (Champion 1988:14).

French built two sawmills, with the large trees cut and split by hand and transported by bullocks along Bantry Bay Road to Bantry Bay. Parts of the old road still remain in the bushland near Bantry Bay. French also built a two storey residence near the current corner of Hilmer Street and Primrose Avenue, however this was primarily a place to stay during the weekend, with French’s main residence, ‘Paradise’, located at Willoughby. The house at Frenchs Forest was later burnt down by men holding drinking and gambling parties in French’s absence (Champion 1988:14).

2.1.3 William Hews

The first permanent residents in the area arrived in 1885 with the Hews family, who purchased ten acres from James French. The Hews’ built their timber cottage (Plate 1) on the corner of Bantry Bay Road and
Warringah Road, opposite a row of shops which still stands (Champion 1988:19). William Hews set up a brick works (Plate 2), employing around 40 people, many of whom followed Hews from his earlier brickworks at Petersham. The works was located within the area bounded by Frenchs Forest Road West, Fitzpatrick Avenue, Hilmer Street and Wakehurst Parkway, and the brick pit was located at the intersection of Warringah Road and the Wakehurst Parkway, at a location now known as Brick Pit Reserve (Plate 3) (refer also Section 2.2.7). Hews built a number of other timber houses and a large communal timber slab and bark hut on his lots to accommodate his employees, who became the first residents of the area (Champion 1988:19).

Hews' bricks were handmade, with one man able to make 1,200-1,300 bricks per day. The bricks were carted from the brickworks by horse and dray along the bush tracks to Manly, where they were used to build many of the early houses. They were also transported to Narrabeen and Mosman, crossing the Spit by punt (Champion 1988:19).

Following the success of the brickworks, in 1900 the Hews built their own permanent residence on the foundations of French’s house at the intersection of Hilmer Street and Primrose Avenue (Plate 3, refer also Plate 5, Table 2-2). They used the well-settled foundations of French’s burnt out house and built the rest with the bricks from their own yard. The house was a modest single storey home with large verandas set in expansive landscaped grounds which featured gardens, a tennis court, and a cricket oval with pitch and pavilion (Plate 3) (Champion 1988:19-21). The house remains, although appears to have been highly modified.
2.1.4 John Holland

During the early twentieth century large areas of land were clear felled to make way for orchards and market gardens. In 1900 Henry Green established an orchard on 18 acres of his 41 acre lot at Frenchs Forest, where he planted loquats, persimmons, lemons, and other fruit trees (Champion 1988:33). Green’s orchard, located on the present site of Forest High School, was inherited by his son in law, John Holland, in 1906 (refer Plate 5). Holland’s orchard employed at least three people, one of whom lived with his family in a slab hut in the Bantry Bay Road corner of the property (Champion 1988:33).

2.1.5 Suburban development

In the early twentieth century Frenchs Forest remained predominantly rural. At the onset of World War I (WW I) a 200 acre Soldiers’ Settlement was set out at nearby Forestville, but the uptake of plots was low, and the isolation, lack of services, and poor soils meant a number of soldiers abandoned their properties. A Methodist Church was built on Forest Way in 1918 to cater for returned servicemen and was one of the first churches in the area; prior to this services were held in the Holland family home (refer Section 2.1.3) (Plate 4, Plate 5).

Following WWI additional community amenities were established near the intersection of Forest Way and Warringah Road (Champion 1998:55). Churches, schools and shops were set up to service the area, and
locals were occupied in brick making, carting, labouring, building and gem cutting (Pollon 1988:106). Despite this, for much of the early twentieth century the area retained its country character and was characterised by dairy, poultry and pig farming, market gardening, and orchards (Champion 1988:55). A 1943 aerial of the Frenchs Forest area shows John Holland’s orchard, the overgrown brick pit on the corner of Warringah Road and the Wakehurst Parkway and the former Methodist Church (Plate 4, see also Plate 5). The aerial photograph is telling, however, in its lack of residences, demonstrating that subdivision and residential settlement of the area dramatically increased after that time.

Following World War II (WWII) suburban development began in earnest. The opening of the bridges at the Spit and Roseville appear to have been the impetus for the original post-WWI change in the area, and upgrades to those bridges and surrounding road and transport infrastructure following WWII were the stimuli Frenchs Forest needed to grow. The population of Frenchs Forest grew so rapidly that buses to the city suffered from overcrowding. The Progress Association pushed for formal development, eager to prevent the appearance of a shanty-town as many residents were living in caravans, garages and makeshift structures (Champion 1988:72). The overcrowded classes at Frenchs Forest Public School were the impetus to open Forest High School in 1961 (Champion 1988:73).

2.1.6 Discussion

Frenchs Forest was subject to land speculation and early industry, yet remained substantially undeveloped until the late nineteenth century due to its isolation. The area remained largely rural in character until the early to mid twentieth century, when orchards and market gardens gave way to suburban development. Documentary evidence indicates that the Study Area featured a brick making enterprise including a brick pit, with at least one large orchard on its border, while the outer reaches of the Study Area remained largely undeveloped until the mid twentieth century.

2.2 Recorded non Aboriginal heritage

Acknowledged heritage items and places are recorded in statutory and non-statutory registers held at the Federal, State and local level depending on their level of significance. Internationally significant sites of
'outstanding universal value' are inscribed in the World Heritage List (WHL) and in turn, such sites are usually recognised through their inclusion on Federal and State-level registers.

Federal designations include the National Heritage List (NHL) and the Commonwealth Heritage List (CHL) created by the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). Both registers are maintained by the Commonwealth Department of the Environment and are available to view on an online database, the Australian Heritage Database. The NHL includes natural, Aboriginal and non Aboriginal places that are of outstanding national heritage value to the Australian nation. The CHL protects natural, Aboriginal and non Aboriginal heritage places on land owned or leased by the Commonwealth or a Commonwealth Authority. To reach the threshold for the NHL, a place must have ‘outstanding’ heritage value to the nation whereas to be entered on the CHL, a place must have ‘significant’ heritage value.

Heritage places of state significance are included on the SHR maintained by the Heritage Division of the Office of Environment and Heritage. Places included on the SHR are available on an online database, the NSW Heritage Inventory database; however, it should be noted that the inventory includes items of state and local significance in NSW, it may not necessarily be comprehensive and inclusion on the inventory does not carry statutory weight in its own right. In order to reach the threshold for inclusion in the SHR, a place needs to meet one of more of the heritage criteria identified by the Heritage Council of NSW. The ultimate decision on whether a place is included on the SHR is made by the Minister for Heritage. Places of local significance are included in heritage schedules in LEPs.

2.2.1 World heritage

A search of the Australian Heritage Database undertaken on 13 January 2015 indicated that there are no World Heritage Sites ('WHS') located within the study area.

2.2.2 National and Commonwealth heritage

A search of the Australian Heritage Database undertaken on 13 January 2015 indicated that there were no items within the study area included on the NHL or CHL.

2.2.3 State heritage

A search of the SHR database on 13 January 2015 identified no items/places within the study area are included on the SHR or subject to an interim, or authorised interim heritage order.

2.2.4 Section 170 heritage and conservation registers

A search of the NSW Heritage Inventory was carried out on 13 January 2015 and no items were identified as being located within the study area.

2.2.5 Local heritage

A search of Schedule 5 of the Warringah LEP 2011 on 13 January 2015 identified no local heritage items within the study area. The closest heritage item to the current study area is the remnant pear tree (part of the heritage item known as “Former Holland’s Orchard and Commemorative Grove”) along Warringah Road, located on the boundary of the Stage 1 and Stage 2 Study Areas. The pear tree is the lone survivor of an orchard owned by John Holland. The commemorative grove is located within the Forest High School and comprises propagations of the pear tree. The heritage significance of the pear tree was assessed as part of the Stage 1 Statement of Heritage Impact (RPS, 2014) and is reproduced in Section 5 of this report.
2.2.6 Register of the National Estate

A search of the Register of the National Estate on 13 January 2015 identified no registered places relevant to the study area. The closest item is an indicative place, being Betty Moloney [sic] Garden at 18 Hurdis Avenue, to the north of the current study area.

2.2.7 Register of the National Trust

A search of the Register of the National Trust on 13 January 2015 identified no items relevant to the study area. The closest item is Betty Maloney Garden, 18 Hurdis Avenue (listing ID S6765).

2.2.8 Other Heritage items

The former Hews' Brick Pit, located south west of the intersection of Warringah Road and Wakehurst Parkway and within the study area, is not a listed heritage item but has some heritage significance, chiefly for its association with the early development of Frenchs Forest. This is explored further in Section 4.
Figure 2-1: Location of non Aboriginal heritage items assessed in the Stage 2 study area

- Former Holland's Orchard and Commemorative Grove
- Former Hews' brick pit
2.3 Previous heritage assessments

Very few heritage studies of the Frenchs Forest area alone have been undertaken. It has generally been included in regional heritage studies. However, the below relevant studies have been identified:

**RPS, 2014. Northern Beaches Hospital: Connectivity and Network Enhancements – Statement of Heritage Impact, Stage 1**

RPS was commissioned by SMEC on behalf of Roads and Maritime in 2014 to prepare a Statement of Heritage Impact for Stage 1 of the Northern Beaches Hospital Connectivity and Network Enhancements project, which reviewed the heritage constraints associated with the concept proposal of the road works associated with the Northern Beaches Hospital overall and the impacts on non Aboriginal heritage as a result of works associated with Stage 1. The report supported the EIS for the Stage 1 and Concept Proposal works.

Stage 1 comprised an area north of Warringah Road including Forest Way and Frenchs Forest Road from Forest Way in the west to its junction with Warringah Road in the east. A total of eight heritage items were identified as a result of that investigation and were all assessed as being of local significance. The report also included management options for the Former Methodist Church located on Forest Way, which was the only heritage item with potential to be directly impacted by the proposed works. Since that report was written, impact to the church has been avoided.


Australian Museum Business Services (AMBS) was commissioned in 2012 by Health Infrastructure NSW to prepare an historic heritage impact assessment for the proposed Northern Beaches Hospital at Bantry Bay Road, Frenchs Forest and ancillary services near Aquatic Drive, Frenchs Forest. The assessment included a comprehensive historical overview of the Frenchs Forest area, a site inspection and an assessment of the potential impacts to the significance of historical heritage resources. The proposed Northern Beaches Hospital site is bound by Wakehurst Parkway, Warringah Road, The Forest High School, and Frenchs Forest Road West and is located immediately adjacent to the current study area. The ancillary services area is located immediately west of the site compound included in the current study area.

Due to the paucity of documentary evidence available, the AMBS assessment identified an unquantifiable potential for subsurface features to be exposed by the works within both the proposed hospital site and the Aquatic Drive ancillary services area. It was not anticipated that any of these potential items would be of State significance, therefore it was recommended that an archaeological management strategy be implemented including an application to the Heritage Council for an exemption under Section139(4) of the *Heritage Act 1977* (Australian Museum Business Services 2012).
3.0 Visual Inspection

A visual inspection of the study area was conducted on Wednesday 2 April 2014 by RPS Cultural Heritage Consultant, Deborah Farina. The inspection was conducted on foot and viewed all items within the study area, including those identified for both Stage 1 and Stage 2.

3.1 General description of the study area

The study area is a quiet, leafy suburban area, dissected by two major roadways: Warringah Road and Wakehurst Parkway. These major roadways have broad verges flanked with nature strips, while the remainder of the study area features suburban streets with established residential subdivisions, a high school, some retail, and the Allambie Grove Business Park to the east. The residential style of the neighbourhood is characterised by mid to late twentieth century brick and tile homes and fibro cottages set amidst established gardens. Brick Pit Reserve is located on the south western corner of the intersection of Warringah Road and the Wakehurst Parkway.

3.1.1 Heritage items within the study area

As noted above, there is one listed heritage item identified as being on the boundary of the current study area. This is the Former Holland’s Orchard and Commemorative Grove, with the remnant pear tree from Holland’s orchard located on the verge of the northern side of Warringah Road outside Forest High School, and the commemorative grove located within the school grounds.

In addition, research for the Stage 1 report identified the former Hewes’ Brick Pit is of heritage significance at a local level. The former Hewes’ Brick Pit, located south west of the intersection of Warringah Road and Wakehurst Parkway, is located within the Brick Pit Reserve. The reserve has a playground and picnic tables set amongst mowed lawns (Plate 6), while the brick pit itself appears to comprise the large, deep pit in the bushland behind the playground. The pit appeared to have been used by mountain bikers, and had substantial amounts of modern dumped rubbish at the time of inspection (Plate 7). This site is assessed as a heritage item and is considered further in Sections 4 and 5.
3.2 Visual inspection results and summary

No additional potential heritage items were identified in the study area or within 250 metres of the study area as a result of the visual inspection. An assessment of historical archaeological potential within the study area is presented in Section 4 below.

Table 3-2 Summary of listed and unlisted heritage items in and within 250 metres of the study area

<table>
<thead>
<tr>
<th>Item</th>
<th>Item</th>
<th>Heritage listing</th>
<th>Heritage significance</th>
<th>Statutory requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Former Holland’s Orchard and Commemorative Grove</td>
<td>Warringah LEP 2011</td>
<td>Local</td>
<td>Warringah LEP 2011</td>
</tr>
<tr>
<td>2</td>
<td>Former Hews’ Brick Pit potential archaeological site, corner Warringah Road and Wakehurst Parkway</td>
<td>Not listed</td>
<td>Local</td>
<td>s139 Heritage Act 1977</td>
</tr>
</tbody>
</table>
4.0 Historical Archaeological Potential

Historic research and early aerial photographs indicate that Frenchs Forest remained largely rural until the mid twentieth century, when it was characterised by orchards and market gardens. Population growth in the area remained slow until the 1950s, when a post war housing boom resulted in subdivision and a significant influx in residents. Documentary evidence suggests that much of the central portion of the study area, near the intersection of Warringah Road and Wakehurst Parkway, was dominated by William Hews’ brick works and John Holland’s orchard.

The former Holland’s Orchard and Commemorative Grove is located on the northern side of Warringah Road, between Forest Way and the Wakehurst Parkway, now the site of Forest High School. John Holland’s orchard was a large and well known orchard established in the early 1900s, and was representative of the many orchards once common in the Frenchs Forest area. It stood until the early 1960s when Forest High School was constructed.

The Former Holland’s Orchard and Commemorative Grove is now a locally listed heritage item, comprising the last remaining pear tree from John Holland’s Orchard, and a commemorative grove within the high school grounds made from cuttings of that last tree. The remaining pear tree was once one of two heritage listed trees, with the other tree dying at some time before 2005. The death of that tree prompted the propagation program resulting in the Commemorative Grove located within the grounds of Forest High School.

As this part of the orchard grounds was taken up by trees, there is no potential for subsurface physical evidence to remain. Given the extensive disturbance to the entire verge through the construction of Forest High School, footpaths along Warringah Road and maintenance works to Warringah Road, it is considered that there is no archaeological potential in the vicinity of the remaining pear tree.

The former Hews’ Brick Pit was located on the south western corner of the intersection of the Wakehurst Parkway and Warringah Road and may have some potential to yield information that relates to the settlement of the area. Although the brick pit was identified during the visual inspection, no evidence of the infrastructure associated with the brick works or the timber workers’ housing was found. Descriptions of the works and housing described timber slab structures, which are likely to have decayed over time. The potential for finding evidence associated with the former built structures of Hews’ operation is assessed as low. A significance assessment of the former Hews’ Brick Pit is outlined in Section 5.

As noted in Section 4.0, the extent of any archaeological remains is uncertain, however given that the pit was used for clay extraction in the brick-making process it is unlikely that there will be much left in the archaeological record to demonstrate its former purpose. There may be some footings from infrastructure associated with the pit, however these are likely to have been removed or located outside of the impact zone of the proposed works. As a result of this, coupled with the disturbance of the site through modern recreational use and erosion through water runoff, the archaeological potential of the brick pit is considered to be nil to low.

Aerial photographs from 1943 indicate small collections of buildings throughout the bushland surrounding Hews’ property. The function and ownership of these buildings has not been determined, and there appear to be no surviving records to verify this.

Most of the study area has been substantially residentially developed, and a large portion of the area east of the Wakehurst Parkway and south of Warringah Road has been developed as a small industrial estate. The archaeological potential in these areas is considered to be low.
5.0 Significance Assessment

In line with the *Burra Charter*, before making decisions about the future of a heritage item it is first necessary to understand its heritage significance and the values it embodies. The following section contains an assessment of the heritage significance of items identified within the study area using the NSW state significance heritage criteria as explained in *Assessing Heritage Significance* (NSW Heritage Office 2001). Consideration is also given to the integrity and intactness of the items.

There was one recorded heritage item on the boundary of the study area, being the Former Holland’s Orchard and Commemorative Grove, and one unlisted heritage item within the study area, being the former Hews’ Brick Pit.

5.1 Former Holland’s Orchard and Commemorative Grove

With reference to the heritage inventory sheets held by Warringah Council, the heritage significance of the Former Holland’s Orchard and Commemorative Grove is assessed as follows.

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Former Holland’s Orchard and Commemorative Grove Adjacent to Warringah Road and within The Forest High School Grounds Lot 2, DP 234702 Warringah LEP 2011 (I62)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A – Historical Significance</td>
<td>The remaining pear tree on Warringah Road and the propagated trees within the grounds of Forest High School are the last physical remains of Holland’s large orchard that once occupied this area during the late nineteenth and early twentieth centuries. Agriculture, and particularly fruit-growing, was the impetus for settlement of the area and therefore important part of the development of Frenchs Forest. The remaining trees from that orchard therefore satisfy this criterion at a local level to a high degree.</td>
<td>Local</td>
</tr>
<tr>
<td>B – Associative Significance</td>
<td>Although the remaining trees have a strong association with John Holland and his fellow orchardists, it must be borne in mind that there were several orchards and orchardists all operating in the vicinity at the same time. As John Holland was one of many orchardists and agriculturists, the importance of his orchard in the development is as one of a group and therefore not strong enough individually to satisfy this criterion.</td>
<td>Nil</td>
</tr>
<tr>
<td>C – Aesthetic Significance</td>
<td>The remaining trees are not of aesthetic significance and are not considered to meet this criterion.</td>
<td>Nil</td>
</tr>
<tr>
<td>D – Social Significance</td>
<td>The propagation of trees and replanting within The Forest High School grounds is indicative of the level of significance of these trees to</td>
<td>Local</td>
</tr>
</tbody>
</table>
E – Research Potential
The pear variety may be of heirloom variety and as such is considered to have local research potential. Local

F – Rarity
Generally, pear trees are not rare in NSW or the local area however the pear tree on Warringah Road is a rare surviving example of the trees belonging to the orchard and may be of a rare or unusual heirloom variety. As the tree represents a phase of the historical development of Frenchs Forest, and given the number of orchards that were once present in the area, the last remaining tree is assessed as being a rare example of orchard trees in the local area. Local

G – Representative
The pear trees are representative of the types of orchards that occupied much of the landscape prior to residential subdivision and therefore meet this criterion to a local level. Local

Integrity and Intactness
When first assessed in 2000, there were two trees, initially recorded as apple trees. A subsequent assessment as part of the Warringah Heritage Study noted that they were in fact pear trees and that one had died in the interim (Plate 9). In 2005, a number of trees were propagated from the remaining tree on Warringah Road and planted as a grove in the grounds of Forest High School in commemoration of Holland’s orchard that once stood there. The curtilage of this heritage item is in the process of being amended by Warringah Council to include this propagated grove, to note the death of one of the original trees and that they are in fact pear trees. The grove of trees within Forest High School appears in good health and intact. The surviving pear tree on Warringah Road also appears in good health; however an arborist should be consulted regarding its future management.

Statement of Heritage Significance
This item is of local significance for historic, social, research, rarity and representative reasons. The last remaining pear tree from the Holland’s orchard is the last surviving tangible link to the many orchards that made up the area and encouraged settlement in the Frenchs Forest area. Based on its historical significance and rarity, it is assessed as being of high local significance.

5.2 Former Hews’ Brick Pit

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Former Hews’ Brick Pit</td>
<td></td>
</tr>
<tr>
<td>Intersection of Warringah Road</td>
<td></td>
</tr>
<tr>
<td>and Wakehurst Parkway</td>
<td></td>
</tr>
<tr>
<td>Lot C, DP 361887</td>
<td></td>
</tr>
<tr>
<td>Lot 1B, DP 417447</td>
<td></td>
</tr>
</tbody>
</table>

A – Historical Significance
The former Hews’ Brick Pit is historically significant as the site of one of the first industries in Frenchs Forest. It is considered to satisfy this criterion at a local level. Local

B – Associative Significance
The former Hews’ Brick Pit site is associated with William Hews who set up the works. Hews employed around 40 people at the works, and built a number of timber houses and communal huts in the area to accommodate his employees, who became the first permanent residents. Local
### Criterion

**Former Hew's Brick Pit**  
**Intersection of Warringah Road and Wakehurst Parkway**  
Lot C, DP 361887  
Lot 1B, DP 417447

### Significance

#### C – Aesthetic Significance

Evidence of the former Hew's Brick Pit comprises an overgrown pit, presumably from whence clay was obtained. The Brick Pit is not considered to meet this criterion.

**Nil**

#### D – Social Significance

The former Hew's Brick Pit site does not appear to have any social significance, and is not considered to meet this criterion.

**Nil**

#### E – Research Potential

The research potential of the former Hew's Brick Pit is considered to be low. The site is not considered to meet this criterion.

**Nil**

#### F – Rarity

There are numerous heritage listed brick works and brick pits in New South Wales, and as such the former Hew's Brick Pit is not considered to meet this criterion.

**Nil**

#### G – Representative

The former Hew's Brick Pit is a fair representative example of a brick pit in New South Wales and is considered to meet this criterion.

**Local**

### Integrity and Intactness

The former Hew's Brick Pit was an element of a much larger brickworks complex, owned and operated by Williams Hew. No evidence of the larger operation was found during the visual inspection of the site, and it is expected that this is likely to have decayed over time. The brick pit was heavily overgrown and had mountain bike tracks and dumped rubbish in it at the time of inspection. The integrity and intactness of the brick pit is fair.

### Statement of Heritage Significance

The former Hew's Brick Pit is considered to have local historical, associative and representative significance, and is strongly associated with the early development of industry, and by association, early residential development in Frenchs Forest.

#### 5.3 Summary of heritage significance

Table 5-1 below presents a summary the assessed level of significance of the item within the vicinity of the study area.

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Lot/DP</th>
<th>Listing/significance</th>
<th>Assessed significance</th>
<th>Potential Stage 2 impact</th>
</tr>
</thead>
</table>
| 1  | Former Holland’s Orchard and Commemorative Grove | Lot 2, DP234702  
Lot 2, DP746670 | Warringah LEP 2011 | Local | Yes |
| 2  | Hew's Brick Pit potential archaeological site, corner | Lot C, DP 361887  
Lot 1B, DP 417447 | Not listed | Local | Physical – Yes (see 6.0 below) |
## No

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Lot/DP</th>
<th>Listing/significance</th>
<th>Assessed significance</th>
<th>Potential Stage 2 impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Warringah Road and Wakehurst Parkway</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6.0 Statement of Heritage Impact

The purpose of this Statement of Heritage Impact is to assess the likely impacts of the proposed Stage 2 works on the non-Aboriginal heritage values of items and features identified within the study area in accordance with the NSW Government guidelines.

As noted in Table 1.2, road widening and intersection upgrades are required throughout the Stage 2 construction impact area. The remnant pear tree from the former John Holland’s Orchard located on the boundary of the Stage 1 and Stage 2 areas is expected to be impacted by the Stage 2 works, in particular by a proposed shared pathway. The Hew’s Former Brick Pit is also expected to be impacted as a result of road widening works along the intersection of Warringah Road and the Wakehurst Parkway.

Section 7 includes recommended measures proposed to manage impacts to the heritage significance of the items.

6.1 Impact of proposed works on the Former Holland’s Orchard and Commemorative Grove and Former Hew’s Brick Pit

6.1.1 Summary of proposed works

As noted in Section 1.4 above, the Stage 2 Network Enhancement Works is directed towards broader network capacity enhancement particularly along Warringah Road. These involve a program of road widening and other enhancements, principally along Warringah Road and Wakehurst Parkway, to improve road travel to and from the Northern Beaches Hospital. Further details of the works are included at Section 1.4 above.

6.1.2 Alternative alignment options

Prior to settling on the current design, the following three alternative alignment options were investigated:

- Tunnel (roadheader construction).
- Tunnel (cut and cover construction).
- Underpass with widening to the north of Warringah Road.

The principal features of each alignment are summarised as follows and shown in Figure 6-1, Figure 6-2 and Figure 6-3 respectively.

Tunnel (roadheader)

- Eastbound tunnel following the alignment of Warringah Road.
- Westbound tunnel located to the south of Warringah Road.
- Ramp from Wakehurst Parkway at Warringah Road to allow southbound traffic on Wakehurst Parkway to join westbound tunnel.
- Avoids widening of existing Warringah Road carriageway.
- Associated surface construction activities would be generally confined to the portal locations west of Forest Way and east of Wakehurst Parkway.

Tunnel (cut and cover)

- Single cut and cover tunnel extending from about 200 metres west of Hilmer Street to Wakehurst Parkway with an underpass at each end of the tunnel.
- Tunnel generally running under the existing alignment of Warringah Road, deviating slightly to the north between Hilmer Street and Bantry Bay Road.
- Ramp from Warringah Road at Wakehurst Parkway to allow southbound and northbound traffic on Wakehurst Parkway to join westbound tunnel.
- While this alternate alignment avoids widening of Warringah Road, it could constrain future development of the hospital where the alignment deviates to the north as noted above.
- Construction activities would occur along the entire affected length of Warringah Road.

**Underpass and road widening (north)**
- Alignment is the same as for the preferred option (Option 2B) except that it would deviate to the north at about 200 metres west of Hilmer Street to Wakehurst Parkway.
- Ramp from Warringah Road at Wakehurst Parkway to allow southbound and northbound traffic on Wakehurst Parkway to join westbound tunnel.
- Requires acquisition of part of the hospital site and would constrain future development on the hospital site; also requires part of the high school site.
- Construction activities would occur along the entire affected length of Warringah Road.

![Figure 6-1: Tunnel (roadheader option)](image)
6.1.3 Consideration of alternative alignments

A comparison of the alternative alignments was undertaken and the following was noted:

- The cost of the tunnel (roadheader) option would be more than double the cost of the revised preferred underpass option (i.e., widening to the south) while the tunnel (cut and cover) option would be 40 per cent
more.

- The estimated capital costs of the two underpass options are broadly similar.
- Both tunnel options would have a similar level of road network performance compared to the revised preferred underpass option and the underpass with widening to the north of Warringah Road option, i.e., they would not provide a material increase in network performance for the additional cost.
- Both tunnel options would incur greater operational costs associated with lighting, ventilation systems, monitoring, etc.
- Construction of the underpass and road widening (south) option could be completed by mid-2018 whereas construction of either of the two tunnel options would take up to an additional six months to complete.

Widening on the northern side of Warringah Road would:

- Require property to be acquired from both the Department of Education and Communities (DEC) (about 600 square metres) and Health Infrastructure (about one hectare).
- Reduce the developable area for the new hospital which would limit future expansion on the site and would require construction of a new high school before the hospital needs to expand as the hospital would need to acquire land from DEC.
- Have a significant impact on the long term expansion of the hospital campus effectively rendering the retained expansion zone unsuitable for future health facilities resulting in the need for a replacement area to be found in the medium term (5–10 years from opening).
- Impact on DEC planning for any potential future reconfiguration of the school site to accommodate changes in student demographic factors.

Widening to the south of Warringah Road would offer a number of other key advantages when compared with widening to the north including:

- Less complicated construction staging.
- Less disruption to traffic during construction.
- Reduced amount of night works.
- Less impact on The Forest High School during construction and following construction.
- No need for land to be acquired from either Health Infrastructure or DEC.
- No impact on the section of the hospital site set aside for future expansion.
- No need to construct a new high school or combined primary and high school with associated costs and disruptions to the school and surrounding community.
- Avoiding acceleration costs that would be incurred to complete all road works in time for the hospital opening.

Neither of the tunnel options would provide better network performance commensurate with the additional cost. Other key disadvantages include longer construction periods and greater operational cost. While widening to the north of Warringah Road would avoid impacts to the businesses on the southern side of Warringah Road, it would have a number of unavoidable impacts, particular on future use of the hospital site and The Forest High School.
6.1.4 Confirmation of preferred Stage 2 option

Development and evaluation of viable options for Stage 2 of the project commenced with identification of an underpass as the preferred road-based transport solution to address the local and broader network capacity issues.

Design development has occurred in an iterative fashion with each round drawing on increased understanding of the Project’s issues and challenges. The robustness of the option development and evaluation process has been strengthened through an industry participation process. This included revisiting the overpass option which concluded that an underpass option would provide greater value in terms of the Project’s objectives.

The concept design has been reviewed to confirm the need for the same number of surface traffic lanes in addition to the four traffic lanes in the underpass. The review confirmed that the proposed configuration would be the most effective means of managing future traffic needs and facilitating efficient road network performance across the Northern Beaches Hospital Precinct.

Consultation was carried out from March to April 2014 and from July to August 2014. The aim of the consultation was to inform the community and key stakeholders about the Project, the planning approval process and next steps and to encourage feedback via forums and via written submissions. Issues raised were considered as part of design development and have driven development and evaluation of additional options including alternative alignments to avoid impacting on businesses on the southern side of Warringah Road.

On balance, the revised underpass southern alignment (Option 2B) is considered to best meet the project objectives and is confirmed as the preferred option for Stage 2.

6.2 Impact assessment and discussion

6.2.1 Former Holland’s Orchard and Commemorative Grove

The Former Holland’s Orchard and Commemorative Grove is a heritage item comprising the remaining pear tree from a large orchard once on the site of the Forest High School, and a commemorative grove within the high school comprising cuttings of that remaining tree. The remaining tree was once one of two trees, with the other tree dying at some time before 2005. The death of that tree prompted the propagation program resulting in the Commemorative Grove located within the grounds of Forest High School. The heritage item will be partially impacted, in that the only remaining pear tree from the Former Holland’s Orchard lies within the pathway of the proposed works. Given its location adjacent to the pedestrian path on the verge between the northern side of Warringah Road and the southern boundary fence of Forest High School, any widening to either the footpath or Warringah Road would cause impact to the tree.

In part, the item’s significance is based on the rarity of the remaining tree. Once that tree dies or is destroyed, the significance of the overall item will be affected. However, the current location of the tree, approximately two metres from the kerb of Warringah Road, means that the tree is currently located in an incongruous setting. Further, its proximity to Warringah Road exposes the tree to a higher potential of damage through road accidents or vandalism.

As the remaining tree is in an area requiring utility relocations (assessed as part of the Stage 1 Project), there is potential for the tree to be impacted by those activities. However, should detailed design of the utility relocations avoid impacting the tree, the construction of a shared footpath for the Stage 2 Project would impact it. In the event that detailed designs for those works impacted on the remaining tree, the Stage 1 Statement of Heritage Impact recommended that:
“...the pear tree be examined by a qualified and experienced arborist prior to any management measures being undertaken. If the arborist concludes that it is healthy enough to be moved, then consultation should be undertaken with Warringah Council and the Department of Education regarding such a move. Should the arborist conclude that it is not healthy enough to be moved, it is recommended that the tree be propagated further and photographically recorded.”

The impact posed by the Stage 2 works, therefore, depends on the outcomes of the Stage 1 detailed designs. If the tree is impacted, then there will be no need to consider the impact of the works proposed for Stage 2.

However, if the Stage 1 works do not impact upon the pear tree, then consideration should be given to removing the tree and replanting it within the Commemorative Grove within the boundaries of the Forest High School in keeping with the above recommendation. Whilst normally the removal of any heritage item from its original location lessens its significance that does not hold true in this case. The removal of the pear tree to the Commemorative Grove would place the tree back an orchard environment. If its removal is successful, it may also increase the significance of the commemorative grove by its presence. It may also provide a safer environment for the tree to flourish and further opportunities for it to naturally propagate.

### 6.2.2 Former Hews’ Brick Pit

The former Hews’ Brick Pit has not been identified for listing in any heritage register to date. However, given that permanent settlers came to the Frenchs Forest area to work in such establishments it has been assessed as being of moderate historical significance to the Frenchs Forest area. It is also considered historically significant as evidence of early industry in the area. Additionally, given its connection to William Hews, one of Frenchs Forests’ earliest European settlers, the item is also considered to be of moderate associative significance.

The proposed Stage 2 works entail the widening of Warringah Road to the north of the item, Bantry Bay Road to the west and the Wakehurst Parkway to the east. These widening works will have a direct physical impact on the curtilage of the former Hews’ Brick Pit, which for the purposes of this assessment is defined as an arbitrary 50 metres surrounding the pit to include any potential subsurface remains of temporary or permanent constructions and/or features (see Figure 4).

As noted in Section 4.0, the extent of any archaeological remains is uncertain, however given that the former Hews’ Brick Pit was used for clay extraction in the brick-making process it is unlikely that there will be much left in the archaeological record to demonstrate its former purpose. There may be some footings from infrastructure associated with the pit, however these are likely to have been removed or located outside of the impact zone of the proposed works. As a result of this, coupled with the disturbance of the site through modern recreational use and erosion through water runoff, the archaeological potential of the former Hews’ Brick Pit is considered to be nil to low. The impact of the proposed works is therefore considered to also be low.
Figure 6-1: Impact on former brick pit
6.3 Visual impact

Although the tree is the last pear tree of the former Holland’s Orchard, its location is in a “green belt”, surrounded by other mature trees. As it is recommended that the tree be removed to the Commemorative Grove within the grounds of the Forest High School, the works will not have a visual impact on the heritage item as a whole.

Currently the former Hews’ Brick Pit is a green space adjacent to the Brick Pit Reserve on Bantry Bay Road. Being a former pit, it is below the level of the surrounding landscape, including the Wakehurst Parkway and the Brick Pit Reserve. The proposed works will therefore have no visual impact on the potential item.

6.4 Summary of heritage impact

Following the assessment of the heritage significance of the items and the impact of the proposed works, it is concluded that the significance of Former Holland’s Orchard and Commemorative Grove would be impacted. This, of course, is assuming that the remaining tree is not impacted by the Stage 1 works.

Although the pear tree has been propagated, it is the last remaining tree from Holland’s Orchard and therefore is assessed as being of high local significance, partially based on its rarity. As with all heritage, avoidance of impact is the ideal course, however if this is not viable, removing the tree to within the Commemorative Grove would be the next preferred option. As noted above, this may provide greater longer term protection within a grove of trees rather than on the verge of a busy road. Feasibility of the tree’s removal should be guided by the advice of a qualified arborist to assess the health of the tree and the likely success of such a move. Consultation should also be undertaken with Warringah Council and the Department of Education/Forest High School regarding the move.

In regard to the former Hews’ Brick Pit, whilst some physical impact may occur on its outer edges, this would not impact on the overall significance of the item. The significance of the former Hews’ Brick Pit is chiefly its historicity, both in its location and role in the development of industry and subsequent settlement of the suburb of Frenchs Forest. The other reasons for its significance, being its association with William Hews and its representativeness, are also not reliant on fabric or form and therefore not sensitive to change. In addition, the exact boundaries of the former Hews’ Brick Pit are unknown and its configuration as it now appears has been reshaped over the years by recreational use, particularly in the former of trail bike riding, and erosion in the form of water runoff.

<p>| Former Holland’s Orchard and Commemorative Grove, Warringah Road, Frenchs Forest |
|---------------------------------|----------------|-----------------|------------------|-----------------|----------------|
| <strong>Element</strong> | <strong>Significance of element</strong> | <strong>Physical impacts</strong> | <strong>Visual impacts</strong> | <strong>Recommendations</strong> | <strong>Actions</strong> |
| Brick pit | Local | Partial incursion of brick pit through widening of Wakehurst Parkway and Warringah Road | Nil | Standard Management Procedure: Unexpected Heritage Items | Nil |
| Curtilage | Local | Loss of some curtilage | Low | Nil | Nil |</p>
<table>
<thead>
<tr>
<th>Element</th>
<th>Significance of element</th>
<th>Physical impacts</th>
<th>Visual impacts</th>
<th>Recommendations</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brick pit</td>
<td>Local</td>
<td>Partial incursion of brick pit through widening of Wakehurst Parkway and Warringah Road</td>
<td>Nil</td>
<td>Standard Management Procedure; Unexpected Heritage Items</td>
<td>Nil</td>
</tr>
<tr>
<td>Curtilage</td>
<td>Local</td>
<td>Loss of some curtilage</td>
<td>Low</td>
<td>Nil</td>
<td>Nil</td>
</tr>
</tbody>
</table>
7.0 Mitigation, Conclusion and Recommendations

The NSW Heritage Council guidelines require that Statements of Heritage Impact, together with supporting information, address what measures are proposed to mitigate the negative impacts of a proposal and why more sympathetic solutions are not viable.

This report has considered the environmental and archaeological context of the study area, reports on the results of a site inspection of the study area, considers the significance of heritage items within the study area, the development proposal, and details potential heritage impacts and mitigation options within the Stage 2 construction impact area.

There was one listed heritage item located on the boundary of the Stage 2 study area, being the Former Holland’s Orchard and Commemorative Grove, listed in Schedule 5 of the Warringah Local Environmental Plan 2011. It is anticipated that the Stage 2 works will impact on this item and mitigation and management recommendations are made in regard to this item.

This heritage impact assessment also considered the impacts on the unlisted heritage item of the former Hews’ Brick Pit and concluded that the proposal will not impact on its local heritage significance. As its significance relates to its historicity and association with William Hews, rather than any tangible remains, the proposed Stage 2 works will not diminish its significance.

The following management recommendations have been formulated with consideration of all available information and have been prepared in accordance with the relevant legislation.

**Recommendation 1 – Management of pear tree**

In the event that the pear tree is not impacted by the Stage 1 works, it is recommended that it be examined by a suitably qualified and experienced arborist prior to any management measures being undertaken. If the arborist concludes that it is healthy enough to be relocated, then consultation should be undertaken with Warringah Council and the Department of Education regarding relocation. Should the arborist conclude that it is not healthy enough to be relocated; it is recommended that the tree be propagated from cuttings and planted in the NBH grounds. A garden for these plants and a commemorative sign would be subject to discussion with HI.

**Recommendation 2 – Heritage induction**

It is recommended that a heritage induction be carried out in advance of the proposed works. All relevant site staff, contractors and subcontractors should be made aware of the location of heritage items, their statutory obligations for heritage under the Heritage Act 1977 in relation to built heritage and archaeological relics and procedures to follow.

**Recommendation 3 – Unexpected archaeological finds**

If unexpected archaeological remains are uncovered during the works, all works must cease in the vicinity of the material/find. Should non Aboriginal archaeological deposits/relics be discovered, the Heritage Council of NSW must be notified in writing as per the Roads and Maritime Services Standard Management Procedure: Unexpected Heritage Items and in accordance with s146 of the Heritage Act 1977. Copies of this Procedure should be on site and available at all times to all staff.
8.0 References


Appendix 1

Concept design Stage 2
Appendix 2

OEH Listing for Holland’s Orchard (former)
Hollands Orchard (Former)

Item details

Name of item: Hollands Orchard (Former)
Other name/s: Hollands Orchard
Type of item: Landscape
Primary address: adjacent to Warringah Road, Frenchs Forest, NSW 2086
Local govt. area: Warringah

All addresses

<table>
<thead>
<tr>
<th>Street Address</th>
<th>Suburb/town</th>
<th>LGA</th>
<th>Parish</th>
<th>County</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>adjacent to Warringah Road</td>
<td>Frenchs Forest</td>
<td>Warringah</td>
<td></td>
<td></td>
<td>Primary Address</td>
</tr>
</tbody>
</table>

Statement of significance:

A rare remnant of an early orchard, which demonstrates that horticultural activities were carried out in the area at the turn of the 20th century. Provides evidence of the association of social, cultural & educional qualities in the locality.

Note: There are incomplete details for a number of items listed in NSW. The Heritage Branch intends to develop or upgrade statements of significance and other information for these items as resources become available.

Description

Construction years: 1900-
Physical description: Remnant plantings consisting of two apple trees approximately 4 metres in height with honeysuckle vine at the base of the trees.

History

Historical notes: "Hollands Orchard" was established around the turn of the century on the northern side of Warringah Road, where Frenchs Forest High School is now.

Historic themes

<table>
<thead>
<tr>
<th>Australian theme (abbrev)</th>
<th>New South Wales theme</th>
<th>Local theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Economy-Developing local, regional and national economies</td>
<td>Agriculture-Activities relating to the cultivation and rearing of plant and animal species, usually for commercial purposes, can include aquaculture</td>
<td>(none)-</td>
</tr>
</tbody>
</table>
8. Culture—Developing cultural institutions and ways of life

Creative endeavour—Activities associated with the production and performance of literary, artistic, architectural and other imaginative, interpretive or inventive works; and/or associated with the production and expression of cultural phenomena; and/or environments that have inspired such creative activities.

Recommended management:

Significance of the two apple trees should be recognised by statutory heritage listing.

Listings

<table>
<thead>
<tr>
<th>Heritage Listing</th>
<th>Listing Title</th>
<th>Listing Number</th>
<th>Gazette Date</th>
<th>Gazette Number</th>
<th>Gazette Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Environmental Plan</td>
<td></td>
<td>05 Dec 00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Study details

<table>
<thead>
<tr>
<th>Title</th>
<th>Year</th>
<th>Number</th>
<th>Author</th>
<th>Inspected by</th>
<th>Guidelines used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warringah Heritage Study</td>
<td>2001</td>
<td>Major Local Significance</td>
<td>Warringah Council</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

References, internet links & images

<table>
<thead>
<tr>
<th>Type</th>
<th>Author</th>
<th>Year</th>
<th>Title</th>
<th>Internet Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written</td>
<td></td>
<td></td>
<td>Field inspection and oral source</td>
<td></td>
</tr>
</tbody>
</table>

Note: internet links may be to web pages, documents or images.

(Click on thumbnail for full size image and image details)

Data source

The information for this entry comes from the following source:

Name: Local Government
Database number: 2610091

Every effort has been made to ensure that information contained in the State Heritage Inventory is correct. If you find any errors or omissions please send your comments to the Database Manager.

All information and pictures on this page are the copyright of the Heritage Branch or respective copyright owners.