



**Transport**  
Roads & Maritime  
Services



# Additional crossing of the Clarence River at Grafton

Route Options Development Report  
Technical Paper – Aboriginal Heritage

**SEPTEMBER 2012**







**Main Road 83 Summerland Way-Additional  
Crossing of the Clarence River at Grafton  
Route Options Development Report**

**Technical Paper: Aboriginal Heritage**

**August 2012**

**Ballarat:**

506 Macarthur Street Ballarat3350  
Ph: (03) 5331 7000 Fax: (03) 5331 7033  
email: [ballarat@biosisresearch.com.au](mailto:ballarat@biosisresearch.com.au)

**Brisbane:**

Suite 4 F11 72 Wickham Street  
Fortitude Valley 4006  
Ph: (07) 3831 7400 Fax: (07) 3831 7411  
email: [brisbane@biosisresearch.com.au](mailto:brisbane@biosisresearch.com.au)

**Melbourne:**

38 Bertie Street Port Melbourne 3207  
Ph: (03) 9646 9499 Fax: (03) 9646 9242  
email: [melbourne@biosisresearch.com.au](mailto:melbourne@biosisresearch.com.au)

**Canberra:**

Unit 16 / 2 Yallourn Street Fyshwick 2609  
Ph: (02) 6228 1559 Fax: (02) 6280 8752  
email: [canberra@biosisresearch.com.au](mailto:canberra@biosisresearch.com.au)

**Sydney:**

18-20 Mandible Street, Alexandria, 2015  
Ph: (02) 9690 2777 Fax: (02) 9690 2577  
email: [sydney@biosisresearch.com.au](mailto:sydney@biosisresearch.com.au)

**Wangaratta:**

26A Reid Street Wangaratta 3676  
Ph: (03) 5721 9453 Fax: (03) 5721 9454  
email: [wangaratta@biosisresearch.com.au](mailto:wangaratta@biosisresearch.com.au)

**Wollongong:**

8 Tate Street Wollongong 2500  
Ph: (02) 4229 5222 Fax: (02) 4229 5500  
email: [wollongong@biosisresearch.com.au](mailto:wollongong@biosisresearch.com.au)

**Project no: 13529**

**Authors:**

Samantha Higgs and Samantha  
Gibbins

**Reviewer:**

Pamela Kottaras

**Mapping:**

James Shepherd and Ashleigh  
Pritchard

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<b>REPORT FOR</b>	Arup on behalf of Roads and Maritime Services – Northern Regional Office
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<b>REPORT TITLE:</b>	Route Options Development Report: Technical Paper-Aboriginal Cultural Heritage
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<b>AUTHOR(S):</b>	Samantha Higgs and Samantha Gibbins
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**Note on report contents: Aboriginal readers should be aware that this report contains the name and image of a deceased person.**

**This report has been approved for release by Grafton-Ngerrie Local Aboriginal Land Council.**

## Executive Summary

Roads and Maritime Services (RMS) is currently undertaking investigations to identify an additional crossing of the Clarence River at Grafton to address short-term and long-term transport needs. Arup (on behalf of RMS) has engaged Biosis Research to undertake Aboriginal cultural heritage investigations.

Since the early 1970s there have been various discussions and studies into an additional crossing of the Clarence River near Grafton. A number of these studies have been carried out during the past ten years and provide the background to the current investigation.

In December 2010, RMS commenced a revised process to work more closely with the community to determine the preferred location for an additional crossing. As part of this revised process, a series of public surveys, community forums and meetings with residents and community groups have been held and various studies and project documents released for public viewing and comment.

In June 2011, RMS released the *Feasibility Assessment Report*, which describes the assessment undertaken by RMS on the 41 route suggestions identified by the community following the announcement of the revised process in December 2010. The report identifies 25 preliminary options within five strategic corridors to go forward for further engineering and environmental investigation.

Between June 2011 and January 2012, RMS carried out investigations in the Grafton area and surrounds to identify constraints relevant to an additional crossing of the Clarence River. The outcomes of these investigations, community comment and a community and stakeholder evaluation workshop provided inputs into the selection of the short-list of options.

In January 2012, six route options to be investigated further as part of the process to identify a location for the crossing were announced (as shown in Figures 1-6). The short-listed options were identified in the *Preliminary Route Options Report – Final* (RMS, January 2012) which also provided details of the technical investigations undertaken on the 25 preliminary options and the process to select the short-listed options.

This technical paper forms part of a comprehensive investigation into Aboriginal heritage in the Grafton area and is an attachment to the Route Options Development Report. The investigation documented in this technical paper builds on information identified in the *Preliminary Route Options Report – Final* (RMS, January 2012). The investigation has been documented in two parts within this paper: Aboriginal cultural heritage and Aboriginal archaeological heritage. Part 1 documents the Aboriginal cultural heritage investigations and will be used to assess the potential impacts on Aboriginal cultural heritage from the six route options. Part 2 documents the Aboriginal archaeological heritage investigations and will be used to assess the potential impacts on Aboriginal archaeological heritage from the six route options. The findings of these investigations will be an input into the selection of a recommended preferred option.

A targeted field survey of the six route options was conducted in February and April 2012 in consultation with the Grafton-Ngerrie Local Aboriginal Land Council (LALC), who are part of the Aboriginal focus group for this project. The surveys were undertaken by Samantha Higgs (Biosis Research), Samantha Gibbins (Biosis Research), Brett Duroux (Grafton-Ngerrie LALC) and Rod Duroux (Grafton-Ngerrie LALC). Rod and Brett Duroux provided relevant information about cultural significance during the survey.

The objectives of the site visits were to:

- Assess the previous disturbance to the area within and surrounding the route options;
- Assess the potential of the area within and surrounding the route options to possess intact Aboriginal heritage;
- Locate any Aboriginal objects or Places present within and surrounding the route options.

Two known areas of cultural value; the Golden Eel site and the Great Marlow region have been identified as being potentially impacted by the short-listed options, along with Aboriginal Heritage Information Management System (AHIMS) site 12-6-0402 (modified tree). One previously unidentified cultural site Tracker Robinson's Camp was identified by the current investigations.

## Summary of route options assessment

Route Option	Impacts on known Aboriginal cultural heritage	Impacts on known archaeological sites	Significance of archaeological sites	Length of High Archaeological Potential impacted (m)
E	N	N	-	0
A	N	N	-	0
C	<p>Y</p> <p>Golden Eel site could potentially be impacted during construction and the Grafton-Ngerrie LALC has raised concerns about this as well as the impacts on the aesthetic values of the site.</p> <p>Golden Eel Site is in close proximity to the option and measures will need to be taken during construction to protect the site.</p>	<p>N</p> <p>Golden Eel Site is in close proximity to the option and measures will need to be taken during construction to protect the site</p>	High	170
11	N	N	-	0
14	Y – Great Marlow	N	-	175
15	<p>Y – Great Marlow</p> <p>In addition, Tracker Robinson's Camp site is in close proximity to the option and measures will need to be taken during construction to protect the site</p>	<p>N</p> <p>Tracker Robinson's Camp site is in close proximity to the option and measures will need to be taken during construction to protect the site</p>	High	510

**Table 1: Impact assessment of route options on Aboriginal cultural and archaeological heritage**

## Acknowledgments

Biosis Research acknowledges the contribution of the following people and organisations in preparing this report:

- Peter Rand, Javier Valderrama, Kathryn Nation and Nicola Fleury – Arup
- Graham Purcell and Simon Millichamp – Roads and Maritime Services, Northern Regional Office
- Wesley Fernando, David 'Bunny' Daley, Brett Tibbett, Brett Duroux and Rod Duroux – Grafton-Ngerrie Local Aboriginal Land Council
- Gwen Duroux
- Dawn Martin
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- Lisa Appo - OEH, Northern Office
- Staff of Northern Rivers Catchment Management Authority

## Abbreviations

ACHA	Aboriginal Cultural Heritage Advisor
ACHMP	Aboriginal Cultural Heritage Management Plan
AHC	Australian Heritage Council
AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit
ARTC	Australian Rail Track Corporation
ATSIC	Aboriginal and Torres Strait Islander Commission
BP	Before Present
CHL	Commonwealth Heritage List
DCP	Development Control Plan
DEC	Department of Environment and Conservation
DECCW	Department of Environment, Climate Change and Water NSW (formerly Department of Environment and Climate Change, now Office of Environment and Heritage)
DEH	Department of Environment and Heritage
EP&A Act	Environmental Planning and Assessment Act 1979
EPBC Act	Environment Protection and Biodiversity Conservation Act 1979
ESC	Effective Survey Coverage
GSV	Ground surface visibility
ICOMOS	International Council on Monuments and Sites
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local Government Area
MGA	Map Grid of Australia
NNTT	National Native Title Tribunal
NPWS	National Parks and Wildlife Service (now part of OEH)
OEH	Office of Environment and Heritage, Department of Premier and Cabinet NSW
PAD	Potential Archaeological Deposit
REP	Regional Environment Plan
RMS	Roads and Maritime Services
RTA	Roads and Traffic Authority

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## 1.0 INTRODUCTION

Cultural heritage legislation protecting Aboriginal and non-Aboriginal heritage places applies in New South Wales. These places are an important part of our heritage. They are evidence of more than 40,000 years of occupation of New South Wales by Aboriginal people, and of the more recent period of interaction with non-Aboriginal settlers. Heritage places can provide us with important information about past lifestyles and cultural change. It is an offence under sections of legislation to damage or destroy heritage sites without a permit or consent from the appropriate body. Preserving and enhancing these important and non-renewable resources is encouraged.

Aboriginal cultural heritage sites can be generally divided into two broad categories. The first category includes those sites relating to less tangible cultural elements such as ceremonial or dreaming sites. Some ceremonial sites, such as bora rings, may have tangible elements but many are natural landscape features which take on cultural significance through ceremonial or religious association. Aboriginal cultural sites can only be identified and assessed by the Aboriginal community as the primary determinants of their cultural heritage. The investigation into intangible heritage is documented in Part 1 of this technical paper.

The second category includes sites with tangible evidence of past Aboriginal occupation: these include occupation sites (containing material such as stone artefacts, charcoal or shell); modified trees; grinding grooves; burial sites and art sites. The investigation into tangible Aboriginal cultural heritage is documented in Part 2 of this technical paper.

At the time of non-Aboriginal arrival in Grafton the area to the north of the Clarence River was Bundjalung lands. The Yaegl tribe occupied lands on the coast. The Clarence River and Grafton are within the area previously inhabited by the Gumbainggir people. These people also inhabited the steep terrain of the escarpment zone, located south of Grafton, where other sites and evidence of occupation have been found (Witter 2000).

The first recorded interaction between the Aboriginal inhabitants of the Grafton region and the incoming European settlers came in 1825 in the form of an escaped convict, Richard Craig. Conflict between the Aboriginal population and the incoming settlers followed soon after initial European settlement. Killings were carried out by both communities and stock was speared by the local people to drive the new settlers off land. Violence, displacement and disease reduced the numbers of Aboriginal people in the area. By 1891 it was reported that the police had brought 'peace'. Nine reserves had been created to house the remaining Aboriginal population and many Aboriginal people were employed in European industry as stockmen, cane strippers and fishermen (NSW Heritage Office 1996).

A community of Aboriginal people remain in Grafton to this day, many of them with strong spiritual links to the area and important knowledge of past ways of life.

### 1.1 Project Background

Roads and Maritime Services (RMS) is currently undertaking investigations to identify an additional crossing of the Clarence River at Grafton to address short-term and long-term transport needs. Arup (on behalf of RMS) has engaged Biosis Research to undertake Aboriginal cultural heritage investigations.

Since the early 1970s there have been various discussions and studies into an additional crossing of the Clarence River near Grafton. A number of these studies have been carried out during the past ten years and provide the background to the current investigation.

In December 2010, RMS commenced a revised process to work more closely with the community to determine the preferred location for an additional crossing. As part of this revised process, a series of public surveys, community forums and meetings with residents and community groups have been held and various studies and project documents released for public viewing and comment.

In June 2011, RMS released the *Feasibility Assessment Report*, which describes the assessment undertaken by RMS on the 41 route suggestions identified by the community following the announcement of the revised process in December 2010. The report identifies 25 preliminary options within five strategic corridors to go forward for further engineering and environmental investigation.

Between June 2011 and January 2012, RMS carried out investigations in the Grafton area and surrounds to identify constraints relevant to an additional crossing of the Clarence River. The outcomes of these investigations, community comment and a community and stakeholder evaluation workshop provided the inputs to the selection of the short-list of options.

In January 2012, six route options to be investigated further as part of the process to identify a location for an additional crossing were announced (as shown in Figures 1-6). The short-listed options were identified in the *Preliminary Route Options Report – Final* (RMS, January 2012) which also provided details of the technical investigations undertaken on the 25 preliminary options and the process to select the short-listed options.

This technical paper forms part of a comprehensive investigation into Aboriginal heritage in the Grafton area and is an attachment to the Route Options Development Report. The investigation documented in this technical paper builds on information identified in the *Preliminary Route Options Report - Final* (RMS, January 2012). The investigation has been documented in two parts: Aboriginal cultural heritage and Aboriginal archaeological heritage. This technical paper documents the Aboriginal heritage investigation and will be used to define the potential constraints posed by Aboriginal heritage for the six route options and to ensure Aboriginal heritage is protected. The findings of these investigations will be used as part of the selection of a recommended preferred option.

## 2.0 PART ONE: ABORIGINAL CULTURAL HERITAGE

### 2.1 Aboriginal community consultation during the preliminary route options investigation

A programme of Aboriginal cultural heritage consultation was initiated by RMS in January 2011 in accordance with RMS (then RTA) *Procedure for Aboriginal Cultural Heritage Consultation and Investigation* (PACHCI).

Notification letters were sent to relevant agencies and organisations, including Grafton-Ngerrie Local Aboriginal Land Council (LALC), to determine the relevant knowledge holders within the Grafton and South Grafton area. As part of this process, RMS placed public notices in local print media, including *The Daily Examiner*, on 22 January 2011. The notice invited Aboriginal people who held relevant knowledge of the region to register with RMS by 14 February 2011. The Grafton-Ngerrie LALC was the only respondent.

Brett Duroux representing the Grafton-Ngerrie Local Aboriginal Land Council participated in the preliminary route options field surveys. He provided local and cultural knowledge of the immediate Grafton area. A discussion of what would constitute potential direct and indirect impact to cultural values was undertaken with both Brett Duroux and Graham Purcell (RMS Northern Region Aboriginal cultural heritage advisor).

A series of meetings were held on 10 May 2011, 28 June 2011, 1 July 2011, 10 November 2011 and 6 February 2012 at the Grafton-Ngerrie LALC offices to identify relevant knowledge holders and determine the extent of Aboriginal cultural constraints on the proposed preliminary route options.

The following people attended one or more of the meetings:

- Wesley Fernando, Rod Duroux, Brett Tibbett and David “Bunny” Daley (Grafton-Ngerrie Local Aboriginal Land Council)
- Graham Purcell, Chris Clark and Simon Millichamp (RMS)
- Peter Rand and Kathryn Nation (Arup)
- Samantha Higgs and Paul Howard (Biosis Research)

The *Preliminary Route Options Report – Parts 1 and 2* (RMS, October 2011) was provided to the Grafton-Ngerrie LALC for review and comment prior to finalisation. The *Preliminary Route Options Report – Final* (RMS, January 2012) was also provided to the Grafton-Ngerrie LALC for comment prior to finalisation.

#### **Grafton-Ngerrie Local Aboriginal Land Council Meeting 10 November 2011**

A meeting was held at the Grafton-Ngerrie LALC offices in Grafton on Thursday 10 November 2011 to discuss the impacts of the 25 preliminary route options for the additional crossing of the Clarence River at Grafton on areas of Aboriginal cultural significance.

The meeting was attended by:

- Wesley Fernando, Rod Duroux and Brett Duroux (Grafton-Ngerrie Local Aboriginal Land Council)
- Chris Clark and Simon Millichamp (RMS)

#### **Meeting outcomes**

The group reviewed the preliminary options within each of the 5 strategic corridors and discussed the potential impacts and issues of each option. The group provided indicative scoring for Aboriginal heritage for the indicators used in the community and stakeholder evaluation workshop (November 2011), for each of the options on a corridor by corridor basis, and provided reasoning for the scoring. The following is a summary of the evaluation of each of the six short-listed route options (Options E, A, C, 11, 14 and 15) to be investigated further as part of the process to identify a location for an additional crossing of the Clarence River.



- Preliminary Route Option E: There are no major known Aboriginal cultural constraints in Grafton or South Grafton for Preliminary Route Option E.
- Preliminary Route Option A: There are no major known Aboriginal cultural constraints in Grafton or South Grafton for Preliminary Route Option A.
- Preliminary Route Option C: Not acceptable, due to alignment through Alipou Creek and the Golden Eel site in South Grafton. If realigned closer to existing bridge, Preliminary Route Option C may score better.<sup>1</sup>
- Preliminary Route Option 11: There are no known major items of Aboriginal cultural significance for Preliminary Route Option 11.
- Preliminary Route Option 14: There are no known major items of Aboriginal cultural significance for Preliminary Route Option 14.
- Preliminary Route Option 15: Option is likely to directly affect a culturally significant Aboriginal area (Great Marlow).

Any potential disturbance of Aboriginal items would require further consultation with the LALC.

## 2.2 Short-list of route options

The current investigations incorporate the six route options outlined in Table 2 and shown in Figures 1-6.

Option	Location
E	Cowan Street, South Grafton to Villiers Street, Grafton
A	New bridge parallel to and immediately upstream of the existing bridge connecting Bent Street, South Grafton and Fitzroy Street, Grafton
C	Junction of Pacific Highway and Gwydir Highway, South Grafton to Pound Street, Grafton
11	Existing Pacific Highway north of South Grafton to Fry Street, Grafton
14	Existing Pacific Highway north of South Grafton to North Street, Grafton, via Kirchner Street
15	Existing Pacific Highway north of South Grafton to Summerland Way north of Grafton, via Kirchner Street

**Table 2: Description of the six short-listed route options**

## 2.3 Known areas of Aboriginal cultural significance

The following locations were identified as having significance to the Aboriginal community in the *Preliminary Route Options Report – Final* (RMS, January 2012):

### **Clarence River and Alipou Creek - Golden Eel site**

The Clarence River is associated with the Golden Eel creation story and is a culturally significant site. For the purposes of mapping the entirety of the Clarence River has been identified as an Aboriginal site, with the registered location of the site identified.

Alipou Creek is the resting place of the Golden Eel which is of great significance to all of the neighbouring tribal groups. There are many scarred trees and a marriage tree in the area that cannot be impacted on. The community feel strongly that the mouth of Alipou Creek not be directly impacted.

<sup>1</sup> Following further consultation and the realignment of Option C the Golden Eel site has now been avoided.

### ***Susan and Elizabeth Islands***

Particular Aboriginal sites may have access restrictions in order to ensure that cultural knowledge is maintained in a culturally appropriate way. Such restrictions are often in place if the site is especially significant, such as with Dreamtime places, or women's business or men's business places.

Elizabeth Island is a sacred Aboriginal men's site with high significance to the Aboriginal community. Susan Island is a culturally significant women's site with high significance to the Aboriginal community. Access to knowledge about these sites is restricted.

### ***Great Marlow***

Great Marlow is an area that Aboriginal people commonly used to travel through and that contains many areas of high significance. The Great Marlow region has cultural significance to the Aboriginal community.

Several culturally modified trees, a marriage tree and artefact scatters were also identified during the preliminary route options investigation and are documented in the *Preliminary Route Options Report – Final* (RMS, January 2012).

### 3.0 METHODOLOGY

#### 3.1 Introduction to Aboriginal Cultural Heritage

According to Allen and O’Connell (2003), Aboriginal people have inhabited the Australian continent for the last 50,000 years, and the NSW area, according to Bowler *et al* (2003), for over 42,000 years. These dates are subject to continued revision as further evidence of Aboriginal cultural heritage is discovered and as more research of this evidence is conducted.

Without being part of the Aboriginal culture and the productions of this culture it is not possible for non-Aboriginal people to fully understand their meaning to Aboriginal people – only to move closer towards understanding this meaning with the help of the Aboriginal community. Similarly, definitions of Aboriginal culture and cultural heritage without this involvement constitute outsider interpretations.

With this preface Aboriginal cultural heritage broadly refers to things that relate to Aboriginal culture and hold cultural meaning and significance to Aboriginal people (Department of Environment, Climate Change and Water [DECCW] 2010: 3). There is an understanding in Aboriginal culture that everything is interconnected. In essence Aboriginal cultural heritage can be viewed as potentially encompassing any part of the physical and/or mental landscape, that is, ‘Country’ (DECCW 2010: iii).

Aboriginal people’s interpretation of cultural value is based on their “traditions, observance, lore, customs, beliefs and history” (DECCW 2010: 3). The things associated with Aboriginal cultural heritage are continually / actively being defined by Aboriginal people (also see Department of Environment and Conservation [DEC] 2005: 1; DECCW 2010: 3). These things can be associated with traditional, historical or contemporary Aboriginal culture (also see DEC 2005: 1, 3; DECCW 2010: 3).

#### 3.2 Tangible Aboriginal Cultural Heritage

Three categories of tangible Aboriginal cultural heritage may be defined as:

- Things that have been observably modified by Aboriginal people
- Things that may have been modified by Aboriginal people but no discernable traces of that activity remain
- Things never physically modified by Aboriginal people (but associated with Dreamtime Ancestors who shaped those things)

Specific examples would include (Table 3):

<b>Things observably modified by Aboriginal people</b>		
Objects	Specific examples	Animals, modified trees, art, grinding grooves, stone, wood or shell artefacts, earth mounds, fish traps, habitation structures, stone arrangements, quarries
Places		Massacre or Ceremonial sites with material evidence
<b>Things modified by Aboriginal people but no discernable traces of that activity remain</b>		
Objects	Specific examples	A cultural scar on a tree that has since been overgrown
Places		Massacre or Ceremonial sites with material evidence; rock walls previously covered by art that has since washed away
<b>Things never physically modified by Aboriginal people (but associated with the Dreamtime Ancestors who shaped those things)</b>		
Objects	Specific examples	Animals, for example, totems
Places		Dreaming sites

**Table 3: Categories of tangible Aboriginal cultural heritage and specific examples**

### 3.3 Intangible Aboriginal Cultural Heritage

Examples of intangible Aboriginal cultural heritage would include memories of stories and ‘ways of doing’, which would include language and ceremonies (DECCW 2010: 3).

### 3.4 Statutory definitions

Currently Aboriginal cultural heritage, as statutorily defined by the *National Parks and Wildlife (NPW) Act 1974*, consists of objects and Places.

Aboriginal objects are defined as:

“any deposit, object or material evidence...relating to the Aboriginal habitation of the area that comprises NSW, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains”

Aboriginal Places are defined as a place that is or was of special Aboriginal cultural significance. Places are declared under section 84 of the *NPW Act 1974*.

### 3.5 Values of Aboriginal cultural heritage

Aboriginal cultural heritage is broadly valued by Aboriginal people as it is used to define their identity as both individuals and as part of a group (also see DEC 2005: 1, 3; DECCW 2010: iii). More specifically it is used:

- To provide a:
  - “connection and sense of belonging to Country” (DECCW 2010: iii)
  - Link between the present and the past (DECCW 2010: iii)
- As a learning tool to teach Aboriginal culture to younger Aboriginal generations and the general public (DECCW 2010: 3)
- As further evidence of Aboriginal occupation prior to European settlement for people who do not understand the magnitude to which Aboriginal people occupied the continent (see also DECCW 2010: 3)

### 3.6 Indicators for the assessment of the route options

The following indicator will be used to determine the potential impacts of the six route options on areas of Aboriginal cultural significance:

Indicator	Description	Unit
Impact on Aboriginal cultural heritage	This is an indicator of the comparative impacts on Aboriginal cultural heritage. A qualitative assessment of the physical, visual and spiritual impacts on known Aboriginal cultural sites.  The comparative assessment is informed by the Aboriginal consultation undertaken for the project.	Qualitative



### 3.7 Aboriginal consultation for this report

#### Grafton-Ngerrie Local Aboriginal Land Council Meeting 6 February 2012

A meeting was held at the Grafton-Ngerrie LALC offices in Grafton on Monday 6 February 2012 to discuss the project status, geotechnical investigations, and upcoming inspections for the Route Options Development Report. The short-listed route options were also reviewed for Aboriginal heritage issues.

The meeting was attended by:

- Wesley Fernando and Brett Duroux (Grafton-Ngerrie Local Aboriginal Land Council)
- Chris Clark and Simon Millichamp (RMS)

#### **Meeting outcomes**

Project Status:

- Chris Clark discussed the announcement of the six short-listed options: E, A, C, 11, 14 and 15.
- The preliminary alignment of Option C has been realigned to avoid the mouth of Alipou Creek as much as possible.
- Next steps include field inspections and modelling of the options for the Route Options Development Report.

Sites officers for upcoming inspections for Route Options Development Report:

- Biosis will be undertaking Aboriginal heritage field inspections and require one or two LALC sites officers for these visits.
- Rod Duroux and Brett Duroux will be available for these roles.

Geotechnical Investigations

- Arup will be undertaking borehole drilling at 6 locations around Grafton and gravity surveys on the floodplain near McClaers Lane and Meona Lane.
- The sites have been chosen to avoid known areas of Aboriginal cultural significance and areas of high archaeological potential (NB: drilling to occur in the "disturbed zone" in existing Council road reserves).
- If any suspected artefacts are identified, Arup will contact RMS and the LALC for inspection.

Review of short-listed options for Aboriginal heritage issues:

Option E:

- No known constraints.

Option A:

- No known constraints.

Option C:

- Inspection of Australian Rail Track Corporation (ARTC) land between existing bridge and Iolanthe Street in South Grafton is required. Arup are trying to gain access to this land now. There are some scarred trees in this area that need inspection.
- Arup / RMS to advise LALC when ARTC grant permission to this area. Another heritage inspection will be booked for that time. Sites officers will be contacted for attendance.
- If Option C was selected as the preferred option, boundary limits and barriers would need to be installed to protect heritage items and areas of significance. This would be the case for other options also.

Options 11, 14 and 15:

- The flood plain areas in South Grafton covered by these options need inspection by LALC. This area has not yet been inspected by the sites officers.

Options 14 and 15:

- The Great Marlow area covered by these options needs inspection by LALC. This area has not yet been inspected by the sites officers.

Further consultation will be required with Grafton-Ngerrie Local Aboriginal Land Council and local knowledge holders for any option selected as the preferred option.

### **Field Survey**

A targeted field survey of the six route options was conducted in February and April 2012 in consultation with the Grafton-Ngerrie LALC, who are part of the Aboriginal focus group for this project. It was attended by Samantha Higgs (Biosis Research), Samantha Gibbins (Biosis Research), Brett Duroux (Grafton-Ngerrie Local Aboriginal Land Council) and Rod Duroux (Grafton-Ngerrie Local Aboriginal Land Council). Rod and Brett Duroux provided relevant information about cultural significance during the survey.

Samantha Higgs, Samantha Gibbins and Brett Duroux met with Mrs Gwen Duroux on Friday 10 February 2012. Mrs Duroux is the daughter of Tracker Robinson (refer to section 4.1.6) and she provided information about his life as a police tracker with the NSW police. Rod and Brett Duroux were also in attendance at this meeting and provided information about Tracker Robinson.

A copy of this report was provided to the Grafton-Ngerrie Local Aboriginal Land Council for their review and comment, prior to finalisation.

### **Comments on Draft Report by Grafton-Ngerrie LALC**

Comments on the draft report were received via email from Wesley Fernando on 16 July 2012 (provided to Biosis Research on 18 July 2012) and are included in Appendix 2.

The Aboriginal Heritage Technical Paper was revised in response to the comments made by Wesley Fernando. An email was subsequently received from him on 10 August 2012 acknowledging that the changes he requested on 16 July 2012 had been incorporated into the revised technical paper and approving the public version to be released as part of the Route Options Development Report. A copy of this email is included in Appendix 3.

## **3.8 Suitability of methodology used**

Only two members of Grafton-Ngerrie LALC (Brett Duroux and Rod Duroux) have been specifically consulted regarding the six short-listed route options at this stage. Although wider consultation has been conducted for the 25 preliminary route options, some route options have been partially realigned and additional values identified (Tracker Robinson's Camp). Other members of the Grafton-Ngerrie LALC and of the wider Aboriginal community may have additional information relevant to the six route options. It is recommended that RMS undertake further consultation with the community during display of the report.

Primary constraints on the survey of the six route options included limited property access and limited time for inspection, which meant that not all land potentially impacted by the options could be walked over. Wherever possible, properties that could not be accessed were viewed from the roadside and/or adjacent properties.

Despite these limitations, the consultation to date and the methodology used is suitable for this stage of the process for a comparative assessment of the six route options.

## 4.0 ROUTE OPTIONS ASSESSMENT

Areas of known cultural significance are mapped in Figures 1-6 in relation to each of the six route options.

The Clarence River itself has been identified as the location of an important Dreaming/Creation story. As all route options will impact on this area it has not been considered in the assessment. The assessment below considers impacts to areas in addition to the Clarence River.

### 4.1 Discussion

#### 4.1.1 Option E

##### *Items of Aboriginal cultural significance*

None known (Figure 1).

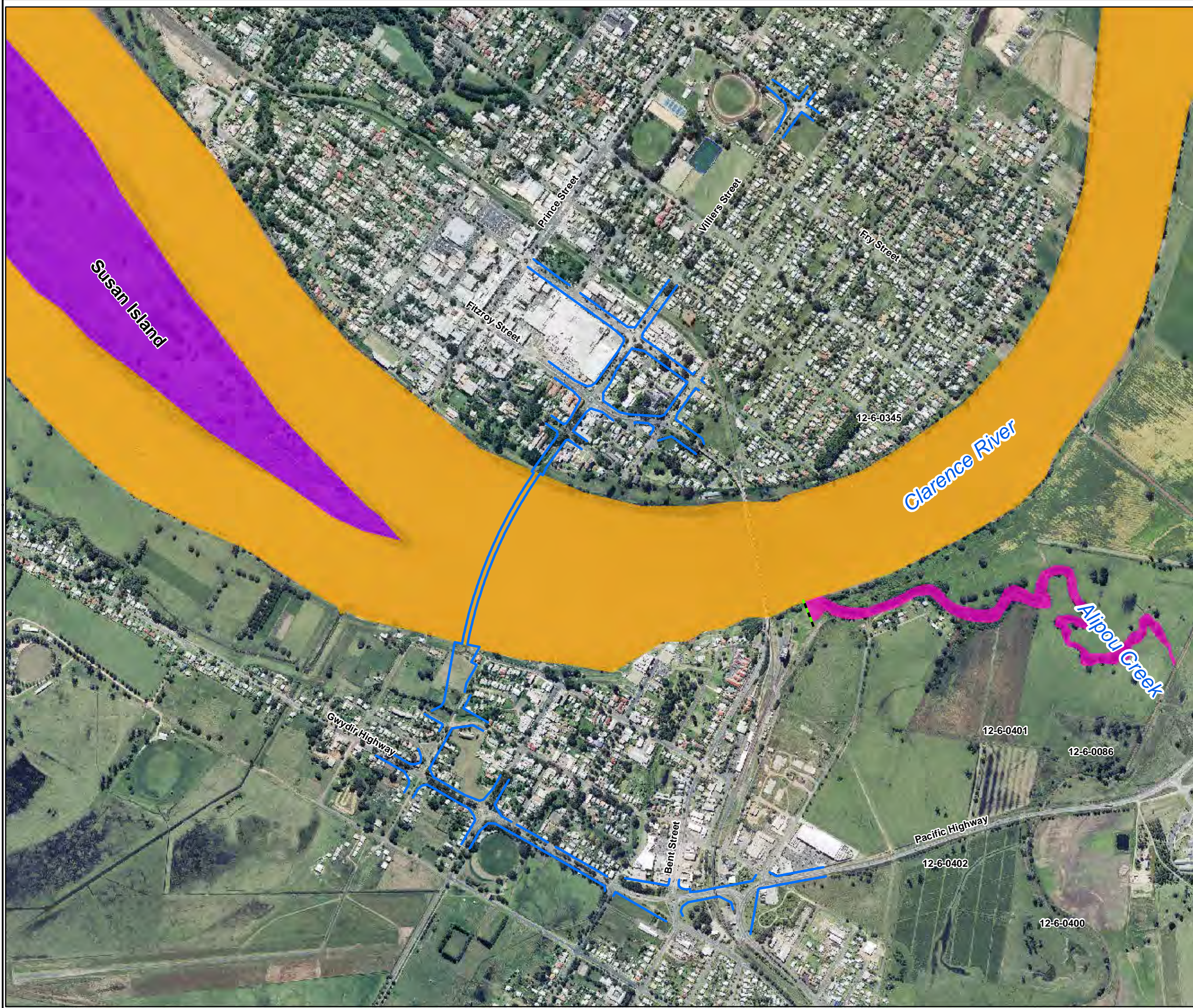
##### *Assessment*

No known impact.

##### *Recommendations*

No recommendations.

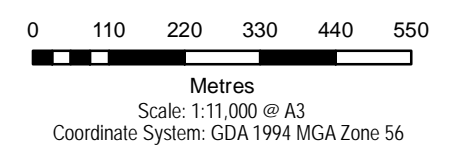





**Legend**

- Route extent
- Protection Barrier
- Cultural Values/Places**
- Aboriginal Ceremony and Dreaming, Men's site
- Ceremonial Ring, Women's site
- Dreaming/Creation Story
- Golden Eel Site + Marriage Tree
- Great Marlow Region


**Figure 1: Known areas of Aboriginal cultural heritage in the vicinity of Option E**





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#### **4.1.2 Option A**

##### ***Items of Aboriginal cultural significance***

None known (Figure 2).

##### ***Assessment***

No known impact.

##### ***Recommendations***

No recommendations.






**Legend**

- Route extent
- Protection Barrier
- Cultural Values/Places
- Aboriginal Ceremony and Dreaming, Men's site
- Ceremonial Ring, Women's site
- Dreaming/Creation Story
- Golden Eel Site + Marriage Tree
- Great Marlow Region


**Figure 2: Known areas of Aboriginal cultural heritage in the vicinity of Option A**

0 110 220 330 440 550  
 Metres  
 Scale: 1:11,000 @ A3  
 Coordinate System: GDA 1994 MGA Zone 56



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### 4.1.3 Option C

#### ***Items of Aboriginal cultural significance***

##### *The Golden Eel (Figure 3)*

Alipou Creek is the resting place of the Golden Eel which is of great significance to all of the neighbouring tribal groups. The registered location of the site is on the southern bank of the river to the east of the existing bridge. During the field survey, Rod and Brett Duroux confirmed that the Golden Eel site is a spiritual area of high significance to the Aboriginal people and should not be disturbed. Rod Duroux identified the mouth of Alipou Creek where it meets the Clarence River as having particular importance.

The mouth of the Alipou Creek where it joins the Clarence River is of particular importance as the resting place of the Golden Eel. The entire length of Alipou Creek was identified as culturally significant by Rod and Brett Duroux during the field investigation and the cultural heritage mapping has been updated to reflect this.

##### *AHIMS Site number 12-6-0402 (Figure 3)*

A modified tree (AHIMS site number 12-6-0402) is located amongst a group of mature trees in the area. During the February 2012 field survey, Brett Duroux confirmed that these trees are culturally significant and should not be impacted.

#### ***Assessment***

The alignment of Option C is in close proximity to the Golden Eel site although it does not physically impact it. However, the site could potentially be impacted during construction and the Grafton-Ngerrie LALC has raised concerns about this as well as the impacts on the aesthetic values (visual and setting) of the site.

If Option C is chosen further consultation with the Grafton-Ngerrie LALC is required to determine visual and spiritual impacts to the Golden Eel site.

No work is currently proposed in proximity to AHIMS site 12-6-0402.

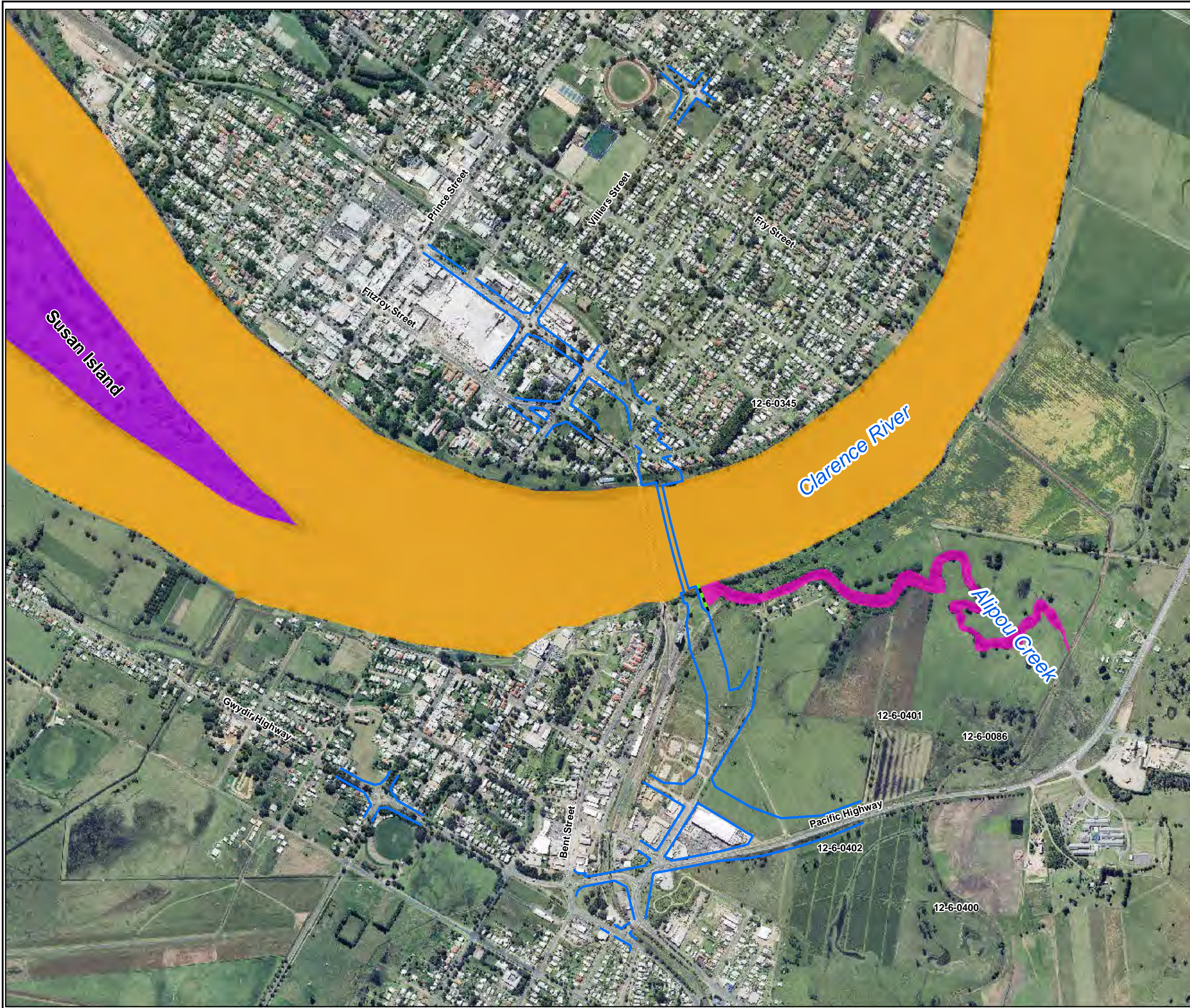
#### ***Recommendations***

##### *The Golden Eel site at Alipou Creek*

The area identified as the Golden Eel site along Alipou Creek and the mouth of Alipou Creek where it meets the Clarence River will not be physically impacted by the alignment of Option C. There is the potential for impacts to this area during construction works, if Option C is chosen, because of its close proximity. If Option C is chosen a physical barrier (e.g. a 1.8 m high wire mesh fence) should be placed between the mouth of Alipou Creek where it meets the Clarence River and the construction site. Suggested placement of the physical barrier, chosen in consultation with Rod and Brett Duroux, is shown in Figure 3.

Discussion with representatives of the Grafton-Ngerrie LALC has highlighted the need to avoid physical impacts to this site. The Grafton-Ngerrie LALC has also identified that the aesthetic values of the Golden Eel Site will be impacted by this option. Further consultation with Grafton-Ngerrie LALC will be required if this option is chosen.






**Legend**

- Route extent
- Protection Barrier
- Cultural Values/Places
- Aboriginal Ceremony and Dreaming, Men's site
- Ceremonial Ring, Women's site
- Dreaming/Creation Story
- Golden Eel Site + Marriage Tree
- Great Marlow Region


**Figure 3: Known areas of Aboriginal cultural heritage in the vicinity of Option C**

0 110 220 330 440 550  
 Metres  
 Scale: 1:11,000 @ A3  
 Coordinate System: GDA 1994 MGA Zone 56



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#### **4.1.4 Option 11**

##### ***Items of Aboriginal cultural significance***

None known (Figure 4).

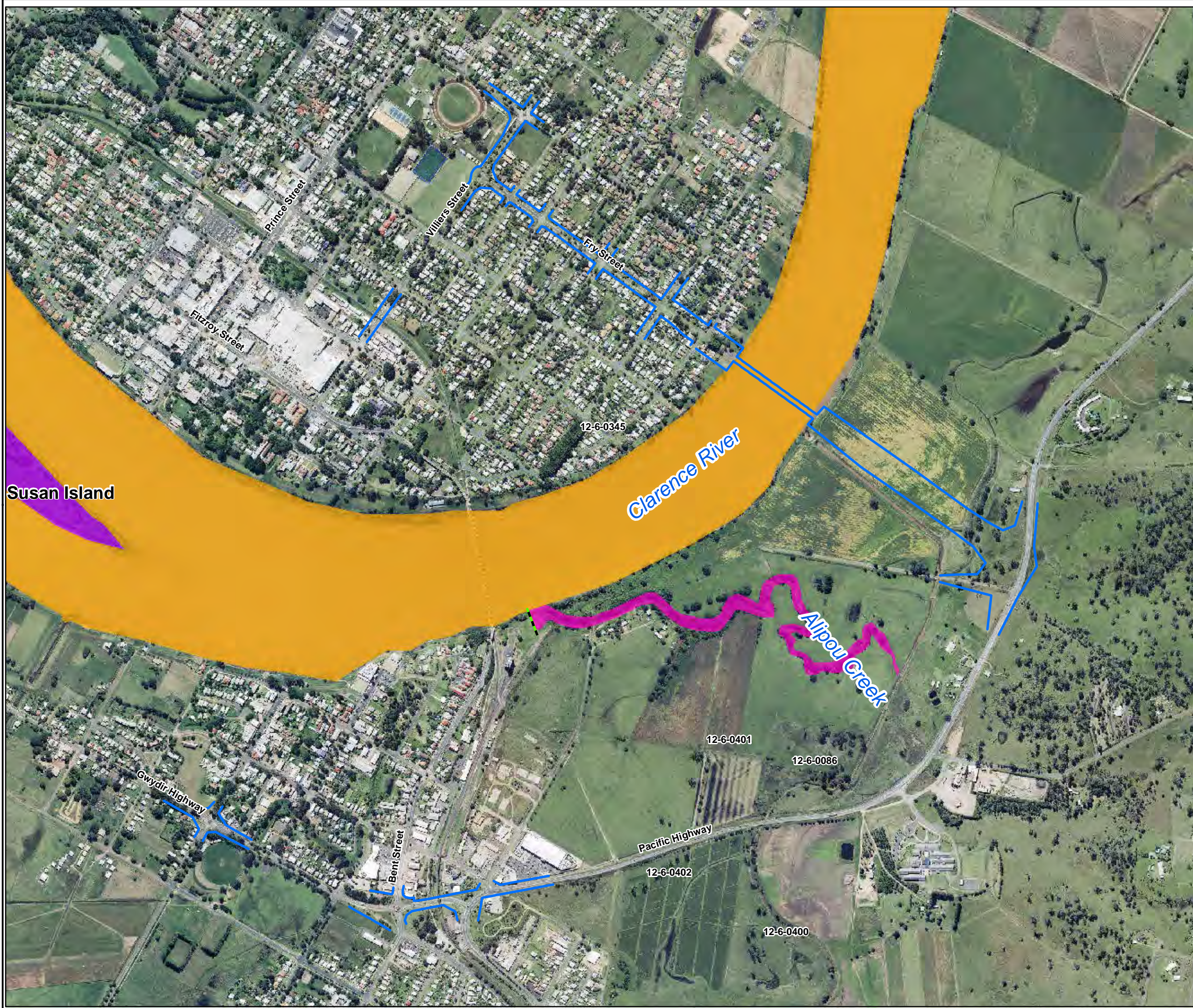
##### ***Assessment***

No known impact.

##### ***Recommendations***

No recommendations.






**Legend**

- Route extent
- Protection Barrier
- Cultural Values/Places
- Aboriginal Ceremony and Dreaming, Men's site
- Ceremonial Ring, Women's site
- Dreaming/Creation Story
- Golden Eel Site + Marriage Tree
- Great Marlow Region

**Figure 4: Known areas of Aboriginal cultural heritage in the vicinity of Option 11**


0 110 220 330 440 550  
 Metres  
 Scale: 1:11,000 @ A3  
 Coordinate System: GDA 1994 MGA Zone 56



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#### **4.1.5 Option 14**

##### ***Items of Aboriginal cultural significance***

###### *Great Marlow (Figure 5)*

The Great Marlow region was identified during the preliminary study as an area that Aboriginal people commonly used to travel through and that contains many areas of high significance (refer *Preliminary Route Options Report – Final* [RMS, January 2012]). No further information was obtained during the current investigation.

##### ***Assessment***

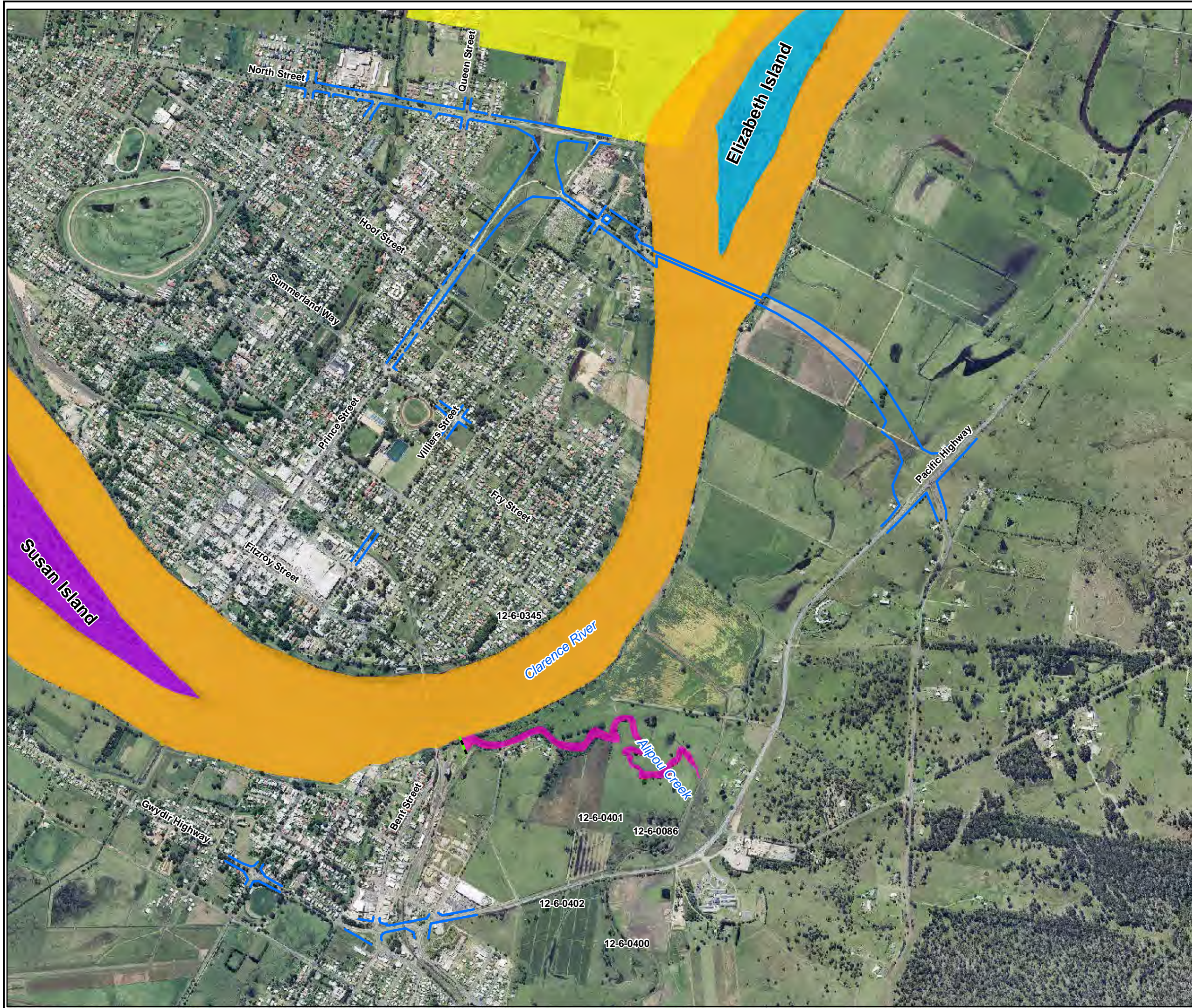
Proposed alterations to North Street between Prince and Duke Street could impact on the edge of the Great Marlow region. Further consultation with the Grafton-Ngerrie LALC is required to determine the physical, visual and spiritual impacts on this area.

##### ***Recommendations***

###### *Great Marlow*

The area identified as the Great Marlow region should be avoided. The significance and boundaries of this area are not well understood at present and further consultation with Grafton-Ngerrie LALC is required to better understand this region prior to the selection of the preferred option.






**Legend**

- Route extent
- Protection Barrier
- Cultural Values/Places
- Aboriginal Ceremony and Dreaming, Men's site
- Ceremonial Ring, Women's site
- Dreaming/Creation Story
- Golden Eel Site + Marriage Tree
- Great Marlow Region

**Figure 5: Known areas of Aboriginal cultural heritage in the vicinity of Option 14**

0 170 340 510 680 850  
 Metres  
 Scale: 1:17,000 @ A3  
 Coordinate System: GDA 1994 MGA Zone 56




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#### 4.1.6 Option 15

##### **Items of Aboriginal cultural significance**

###### *Tracker Robinson's Camp (AHIMS site number pending, Figure 6)*

The site of Tracker Robinson's Camp was identified during the February 2012 field survey through personal communication with a local resident and with Gwen, Rod and Brett Duroux (descendants of Tracker Robinson).

William Leslie "Tracker" Robinson served as an Aboriginal tracker with the NSW police for 47 years from 1914 (*The Northern Star*, Saturday October 15 1994, page 7 – see Appendix 4). It is believed that Tracker Robinson spent a period of time living at the camp in the early years of his work as a tracker. An AHIMS site card has been prepared.

###### *Great Marlow (Figure 6)*

The Great Marlow region was identified during the preliminary route option study as an area that Aboriginal people commonly used to travel through and that contains many areas of high significance (refer *Preliminary Route Options Report – Final* [RMS, January 2012]). No further information was obtained during the current investigation.

##### **Assessment**

Tracker Robinson's Camp (AHIMS site number pending) would not be impacted by the alignment Option 15; however there is the potential for impacts during construction should Option 15 be chosen.

The Great Marlow Region would be impacted by Option 15.

Further consultation with the Grafton-Ngerrie LALC to discuss spiritual impacts is required if Option 15 is chosen.

##### **Recommendations**

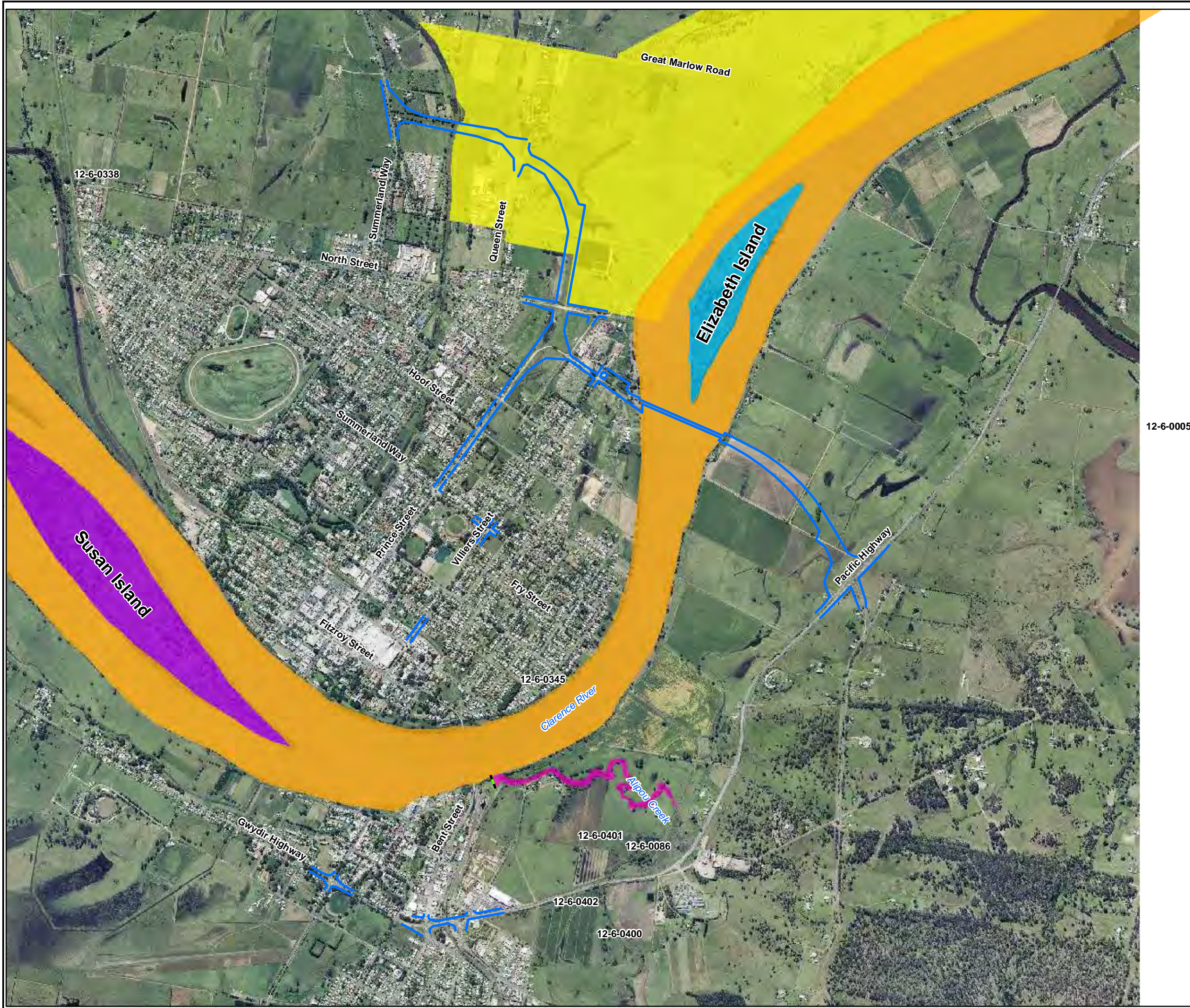
###### *Tracker Robinson's Camp*

The area identified as Tracker Robinson's Camp should be registered with AHIMS and should be avoided. If Option 15 is chosen a physical barrier (e.g. a 1.8 m high wire mesh fence) should be placed between the camp site and the construction site.

###### *Great Marlow*

The area identified as the Great Marlow region should be avoided. The significance and boundaries of this area are not well understood at present and further consultation with Grafton-Ngerrie LALC is required to better understand this region prior to the selection of the preferred option.





**Legend**

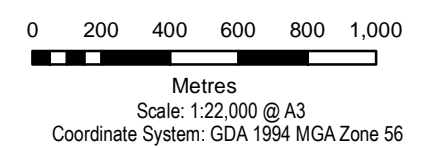
- Route extent
- Protection Barrier

**Cultural Values/Places**

- Aboriginal Ceremony and Dreaming, Men's site
- Ceremonial Ring, Women's site
- Dreaming/Creation Story
- Golden Eel Site + Marriage Tree
- Great Marlow Region

**Figure 6: Known areas of Aboriginal cultural heritage in the vicinity of Option 15**

A sensitive archaeological site (Tracker Robinson's camp) has been identified within the study area, but has not been shown on the mapping.



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## 4.2 Summary

- No known areas of Aboriginal cultural heritage would be impacted by Options E, A or 11
- The alignment of Option C is in close proximity to the Golden Eel site although it does not physically impact it. However, the site could potentially be impacted during construction and the Grafton-Ngerrie LALC has raised concerns about this as well as the impacts on the aesthetic values of the site.
- The area of Great Marlow would be impacted by the alignment of Options 14 and 15
- The area of Tracker Robinson’s Camp could potentially be impacted during construction, although it is not impacted by the alignment of Option 15

Short-list option	Impacts on known Aboriginal cultural heritage
<b>E</b>	N
<b>A</b>	N
<b>C</b>	Y Golden Eel site could potentially be impacted during construction and the Grafton-Ngerrie LALC has raised concerns about this as well as the impacts on the aesthetic values of the site. Golden Eel Site is in close proximity to the option and measures will need to be taken during construction to protect the site.
<b>11</b>	N
<b>14</b>	Y – Great Marlow
<b>15</b>	Y – Great Marlow In addition, Tracker Robinson's Camp site is in close proximity to the option and measures will need to be taken during construction to protect the site

**Table 4: Impact assessment of route options on known Aboriginal cultural heritage**

## 5.0 RECOMMENDATIONS FOR CULTURAL HERITAGE VALUES

### **Report Recommendation:**

This report is culturally sensitive. Permission from the Grafton-Ngerrie LALC and knowledge holders has been received prior to public release.

### **Recommendation 1: *The Golden Eel site at Alipou Creek***

The area identified as the Golden Eel site along Alipou Creek and the mouth of Alipou Creek where it meets the Clarence River will not be physically impacted by the alignment of Option C. There is the potential for impacts to this area during construction works, if Option C is chosen, because of its close proximity. If Option C is chosen a physical barrier (e.g. a 1.8 m high wire mesh fence) should be placed between the mouth of Alipou Creek where it meets the Clarence River and the construction site. Suggested placement of the physical barrier, chosen in consultation with Rod and Brett Duroux, is shown in Figure 3.

Discussion with representatives of the Grafton-Ngerrie LALC has highlighted the need to avoid physical impacts to this site. The Grafton-Ngerrie LALC has also identified that the aesthetic values of the Golden Eel Site will be impacted by this option. Further consultation with Grafton-Ngerrie LALC will be required if this option is chosen.

### **Recommendation 2: *Tracker Robinson's Camp***

The area identified as Tracker Robinson's Camp should be registered with AHIMS and should be avoided. If Option 15 is chosen a physical barrier (e.g. a 1.8 m high wire mesh fence) should be placed between the camp site and the construction site.

Further consultation with Grafton-Ngerrie LALC will be required if this option is chosen.

### **Recommendation 3: *Great Marlow***

The area identified as the Great Marlow region should be avoided. The significance and boundaries of this area are not well understood at present and further consultation with Grafton-Ngerrie LALC is required to better understand this region prior to the selection of the preferred option.

### **Recommendation 4: *Known Aboriginal objects and Places***

All efforts must be made to avoid impacts to known Aboriginal objects and Places. If avoidance is not possible, consultation with Grafton-Ngerrie LALC must be undertaken and reasoning must be documented.

If works come within 30 m of a known site a physical barrier (e.g. a fence) should be erected to protect the site during construction. All construction staff and managers should also undergo an Aboriginal heritage induction prior to commencing works in the vicinity of known sites. Consultation with Grafton-Ngerrie LALC will also be required. The Grafton-Ngerrie LALC has requested that a culture and heritage induction is presented to all staff by the Grafton-Ngerrie LALC and independent of any government department.

Biosis Research support a combined heritage induction that covers Aboriginal cultural and archaeological heritage values.

If works cannot avoid known sites an Aboriginal Heritage Impact Permit issued by the Office of Environment and Heritage (OEH) may be required.

**Recommendation 5:** *Discovery of unanticipated Aboriginal objects*

All Aboriginal objects and Places are protected under the *NSW National Parks and Wildlife Act 1974*. It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by the OEH. Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved or further disturbed until assessed by a qualified archaeologist and the Grafton-Ngerrie LALC. If the find is determined to be an Aboriginal object the archaeologist will provide further recommendations. These will include notifying the OEH and further consultation with Grafton-Ngerrie LALC.

**Recommendation 6:** *Discovery of Aboriginal Ancestral Remains*

Aboriginal ancestral remains may be found in a variety of landscapes in NSW, including middens and sandy or soft sedimentary soils. If any suspected human remains are discovered during any activity you must:

1. Immediately cease all work at that location and not further move or disturb the remains
2. Notify the NSW Police and Office of Environment and Heritage's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location
3. Notify the Grafton-Ngerrie LALC as soon as practicable
4. Not recommence work at that location unless authorised in writing by OEH and the Grafton-Ngerrie LALC

**Recommendation 7:** *Continued consultation with the registered Aboriginal stakeholders.*

As per the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW 2010) and the *RMS Procedure for Aboriginal Cultural Heritage Consultation and Investigation* (PACHCI) (RMS 2011), it is recommended that the proponent provides a copy of this report to the Aboriginal stakeholders and considers all comments received. The proponent should continue to inform these groups about the management of Aboriginal cultural heritage sites within the project area throughout the life of the project.

## 6.0 PART TWO: ABORIGINAL ARCHAEOLOGICAL HERITAGE

### 6.1 Investigations into Aboriginal archaeological heritage during the preliminary route options investigation

An investigation of Aboriginal archaeological heritage was undertaken in December 2010 and April 2011. These investigations are documented in the *Technical Paper: Aboriginal Heritage* in Volume 2 of the *Preliminary Route Options Report – Final* (RMS, January 2012).

The following is a summary of the work undertaken during the preliminary route investigation:

- Heritage register searches to identify any previously recorded cultural heritage sites or places, of the:
  - Aboriginal Heritage Information Management System (AHIMS) database.
  - National Native Title Tribunal.
  - National Heritage List.
  - Commonwealth Heritage List.
  - State Heritage Register.
  - Register of the National Estate.
  - Heritage Schedules of the *Grafton Local Environmental Plan (1988)* and the *Clarence Valley Local Environmental Plan (2010)*.
  - Heritage Schedules of the *North Coast Regional Environmental Plan (15 December 2008)*.
- Background research involving the review of all relevant literature in order to recognise any identifiable trends in Aboriginal archaeological site distribution and location.
- A preliminary reconnaissance field survey of the Grafton and South Grafton area to locate previously recorded sites and identify any additional unrecorded Aboriginal archaeological sites or areas of Aboriginal archaeological potential.
- Opportunities and constraints across the Grafton and South Grafton area were identified based on the findings of this investigation and broad recommendations to minimise or mitigate impacts to Aboriginal archaeological sites were made.
- Management recommendations in regards to the identified sites, including any further investigations required to fulfil legislative requirements.
- Assessment of the 25 preliminary route options based on the research described above.

## 6.2 Short-list of route options

The current investigations incorporate the six route options outlined in Table 5 and shown in Figures 1-6.

Option	Location
E	Cowan Street, South Grafton to Villiers Street, Grafton
A	New bridge parallel to and immediately upstream of the existing bridge connecting Bent Street, South Grafton and Fitzroy Street, Grafton
C	Junction of Pacific Highway and Gwydir Highway, South Grafton to Pound Street, Grafton
11	Existing Pacific Highway north of South Grafton to Fry Street, Grafton
14	Existing Pacific Highway north of South Grafton to North Street, Grafton via Kirchner Street
15	Existing Pacific Highway north of South Grafton to Summerland Way north of Grafton, via Kirchner Street

**Table 5: Description of the six short-listed route options**

## 6.3 Known areas of Aboriginal archaeological significance

The following archaeological sites were identified as having significance to the Aboriginal community in the *Preliminary Route Options Report - Final* (RMS, January 2012).

AHIMS #	Site Locality	Site Type	Notes
12-5-0005	Swan Creek	Burial	
12-6-0086	Grafton	Modified Tree	
12-6-0115	South Grafton	Ceremonial Mound / Ring	
12-6-0158	CH-G-48	Artefact	
12-6-0216	Grafton	Modified Tree	
12-6-0219	Susan Island	Ceremonial Mound / Ring	Restricted. Access to site card by permission only.
12-6-0326	Clarence River Golden Eel	Aboriginal Ceremony and Dreaming	General restriction Access to site card by permission only.
12-6-0327	Elizabeth Island	Aboriginal Ceremony and Dreaming	Restricted. Access to site card by permission only.
12-6-0338	Carr's Creek Camp	Habitation Structure	
12-6-0340	South Grafton	Habitation Structure	
12-6-0345	Grafton	Modified Tree	Site card not available from AHIMS
12-6-0349	South Grafton	Ceremonial Mound / Ring	Site card not available from AHIMS
12-6-0352	South Grafton	Habitation	

		Structure	
12-6-0401	South Grafton	Modified Tree	
12-6-0402	South Grafton	Modified Tree	
12-6-0400	South Grafton	Open campsite	

**Table 6: AHIMS search results (completed 28/02/2011) and sites identified during the Preliminary Route Options field survey**



## 7.0 METHODOLOGY

### 7.1 Field survey methodology

The field survey was conducted where possible and feasible in accordance with the guidelines outlined in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010).

Survey methods used for this assessment have been designed to locate archaeological sites within and surrounding the route options with reference to the following information:

- Previously recorded sites within or close to the route options;
- Areas of potential as identified by the background research predictive model (regional site patterns as compared to the physical environment of the project area, or items identified in historic plans);
- The proposed work site and buffer areas.

The targeted field survey was conducted in February and April 2012. It was attended by Samantha Higgs (Biosis Research), Samantha Gibbins (Biosis Research), Brett Duroux (Grafton-Ngerrie Local Aboriginal Land Council [LALC]) and Rod Duroux (Grafton-Ngerrie LALC).

The objectives of the site visit were to:

- Assess the previous disturbance to the area within and surrounding the route options;
- Assess the potential of the area within and surrounding the route options to possess intact Aboriginal heritage;
- Locate any Aboriginal objects or Places present within and surrounding the route options.

Survey area and site coordinates were logged on a hand-held GPS receiver, using the Map Grid of Australia (MGA) co-ordinate system. All photographs were taken using a digital camera.

Information recorded during the survey included:

- Landform element;
- Ground surface visibility (GSV) and areas of exposure (for definitions see Section 7.3.1);
- Observable disturbances to the landscape from human or animal activities;
- Any archaeological sites present within or surrounding the route options.

This information was also used to assist in the identification of areas of archaeological potential. Distinguishing landform elements and their association with Aboriginal cultural heritage may assist with the identification of site patterning, with an understanding of the following limitations:

- The degree of GSV and amount of exposed areas can significantly bias the discovery of surface artefacts;
- Cultural material exposed on the surface is not necessarily representative of the potential extent of the site (either horizontally or vertically).

Information about GSV and areas of exposure helps to provide a general indication of the effectiveness of the survey for identifying Aboriginal cultural heritage exposed to the surface. Observable disturbances are also considered when assessing the integrity of known or potential sites for an area.

## 7.2 Indicators for the assessment of the route options

The following indicators will be used for this investigation, to determine the potential impacts of the six route options on areas of Aboriginal archaeological significance:

Indicator	Description	Unit
Number of known Aboriginal archaeological sites potentially impacted	<p>This is an indicator of the comparative potential impacts on known Aboriginal archaeological sites.</p> <p>Aboriginal archaeological sites include stone artefact scatters and scarred trees.</p> <p>The level of significance of the identified archaeological sites is categorised as high, moderate and low.</p> <p>Comparatively the greater the number of sites and the higher the significance of the sites, the greater the potential impact to Aboriginal archaeological heritage.</p>	Number
Length through areas of high Aboriginal archaeological potential	<p>This is an indicator of the comparative impacts on Aboriginal archaeological potential. While some areas have been identified as containing 'known' Aboriginal archaeological sites/items (per the indicator above), other areas may have the 'potential' to contain Aboriginal archaeological sites/items.</p> <p>Areas around Grafton have been ranked as having high, medium or low potential to contain Aboriginal archaeological sites/items.</p> <p>This indicator measures the length of each option that crosses through areas of high Aboriginal archaeological potential.</p> <p>Areas considered as having a high archaeological potential include major creek lines, raised flat landforms such as ridges and hills, or where there has been minimal disturbance to the specific area. Artefacts that remain within these areas are likely to be high in density and large in size.</p> <p>For the purposes of this assessment, the length through areas of high archaeological potential has been measured along the widest part of the area of high potential where it falls within each route option.</p> <p>Comparatively the greater the length, the greater the potential impact.</p>	m

## 7.3 Suitability of methodology used

### 7.3.1 General suitability

With any archaeological survey there are several factors that influence the effectiveness (the likelihood of finding sites) of the survey. The factors that contributed most to how detectable archaeological sites were in the project area were visibility and exposure.

#### Visibility

In most archaeological reports and guidelines visibility refers to *ground surface visibility*, and is usually a percentage estimate of the ground surface that is visible and allowing for the detection of (usually stone) artefacts that may be present on the ground surface (NSW National Parks and Wildlife Service [NPWS] 1997: Appendix 4). The primary factor that affects visibility is

vegetation cover; however other things such as introduced fill or excavation will also significantly hamper visibility and surface site detection.

### *Exposure*

Exposure refers to the geomorphic conditions of the local landform being surveyed, and attempts to describe the relationship between those conditions and the likelihood the prevailing conditions provide for the exposure of (buried) archaeological materials. Whilst also usually expressed as a percentage estimate, exposure is different to visibility in that it is in part a summation of geomorphic processes, rather than a simple observation of the ground surface (Burke and Smith 2004: 79; NSW NPWS 1997: Appendix 4). Factors that affect archaeological exposure include the natural geomorphic process acting on a landscape, whether it is aggrading, stable or eroding, and the level of previous disturbance which will potentially bury or expose archaeological sites.

### **7.3.2 Suitability of this investigation**

Several factors impacted upon the effective survey coverage for each of the route options. Primary constraints on the survey of the six route options included limited property access and limited time for inspection, which meant that not all land potentially impacted by the options could be walked over. Wherever possible, properties that could not be accessed were viewed from the roadside and/or adjacent properties.

The recent large amount of rainfall in the region prior to the survey led to dense grass and plant cover across the majority of the areas inspected. This resulted in nil visibility, except in small, infrequent patches of exposure usually associated with disturbance to the ground surface. Disturbances throughout the area include urban development, vegetation clearance and pastoral use of the land, construction of the existing bridge, and installation of levee banks. Properties in low-lying (floodplain) areas were in some cases inundated with water due to the recent rainfall, resulting in nil ground surface visibility.

The wide area covered by this investigation, time and access constraints and very poor ground surface visibility resulted in severe limitations on the field survey. As a result assessment of areas of archaeological potential has been made conservatively and may include areas of disturbance not uncovered by this investigation.

Despite these limitations, the consultation to date and the methodology used is suitable for this stage of the process for a comparative assessment of the six route options.

## **7.4 Site definitions and predictive model**

The archaeological predictive model has been formulated based on the results of the landform analysis, location and type of Aboriginal sites previously recorded within the regional area and information from previous archaeological work completed throughout the region. The background research is included in the *Preliminary Route Options Report: Aboriginal Heritage Technical Paper*. This information has been broken down into patterns that have been compared to the character of the region to allow for an understanding of Aboriginal archaeological potential.

Based on this information, the following predictive model has been developed, indicating the site types most likely to be encountered during the field survey within the Grafton and South Grafton area. The definition of each site type is described firstly, followed by the predicted likelihood of this site type occurring within the area.

### ***Open campsites, artefact scatters, isolated finds and raw material sources/quarries***

Open campsites and artefact scatter sites can range from high-density concentrations of artefacts to sparse, low-density 'background' scatters. These represent a diversity of everyday activities, settlement, hunting and gathering and tool manufacture. Isolated stone artefact occurrences can be located anywhere in the landscape. They can represent discard or loss during transitory movement, or an eroded larger sub-surface site.

Based on the known distribution of Aboriginal sites within the region, there is some potential that artefact sites may be identified within the region as either surface sites (either single artefact occurrences or open campsites) and/or buried sites (archaeological deposits). The identification of these sites depends greatly on ground surface visibility resulting in the

boundaries of a site being defined by the visible extent of the artefacts on the surface. With high levels of previous disturbance, vegetation cover and cyclical flooding of the Clarence River, it is unlikely that this site type will be identified on the surface, but rather, it is highly likely that these areas will contain sub-surface archaeological deposits.

### ***Potential Archaeological deposits***

Potential archaeological deposits generally comprise stable deposits or landforms that are highly likely to contain intact sub-surface archaeological evidence of use or occupation. Areas of potential archaeological deposits generally have very minimal impact (natural and historic), comprise a stable landform, consist of predictable occupation locations and contain in situ archaeological material. There is some potential for archaeological deposits to occur where previous disturbance has been minimal.

### ***Scarred and carved trees***

Scarred trees exhibit scars caused by the removal of bark used in the manufacture of shields, canoes, containers or shelters. These occur on older trees, generally of a size from which a suitable piece of bark can be removed. The survival of scarred trees is generally influenced by the clearance of vegetation land use history of an area.

Carved trees exhibit intricate geometric designs or figures by cutting the bark itself or by removing an area of bark and then cutting the underlying hardwood. Carved trees can be associated with burial places or ceremonial/initiation ground. The survival of carved trees (dendroglyphs) is an extremely rare occurrence in Australia and is generally limited to south-east Queensland and north-eastern New South Wales (Attenbrow 2002:144). Carved trees can be associated with both burial places and initiation grounds. Etheridge (1918) describes those trees associated with burial places as taphoglyphs, and those indicative of initiation grounds as teleglyphs. Both types of carved trees exhibit intricate geometric designs or figures carved either on the bark or by removing an area of bark and then cutting designs or figures into the hardwood.

Four modified trees have been identified within the Grafton and South Grafton area, illustrating the potential for modified or scarred trees to exist in areas with old growth trees. Based on the environmental research completed during this investigation, including viewing aerial mapping of the area, there is some potential for scarred trees to occur where older trees survive.

### ***Axe grinding grooves***

Axe grinding grooves are often found on large open and relatively flat areas of sandstone shelving and outcrops. Individual grooves are elongated, narrow depressions often found in sedimentary rock, such as sandstone, in association with water sources, including creeks and swamps.

The geology of the immediate region does not indicate that suitable horizontal sandstone rock outcrops will occur. Therefore there is very low potential for axe grinding grooves to occur.

### ***Burials***

Aboriginal burial sites are generally situated within deep, soft sediments, caves or hollow trees. The locations of burials can be indicated by carved trees, or become exposed in eroding or shifting sand or soft sediment deposits. Such sites hold great significance for Aboriginal people and the disturbance of burials or burial places is a very sensitive issue. A number of burials have been registered or identified in ethnographical accounts within the region.

Soft alluvial sediments associated with the Clarence River and several permanent creeks around Grafton suggest that there is a moderate chance of burials to occur, where disturbance has been minimal.

### ***Rock shelters with art and / or deposit***

Rock shelter sites include rock overhangs, shelters or caves, and generally occur on, or next to, moderate to steeply sloping ground characterised by cliff lines and escarpments. These naturally formed features may contain rock art, stone artefacts or midden deposits and may also be associated with grinding grooves. The sites will only occur where suitable sandstone exposures or overhangs possessing sufficient sheltered space exist. There are no topographical features suitable for the formation of rock shelters or overhangs within the immediate Grafton and South Grafton area. It is therefore unlikely that rock shelters with art and/or deposit will be present.

### ***Aboriginal ceremony and dreaming / mythological sites***

Sites associated with past Dreamtime stories and beliefs about the creation of the landscape are usually only known from ethnographic recordings or the continuation of past stories to the current generation of Aboriginal inhabitants.

*Mythological / dreaming sites:* such sites may comprise tangible and/or intangible features. Mythological and dreaming sites are often of high significance to the Aboriginal community. Detailed information regarding these sites is often held in trust by members of the Aboriginal community, and such sites are likely only to be identified through consultation with the Aboriginal community. One such site is known and registered, and there is potential that additional unregistered sites may exist.

*Ceremonial sites (including ceremonial rings, marriage trees etc.):* such sites are associated with cultural practices and may comprise tangible and/or intangible features. As with mythological and dreaming sites, ceremonial sites can be of high cultural significance and might only be identified through consultation with the Aboriginal community. Several cultural and ceremonial sites are registered in the Grafton and South Grafton area and there is potential for additional sites to be present.

In Grafton a number of stories have been recorded and there are people who still retain traditional knowledge of the ceremonial aspect of the local culture. In the majority of cases it is only possible for the Aboriginal community themselves to comment on these 'less tangible' sites. In all cases the cultural significance can only be determined by the appropriate Aboriginal community representatives. Discussion of these site types is included in Part 1 of this technical paper.

### ***Post-contact sites***

These are sites relating to the shared history of Aboriginal and non-Aboriginal people of an area. Many of these sites can hold special significance for Aboriginal people and may include places such as missions, massacre sites, post-contact camp sites and buildings associated with post-contact Aboriginal use. This site type is usually known from historical records or knowledge preserved within the local community.

Aboriginal representatives will be consulted regarding their knowledge of such events.

### ***Aboriginal places***

Aboriginal *places* may not contain any "archaeological" indicators of a site, but are nonetheless important to Aboriginal people. They may be places of cultural, spiritual or historic significance. Often they are places tied to community history and may include natural features (such as swimming and fishing holes), places where Aboriginal political events commenced or particular buildings. Often these places are significant in the living memory of a community. There are currently no registered Aboriginal places within the Grafton and South Grafton area.

The likelihood of Aboriginal *places* occurring will be identified through consultation with the local Aboriginal community and registered Aboriginal stakeholders.

### ***Aboriginal resource and gathering sites***

Aboriginal Resource and Gathering Sites are sites where there is ethnographic, oral, or other evidence to suggest that natural resources have been collected and utilised by Aboriginal people. These natural resources have a cultural significance and connection for the Aboriginal community, such as ochre outcrops that were used for art or ceremonial purposes. These sites are still considered important places today. There are no such known sites identified within the region; however the likelihood of these sites occurring will be explored through a separate Aboriginal cultural assessment involving consultation with the local Aboriginal community.

#### **7.4.1 Aboriginal archaeological potential**

It is considered possible that stone artefact sites will remain undetected in many parts of the Grafton and South Grafton area, particularly along the banks of the Clarence River and its tributaries, Alipou Creek, Alamy Creek, Christopher Creek, Cowmans Creek and Musk Valley Creek. The location of these artefact sites are likely to conform to the landscape modelling characteristics described previously. Site preservation and integrity will be subject to the levels of previous disturbances within the Grafton and South Grafton area.

To determine the locations of these sites, an assessment of archaeological potential has been developed, based on those definitions applied by other heritage practitioners that have completed archaeological studies in the Grafton region (McBryde 1974; Hall and Lomax 1993; Navin and Officer 1990; Piper 1994a, 1994b).

Specifically, the assessment is based upon previous studies in similar landscapes, known sites within the region, knowledge of recent land uses and the results of the field survey. The assessment of archaeological potential and the assessment of scientific significance for recorded Aboriginal sites rely on similar criteria, i.e. knowledge of disturbance from land use and site type distribution in the wider Clarence Valley region.

Several areas of high cultural importance in the vicinity of the route options have been identified by Grafton-Ngerrie LALC and these areas have also been taken into account when assessing archaeological potential. Culturally important areas are likely to have increased the rate of visitation to an area and may therefore have an effect on potential site density and size.

Defined levels of archaeological *potential* are not a reflection of the presence of Aboriginal archaeological material, rather an indicator of the likelihood of 'intact' archaeological material within the region, usually on a particular landform.

An archaeological potential map has been developed for each route option and various 'levels' (low, medium and high) have been identified and defined as:

**Low potential:** Low likelihood for intact Aboriginal archaeological remains - Areas that have been identified as having specific locations where there has been a high degree of disturbance since the arrival of non-Aboriginal people, where the impact has been to the extent where no intact deposits are believed to be present. Areas may also include steep slopes or plains away from water sources. Artefacts found in this area are likely to be isolated, representative of 'background scatter' and in a highly disturbed context.

In this context all areas investigated are in close proximity to a water source (the Clarence River) so areas of low potential have been identified based mainly on visible levels of disturbance. As most of the route options are located within a highly urbanised environment areas of low potential have not been specifically identified in the mapping. Any areas in close proximity to the route options not identified as having moderate or high potential in Figures 8, 10, 12, 14, 16 and 18 should be considered as having low potential.

**Moderate potential:** Moderate likelihood for intact Aboriginal archaeological remains – Areas where minor post contact disturbance has occurred; these areas are located along creeks and waterways where short-term campsites may have been present. Artefact scatters are likely to vary in density, but are concentrated in small areas.

Areas of moderate potential have been identified in yellow in Figures 8, 10, 12, 14, 16 and 18.

**High potential:** High likelihood for intact Aboriginal archaeological remains – Areas associated with major creek lines, raised flat landforms such as ridges and hills, or where there has been minimal disturbance to the specific area and it is believed that an intact sensitive landscape exists. Artefacts that remain within these areas are likely to be high density and large in size.

Areas of high potential have been identified in red in Figures 8, 10, 12, 14, 16 and 18.

#### 7.4.2 Levels of disturbance

Disturbance has been assessed based on observations of land use made in the field. Detailed background investigation into the history of areas potentially impacted by the short-list route options has not formed a part of the scope for this report and it is possible that all areas of historical disturbance have not been identified.

**High disturbance:** Areas under existing buildings and roads, or where roads or buildings are known to have existed, are considered to be highly disturbed. Any areas known to have had the top soil removed are considered to have high disturbance.

**Low-Moderate disturbance:** Areas which have not been built on or been stripped of soil are considered to have low-moderate disturbance. Flooding events and pastoral activities while representing a level of disturbance do not necessarily disturb *in situ* sub-surface archaeological deposits (a good example of a well preserved sub-surface site in a pastoral area is described in Jo McDonald CHM 2005).

## 8.0 INVESTIGATION RESULTS

The survey coverage for each route option is shown in Figures 7, 9, 11, 13, 15 and 17. All properties that were made available for access are shown on the figures, but as noted in Section 7.3.2 these could not all be directly surveyed. The actual survey coverage for each route option is detailed below. The areas where the route options traverse existing roadways were not surveyed as they are already highly disturbed.

### 8.1 Option E

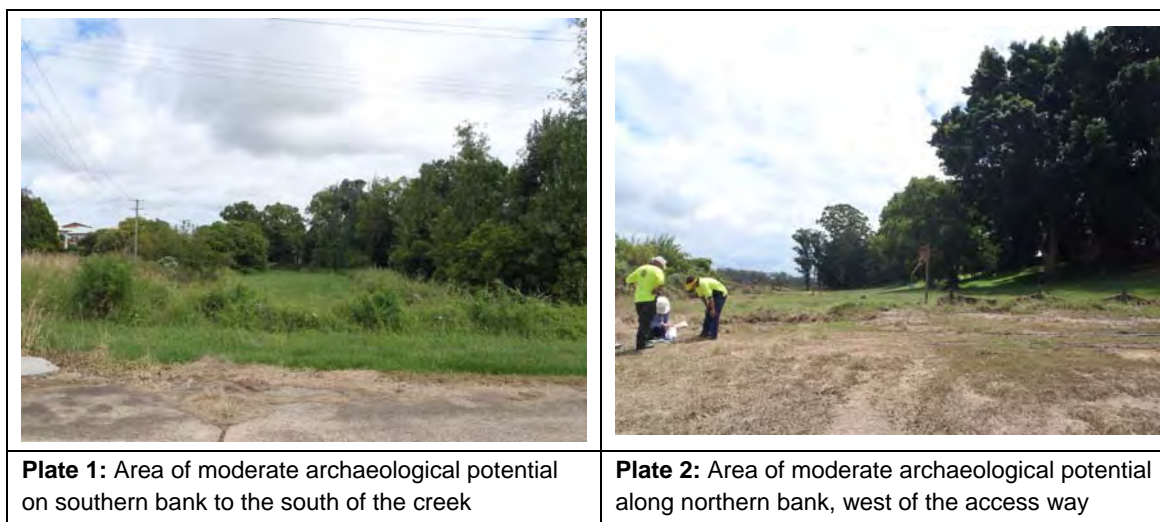
The survey coverage for Option E is shown in Figure 7. The results of the investigation for Option E are described in Table 7 and 8 below.

<b>Southern bank of the Clarence River</b>	
8.1.1	<p><b>Effective survey coverage</b></p> <p>The properties on the south bank of the Clarence River were viewed from Cowan Street. Visibility was nil due to the dense grass cover. Some small patches of exposure were evident in the paddock at the southernmost end, close to Cowan Street, which is currently being used for horse agistment.</p>
8.1.2	<p><b>Landform</b></p> <p>The area surveyed on the southern river bank is located on a floodplain. An unnamed creek runs east-west at the southernmost end of the survey area.</p>
8.1.3	<p><b>Disturbance</b></p> <p>An earthen levee has been constructed along the bank of the Clarence River in front of residential development. The paddocks to the west of Cowan Street are currently being used for pastoral activities but there are signs that a road once ran from Cowan Street across the southernmost paddock. Brett Duroux (Grafton-Ngerrie LALC) remembers a saw mill once operated on the land (Personal communication from Brett Duroux to author 15/02/2012).</p>
8.1.4	<p><b>Aboriginal archaeological sites</b></p> <p>No Aboriginal archaeological sites were detected during the field survey.</p>
8.1.5	<p><b>Aboriginal archaeological potential</b></p> <p>There is moderate potential for archaeological deposit to be present in the area of floodplain behind (to the south of) the levee and existing residence in areas not affected by the old road off Cowan Street (northern side of the small creek) and old saw mill (Figure 8). The small block of land between Spring Street and the northern bank of the small creek does not appear to have been subject to any development and also has moderate potential for archaeological deposit (Plate 1).</p> <p>No trees that could potentially have cultural scarring were observed.</p>

**Table 7: Survey results for the Southern bank of the Clarence River Option E**

<b>Northern bank of the Clarence River</b>	
<b>8.1.6</b> Effective survey coverage	Visibility along the bank was nil due to the dense grass cover. Odd patches of exposure were evident where vehicles had driven across the grassed area on the river bank.
<b>8.1.7</b> Landform	The area surveyed on the northern river bank is located on a floodplain. The bank area to the east of Villiers Street was waterlogged at the time of the survey. Land to the west of Villiers Street is more elevated and slopes up towards the back of buildings located on Victoria Street.
<b>8.1.8</b> Disturbance	At the time of the survey the low lying area to the east of Villiers Street was waterlogged from recent rain and the area between this section and the buildings on Victoria Street has been heavily landscaped. To the west of Villiers Street the river bank was higher and appeared less disturbed. The remains of a sports field and several large trees were observed in the area between the Clarence River and the back of the buildings on Victoria Street but in general this area appeared less disturbed than the area to the east of Villiers Street.
<b>8.1.9</b> Aboriginal archaeological sites	No Aboriginal archaeological sites were detected during the field survey.
<b>8.1.10</b> Aboriginal archaeological potential	<p>There is moderate potential for archaeological deposit to be present on the elevated land between the Clarence River and residential development to the west of Villiers Street (Figure 8 and Plate 2). The more elevated areas to the east of Villiers Street have been highly disturbed by landscaping works and the lower lying waterlogged area is likely to have been subject to very frequent inundation by the Clarence River. These areas have therefore been assessed as having low potential for archaeological deposit.</p> <p>No trees that could potentially have cultural scarring were observed.</p>

**Table 8: Survey results for the Northern bank of the Clarence River Option E**



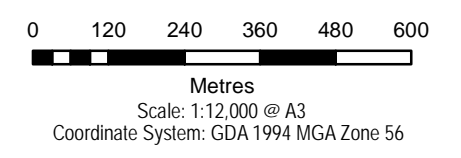




**Legend**

- Route extent
- Properties accessible for survey
- Properties viewed from the street or adjacent property

**Figure 7: Survey coverage in the vicinity of Option E**

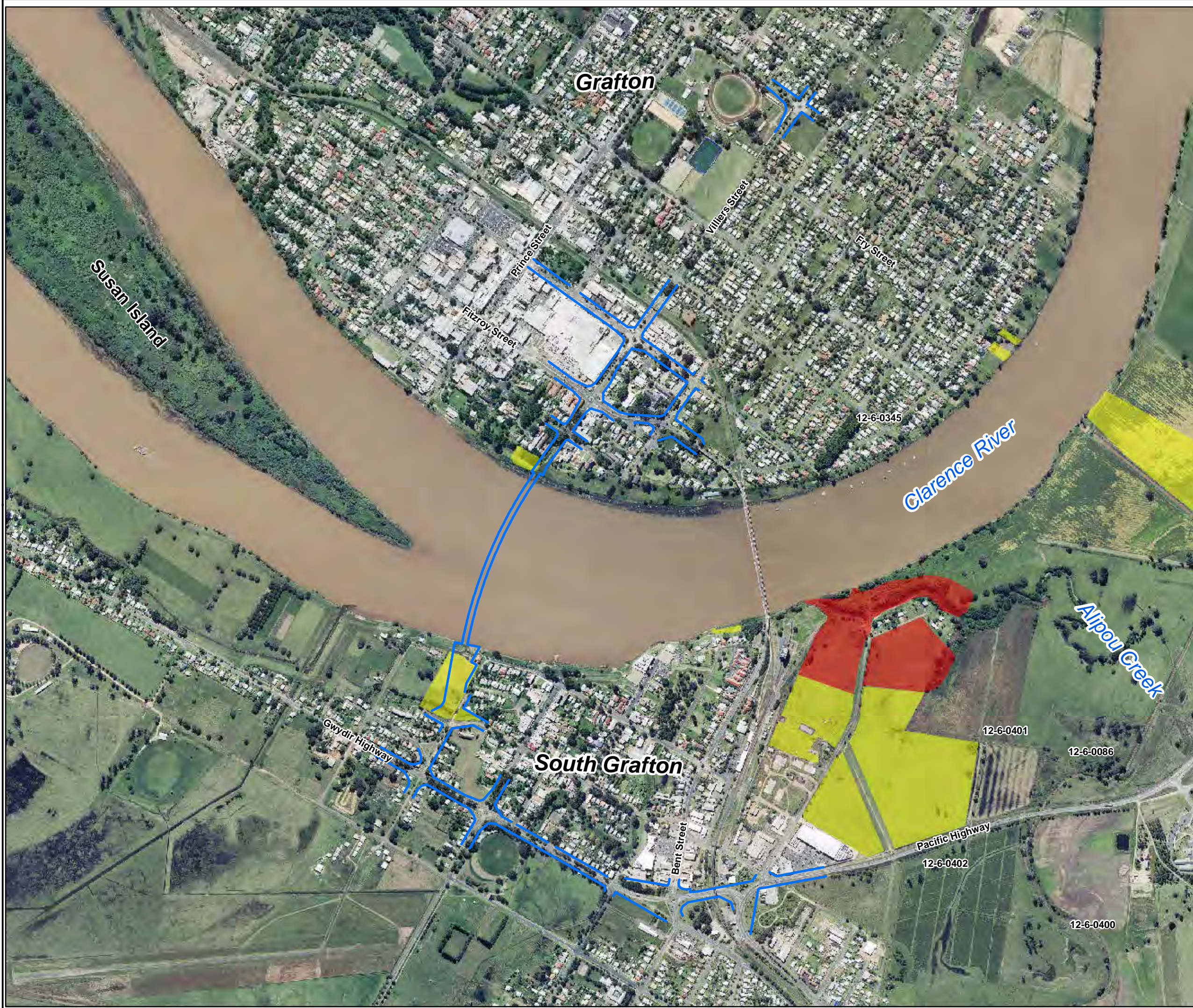


Biosis Research Pty. Ltd.  
18-20 Mandible Street  
Alexandria  
NEW SOUTH WALES  
2015

Offices also in: Ballarat, Melbourne,  
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Date: 07 June 2012, File number: 13529  
Checked by: S.J.G., Drawn by: JMS  
Location: P:\13500s\13529\Mapping\13529\_SurveyAccess\_070612.mxd

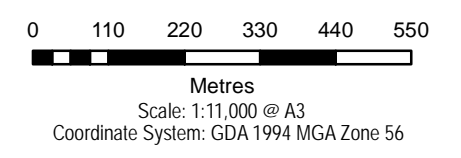





**Legend**

- Route extent
- Archaeological Potential
- High Archaeological Potential
- Moderate Archaeological Potential


**Figure 8: Known Aboriginal archaeological sites and areas of Aboriginal archaeological potential in the vicinity of Option E**





**Biosis Research**  
 Biosis Research Pty. Ltd.  
 18-20 Mandible Street  
 Alexandria  
 NEW SOUTH WALES  
 2015

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## 8.2 Option A

The survey coverage for Option A is shown in Figure 9. The results of the investigation for Option A are described in Table 9 and 10 below.



<b>Southern bank of the Clarence River</b>	
8.2.1 Effective survey coverage	<p>The river bank to the west of the existing bridge was viewed from the pedestrian walkway. Visibility in this area was nil due to the dense grass and vegetation cover. Water movement down the bank after recent rain has resulted in an area of exposure (Plate 3). This area was inspected for Aboriginal objects.</p> <p>The western edge of Council Reserve 83443, potentially impacted by Option A, was surveyed. Visibility was low due to grass cover and landscaping.</p>
8.2.2 Landform	The area surveyed on the southern river bank is located on a floodplain.
8.2.3 Disturbance	<p>The river bank to the west of the existing bridge has been developed with a walkway, and fragments of brick were evident at the surface. According to Rod Duroux (Grafton-Ngerrie LALC), jetties were once present along the river banks on either side of the current bridge (Personal communication from Brett Duroux to author 15/02/2012). Maritime and wharf sites along the banks of the Clarence River are presented in Table 8 and Figure 14 of the Non-Aboriginal Heritage Technical Paper (Biosis Research 2012).</p> <p>The western edge of Council Reserve 83443 has undergone major disturbance related to the construction of the Pacific Highway. Other disturbances include the installation of concrete drainage along the roadside; construction of the Trucker’s memorial; tree planting; and installation of signage, tracks and picnic facilities.</p>
8.2.4 Aboriginal archaeological sites	No Aboriginal archaeological sites were detected during the field survey.
8.2.5 Aboriginal archaeological potential	The river bank to the west of the existing bridge has been disturbed and therefore has low potential for archaeological deposits (Figure 10).

Table 9: Survey results for the Southern bank of the Clarence River Option A

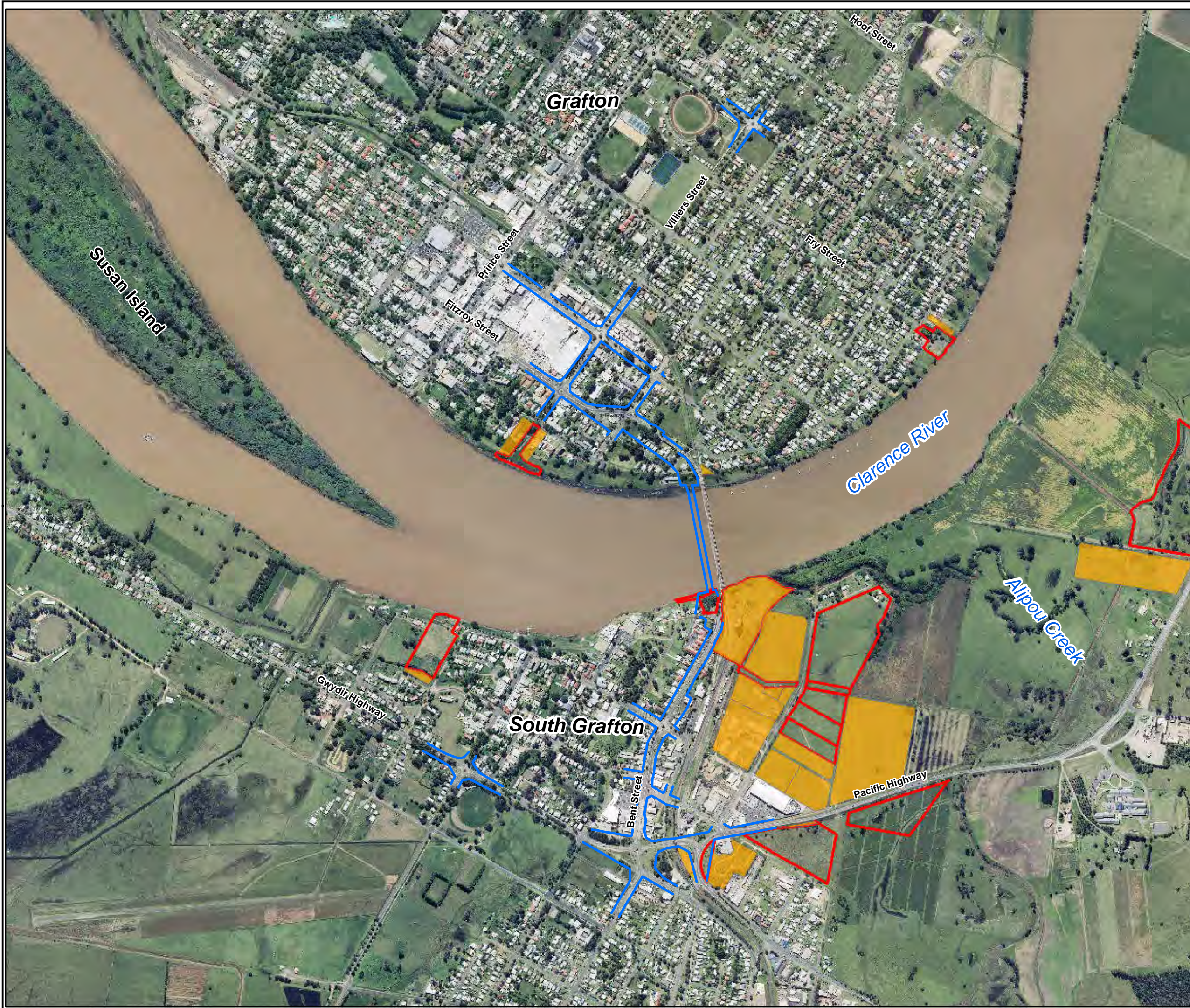
<b>Northern bank of the Clarence River</b>	
8.2.6 Effective survey coverage	Visibility along the bank was nil due to the dense grass cover.
8.2.7 Landform	The area on the northern river bank is located on a floodplain.

8.2.8 Disturbance	Disturbances to the northern river bank include construction of the existing bridge and boat sheds to the west of the current bridge and Option A. An earthen levee has also been constructed in this area.
8.2.9 Aboriginal archaeological sites	No Aboriginal archaeological sites were detected during the field survey.
8.2.10 Aboriginal archaeological potential	All of this area appears to have undergone some historical disturbance. There is low potential for Aboriginal archaeological deposit to be present (Figure 10 and Plate 4).

**Table 10: Survey results for the Northern bank of the Clarence River Option A**

	
<p><b>Plate 3:</b> Recent exposure caused by rain wash along the southern river bank, west of the existing bridge</p>	<p><b>Plate 4:</b> The northern river bank</p>






**Legend**

- Route extent
- Properties accessible for survey
- Properties viewed from the street or adjacent property


**Figure 9: Survey coverage in the vicinity of Option A**

0 120 240 360 480 600  
 Metres  
 Scale: 1:12,000 @ A3  
 Coordinate System: GDA 1994 MGA Zone 56



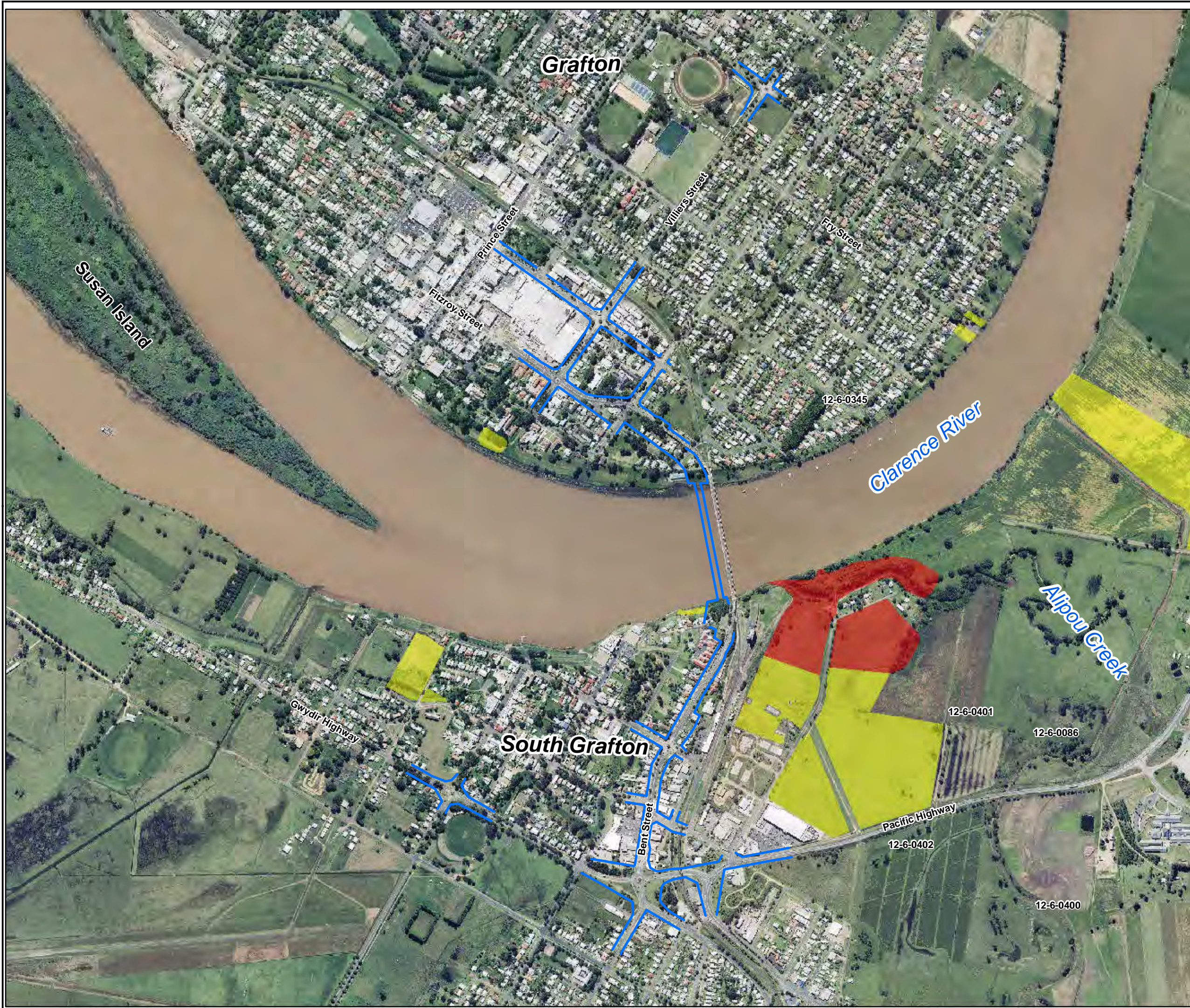
**Biosis Research**  
 Biosis Research Pty. Ltd.  
 18-20 Mandible Street  
 Alexandria  
 NEW SOUTH WALES  
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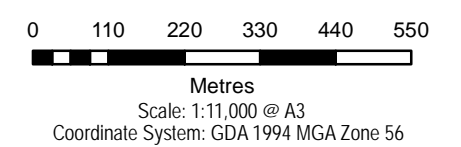




**Legend**

- Route extent
- Archaeological Potential
  - High Archaeological Potential
  - Moderate Archaeological Potential

**Figure 10: Known Aboriginal archaeological sites and areas of Aboriginal archaeological potential in the vicinity of Option A**



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### 8.3 Option C

The survey coverage for Option C is shown in Figure 11. The results of the investigation for Option C are described in Table 11 and 12 below.

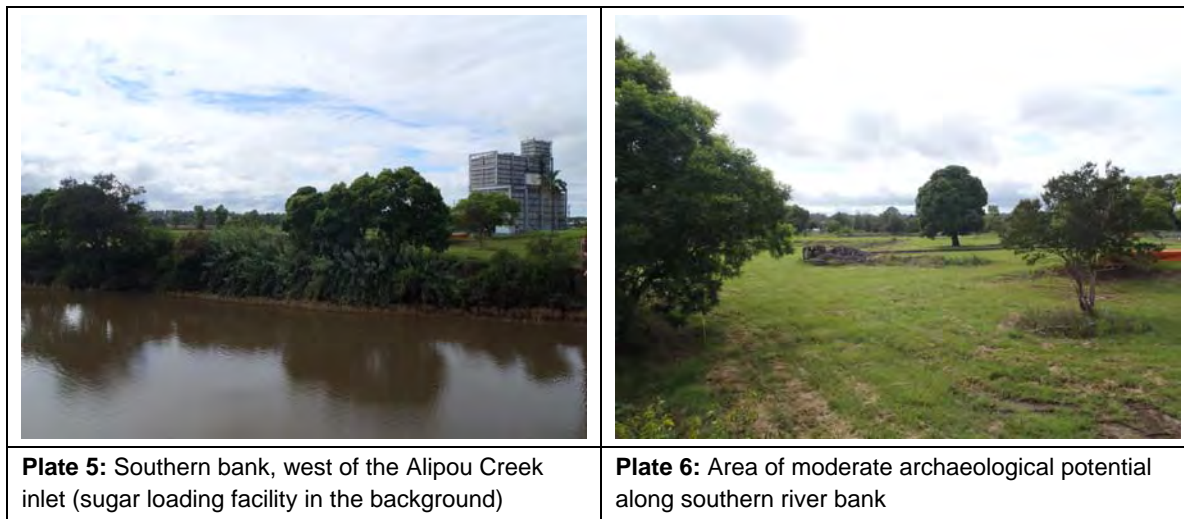
<b>Southern bank of the Clarence River</b>	
<b>8.3.1 Effective survey coverage</b>	<p>Dense grass cover resulted in nil visibility in the areas east and west of Iolanthe Street, west of Alipou Street and the area adjacent to the existing bridge.</p> <p>Scarred trees have been previously recorded south of the Pacific Highway; these were viewed from the roadside. The potential impact of Option C in this area will be predominantly along the disturbed roadside area of the Pacific Highway. Mature trees located near the railway line to the north of the sugar loading facility were also inspected for cultural scarring.</p>
<b>8.3.2 Landform</b>	<p>The area surveyed on the southern river bank is located on a floodplain.</p>
<b>8.3.3 Disturbance</b>	<p>The area immediately to the south of the river bank has been subjected to major disturbance through the construction and operation of a sugar loading facility, its associated railway and historic railway infrastructure, and blacksmith's workshops (now demolished). The river bank in this area is retained by a wooden post and cement retaining wall.</p> <p>Disturbances to the properties to the west of Iolanthe Street include urban development (roads, services and buildings); fencing of paddocks; tree (palm) planting; construction of a levee wall; and flood damage.</p> <p>Disturbances to the properties to the north of the Bunnings complex (located on the corner of Iolanthe Street and the Pacific Highway) and to the east of Iolanthe Street include an earthen levee crossing from southeast to northwest through this area. There were no other signs of major disturbance, beyond vegetation clearance and use of the paddocks for pastoral purposes.</p>
<b>8.3.4 Aboriginal archaeological sites</b>	<p>No Aboriginal archaeological sites were detected during the field survey.</p> <p>Scarred trees (AHIMS sites 12-6-0401 and 12-6-0402) have previously been recorded to the north and south of the Pacific Highway (Figure 12).</p> <p>A Marriage Tree (AHIMS site 12-6-0086) is registered on the banks of Alipou Creek.</p>
<b>8.3.5 Aboriginal archaeological potential</b>	<p>The banks and mouth of Alipou Creek and the area of higher ground to the south of Alipou Creek have been identified as having high archaeological potential (Figure 12 and Plate 5).</p> <p>This area is of high cultural importance to local Aboriginal groups and this importance may have resulted in higher levels of visitation, therefore increasing the density and likelihood of archaeological deposits. The presence of Alipou Creek also makes this area resource rich which again is likely to have promoted visitation of the area and increasing the likely density of archaeological deposits.</p> <p>An area around known site 12-6-0402 has also been designated as having high potential for archaeological deposits. The survival of the scarred trees suggests low disturbance in this immediate area.</p> <p>There is also moderate potential for archaeological deposits to be present in the undisturbed areas</p>

	<p>of floodplain to the south of the Clarence River and Alipou Creek (Plates 6, 7 and 8). These areas appear to have been used as pastoral land with minimal ground surface disturbance, and are located in close proximity to Alipou Creek and the Clarence River.</p> <p>The area occupied by the sugar loading facility and railway is considered to be highly disturbed and to have low archaeological potential.</p> <p>The river bank to the west of the existing bridge has been highly disturbed and therefore has low potential for archaeological deposits.</p>
--	---

**Table 11: Survey results for the Southern bank of the Clarence River Option C**

Northern bank of the Clarence River	
8.3.6 Effective survey coverage	Visibility along the bank was nil due to the dense grass cover.
8.3.7 Landform	The area on the northern river bank is located on a floodplain.
8.3.8 Disturbance	Disturbances to the northern bank include construction of the existing bridge and urban development. An earthen levee has also been constructed in this area.
8.3.9 Aboriginal archaeological sites	No Aboriginal archaeological sites were detected during the field survey.
8.3.10 Aboriginal archaeological potential	All of this area appears to have undergone some historical disturbance. There is low potential for Aboriginal archaeological deposit to be present (Figure 12).

**Table 12: Survey results for the Northern bank of the Clarence River Option C**





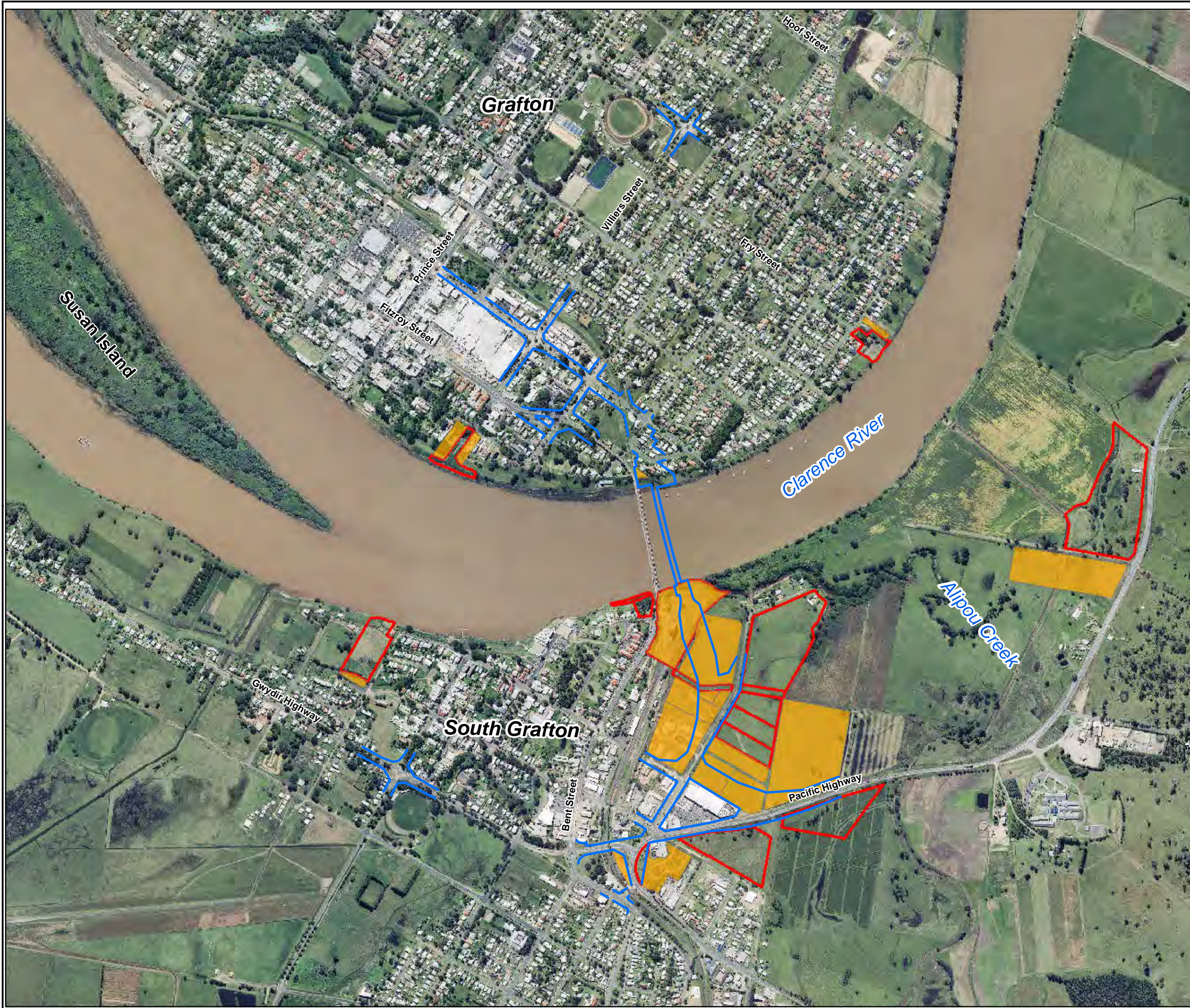


**Plate 7:** Area of moderate archaeological potential on floodplain, view north-west towards the Clarence River



**Plate 8:** Area of moderate archaeological potential on floodplain, view south-east towards Bunnings complex from Iolanthe Street.






**Legend**

- Route extent
- Properties accessible for survey
- Properties viewed from the street or adjacent property

**Figure 11: Survey coverage in the vicinity of Option C**


0 120 240 360 480 600  
 Metres  
 Scale: 1:12,000 @ A3  
 Coordinate System: GDA 1994 MGA Zone 56



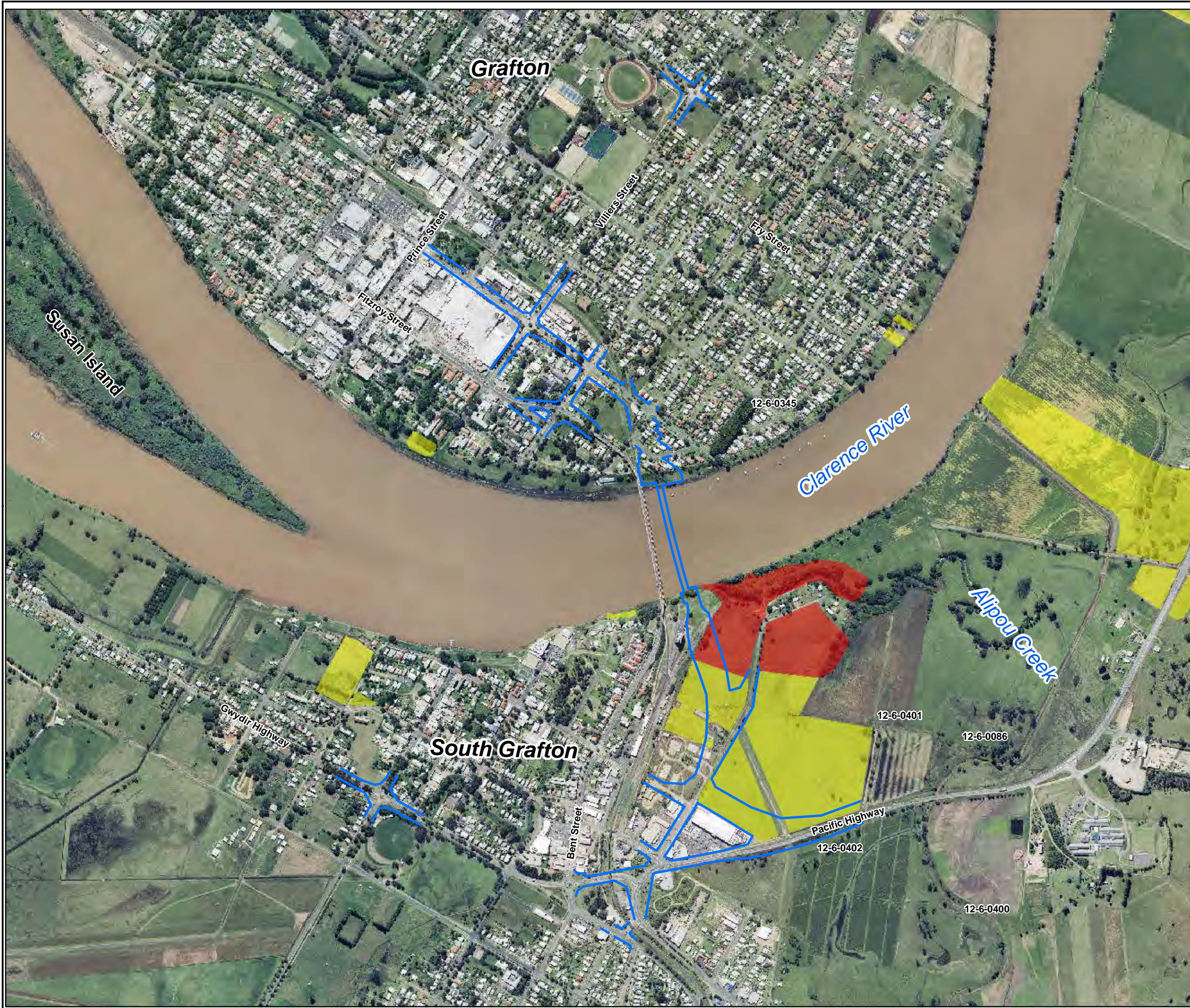
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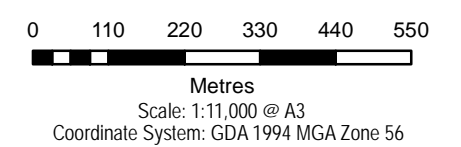




**Legend**

- Route extent
- Archaeological Potential
- High Archaeological Potential
- Moderate Archaeological Potential

**Figure 12: Known Aboriginal archaeological sites and areas of Aboriginal archaeological potential in the vicinity of Option C**



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## 8.4 Option 11

The survey coverage for Option 11 is shown in Figure 13. The results of the investigation for Option 11 are described in Table 13 and 14 below.



<b>Southern bank of the Clarence River</b>	
8.4.1 Effective survey coverage	Ground surface visibility was nil due to the dense grass cover (Plate 9).
8.4.2 Landform	The area surveyed on the southern river bank is located on a floodplain.
8.4.3 Disturbance	This area has been previously cleared of native vegetation and is currently being used for pastoral purposes. Disturbance in the area has resulted from the construction of the Pacific Highway (Plate 9) and McClaers Lane.
8.4.4 Aboriginal archaeological sites	No Aboriginal archaeological sites were detected during the field survey.
8.4.5 Aboriginal archaeological potential	The area away from the Pacific Highway has only had minor disturbance from pastoral uses and has been designated as having moderate potential for archaeological deposit (Figure 14). This area is crossed by multiple ephemeral creeks which would have provided resources for local Aboriginal groups. Mature trees were visible in this area, and will need to be investigated more closely if this option is selected as the preferred option (Plate 10).

**Table 13: Survey results for the Southern bank of the Clarence River Option 11**

<b>Northern bank of the Clarence River</b>	
8.4.6 Effective survey coverage	These areas were viewed from the public boat ramp and access way.
8.4.7 Landform	The area on the northern river bank is located on a floodplain.
8.4.8 Disturbance	The area on the northern river bank has been disturbed by urban development, including the construction of houses, roads and an earthen levee. Further disturbance has resulted from the installation of the boat ramp and access road.  The area between the backs of houses and the Clarence River bank appears not to have been developed and has been considered undisturbed.

<p>8.4.9 Aboriginal archaeological sites</p>	<p>No Aboriginal archaeological sites were detected during the field survey.</p>
<p>8.4.10 Aboriginal archaeological potential</p>	<p>There is moderate potential for archaeological deposit to be present in the undeveloped areas along the river bank (Figure 14).</p>

**Table 14: Survey results for the Northern bank of the Clarence River Option 11**

	
<p><b>Plate 9:</b> Pacific Highway built up above the level of the floodplain, view north</p>	<p><b>Plate 10:</b> Area of moderate archaeological potential, including potential scarred trees, view northwest</p>






**Legend**

- Route extent
- Properties accessible for survey
- Properties viewed from the street or adjacent property


**Figure 13: Survey coverage in the vicinity of Option 11**

0 120 240 360 480 600  
 Metres  
 Scale: 1:12,000 @ A3  
 Coordinate System: GDA 1994 MGA Zone 56



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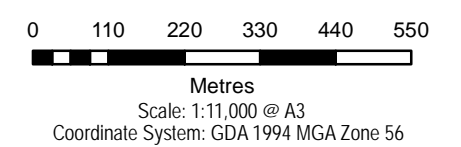





**Legend**

- Route extent
- Archaeological Potential
  - High Archaeological Potential
  - Moderate Archaeological Potential


**Figure 14: Known Aboriginal archaeological sites and areas of Aboriginal archaeological potential in the vicinity of Option 11**





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## 8.5 Option 14

The survey coverage for Option 14 is shown in Figure 15. The results of the investigation for Option 14 are described in Table 15 and 16 below.

<b>Southern bank of the Clarence River</b>		
8.5.1	Effective survey coverage	Ground surface visibility was nil due to the dense grass cover.
8.5.2	Landform	The area on the southern bank is located on a floodplain which extends eastwards towards the Pacific Highway (Plate 11). The land adjacent to the eastern edge of the Pacific Highway rises up to a hill top above the floodplain (Plate 12).
8.5.3	Disturbance	Disturbances on the floodplain to the south of the Clarence River include vegetation clearance, some drainage works, road construction and inundation by floodwaters. The properties surveyed are currently used for livestock farming. The land adjacent to the Pacific Highway has been disturbed by the construction of the highway. The properties immediately to the east of the highway are used for farming purposes and disturbances include vegetation clearance and the construction of fences, houses, sheds and roads.
8.5.4	Aboriginal archaeological sites	No Aboriginal archaeological sites were detected during the field survey.
8.5.5	Aboriginal archaeological potential	<p>The undeveloped portions to the south-east of the Pacific Highway have been designated as having high potential for archaeological deposits due to their elevated position above the floodplain (Figure 16). This area appears to have been relatively undisturbed and its situation on a moderate slope would have provided an excellent location for camping and view towards the river.</p> <p>There is moderate potential for archaeological deposit to be present along the river bank and in the areas of floodplain stretching to the Pacific Highway. There is moderate potential for low density archaeological deposit to be present on the properties immediately to the east of the Pacific Highway, where the ground rises more steeply into a hill top above the floodplain (Plate 12).</p>

Table 15: Survey results for the Southern bank of the Clarence River Option 14

<b>Northern bank of the Clarence River</b>		
8.5.6	Effective survey coverage	Ground surface visibility was nil due to the dense grass cover and water inundation.
8.5.7	Landform	The area surveyed on the northern river bank is located on a floodplain.

	Disturbances on the floodplain to the north of the Clarence River are associated with urban development (e.g. roads, services and housing), an earthen levee wall, and use of the land for pastoral purposes [e.g. vegetation clearance and construction of fencing and sheds]. An example of roadside disturbance is shown in Plate 13.
8.5.8 Disturbance	The area along the bank to the north of the route option alignment has been highly disturbed by development associated with Corcoran Park that has been developed with roadways, picnic facilities, a boat ramp, jetty and earthen levee (Plate 14). This area is frequently inundated by floodwater.
8.5.9 Aboriginal archaeological sites	No Aboriginal archaeological sites were detected during the field survey.
8.5.10 Aboriginal archaeological potential	There is moderate potential for archaeological deposit to be present in the area along the river bank south of the route option alignment (outside of Corcoran Park). There is also moderate potential for archaeological deposit to be present on the area of floodplain incorporating the properties to the west and north of the cemetery (Figure 16).

**Table 16: Survey results for the Northern bank of the Clarence River Option 14**



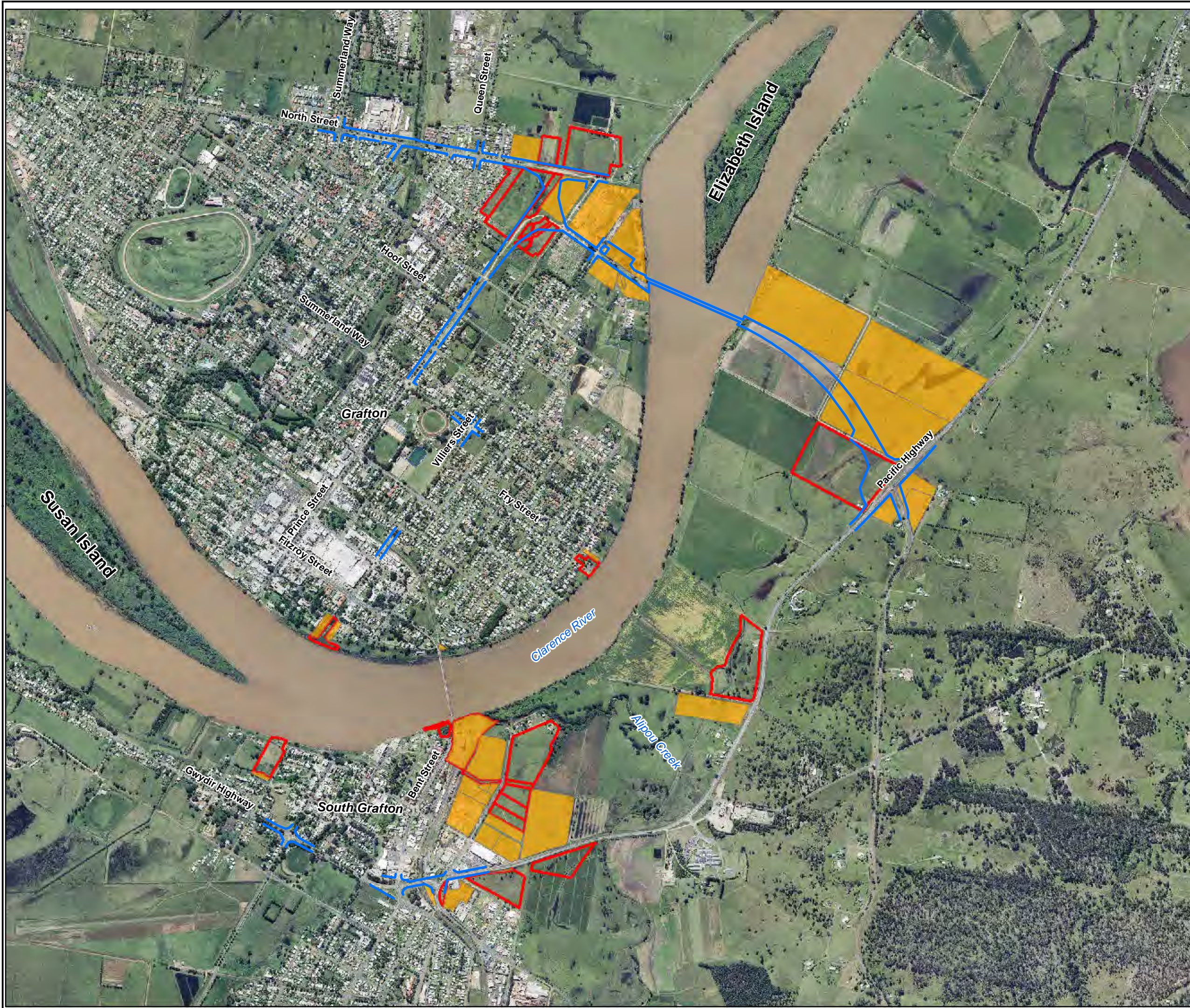


**Plate 13:** Disturbed roadside of North Street, view north.



**Plate 14:** View southeast to Council Reserve 97308 (Corcoran Park), Clarence River in background. A section of the earthen levee is visible to the right.






**Legend**

- Route extent
- Properties accessible for survey
- Properties viewed from the street or adjacent property


**Figure 15: Survey coverage in the vicinity of Option 14**

0 190 380 570 760 950  
 Metres  
 Scale: 1:19,000 @ A3  
 Coordinate System: GDA 1994 MGA Zone 56

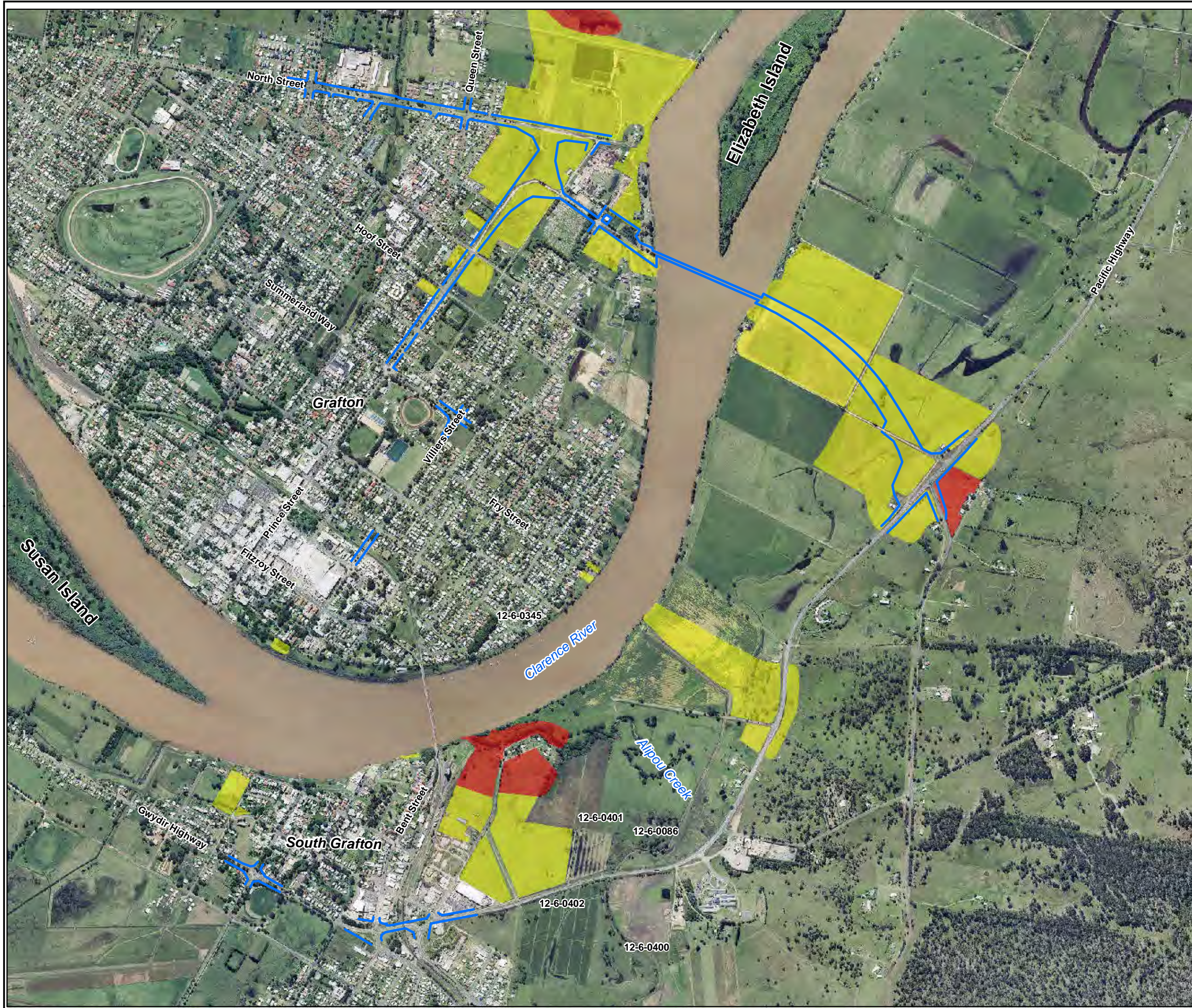
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**Legend**

- Route extent
- Archaeological Potential
  - High Archaeological Potential
  - Moderate Archaeological Potential


**Figure 16: Known Aboriginal archaeological sites and areas of Aboriginal archaeological potential in the vicinity of Option 14**

0 170 340 510 680 850  
 Metres  
 Scale: 1:17,000 @ A3  
 Coordinate System: GDA 1994 MGA Zone 56

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## 8.6 Option 15

The survey coverage for Option 15 is shown in Figure 17. The results of the investigation for Option 15 are described in Table 17 and 18 below.

<b>Southern bank of the Clarence River</b>		
8.6.1	Effective survey coverage	Ground visibility was nil due to the dense grass cover (Plate 11).
8.6.2	Landform	The area on the southern river bank is located on a floodplain which extends eastwards towards the Pacific Highway (Plate 11). The land adjacent to the eastern edge of the Pacific Highway rises up to a hill top above the floodplain (Plate 12).
8.6.3	Disturbance	Disturbances on the floodplain include vegetation clearance, some drainage works, road construction and inundation by floodwaters. The properties surveyed are currently used for livestock farming. The land adjacent to the Pacific Highway has been highly disturbed by the construction of the highway. The properties immediately to the east of the highway are used for farming purposes and disturbances include vegetation clearance and the construction of fences, houses, sheds and roads.
8.6.4	Aboriginal archaeological sites	No Aboriginal archaeological sites were detected during the field survey.
8.6.5	Aboriginal archaeological potential	<p>The undeveloped portions to the south-east of the Pacific Highway have been designated as having high potential for archaeological deposits due to their elevated position above the floodplain (Figure 18). This area appears to have been relatively undisturbed and its situation on a moderate slope would have provided an excellent location for camping and view towards the river.</p> <p>There is moderate potential for archaeological deposit to be present along the river bank and in the areas of floodplain stretching to the Pacific Highway. There is moderate potential for low density archaeological deposit to be present on the properties immediately to the east of the Pacific Highway, where the ground rises more steeply into a hill top above the floodplain (Plate 12).</p>

**Table 17: Survey results for the Southern bank of the Clarence River Option 15**

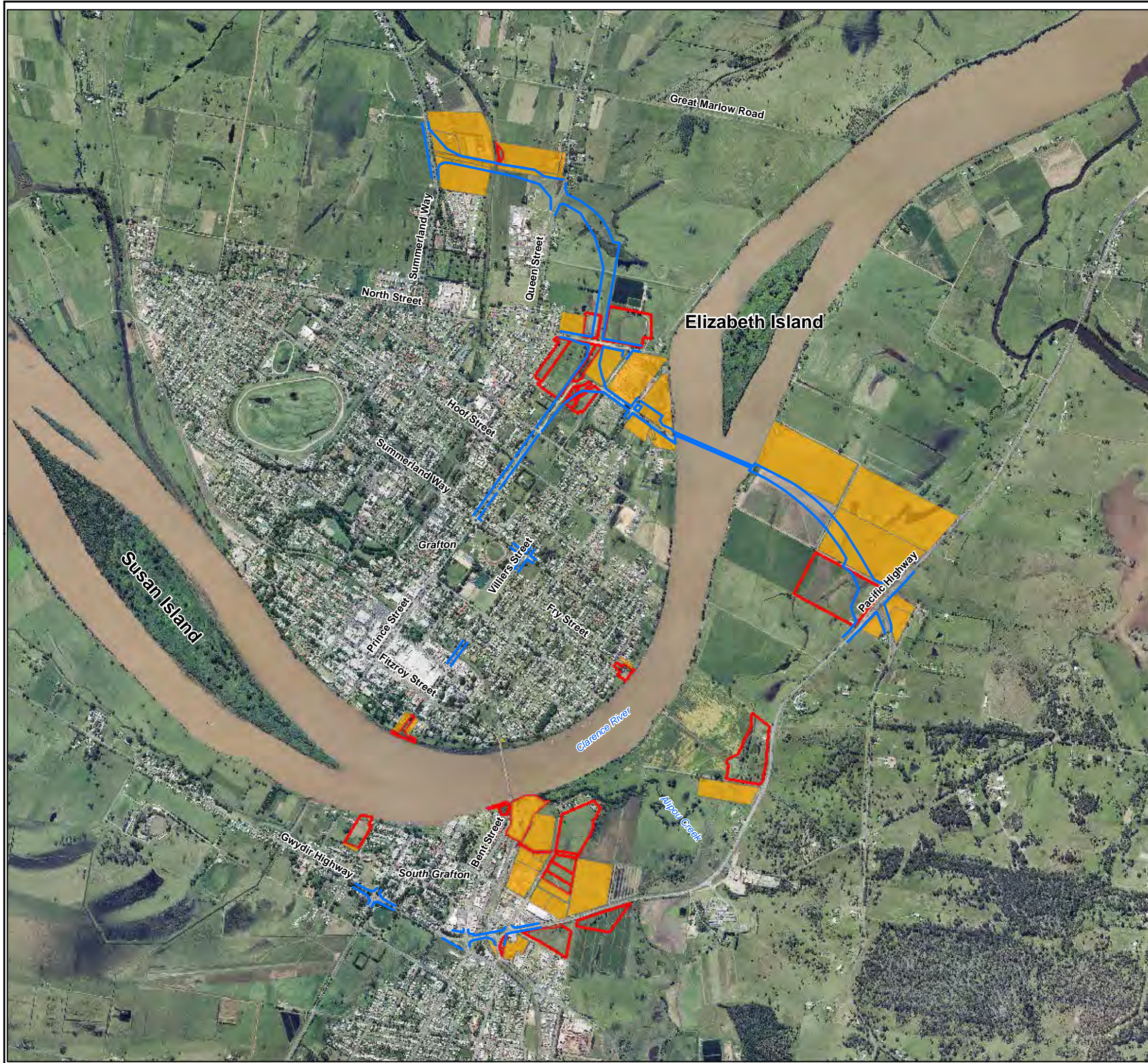
<b>Northern bank of the Clarence River</b>		
8.6.6	Effective survey coverage	<p>Ground surface visibility was nil due to the dense grass cover and water inundation.</p> <p>Mature trees located in the area to the east of Summerland Way were inspected for cultural scarring. Dense grass covered the paddocks and visibility was nil as a consequence. A creek runs from north to south through the area and floodwater has inundated the low-lying areas adjacent to this.</p>
8.6.7	Landform	<p>The area on the northern river bank is located on a floodplain.</p> <p>The properties east of Summerland Way are located on a gently undulating floodplain. Alummy Creek runs from north to south through the area.</p>



8.6.8 Disturbance	<p>Disturbances on the floodplain are associated with urban development (e.g. roads, services and housing) and use of the land for pastoral purposes [e.g. vegetation clearance and construction of fencing and sheds]. An example of roadside disturbance is shown in Plate 13. The area along the western bank is a council reserve that has been developed with roadways, picnic facilities, a boat ramp, jetty and earthen levee (Plate 14). This area is frequently inundated by floodwater.</p> <p>The properties east of Summerland Way are currently used for pastoral purposes. Disturbances include vegetation clearance and the construction of houses, sheds, fences, access tracks and roads. A creek runs from north to south through the area and floodwater has inundated the low-lying areas adjacent to this.</p>
8.6.9 Aboriginal archaeological sites	<p><i>Tracker Robinson's Camp (AHIMS site number pending)</i></p> <p>The site of Tracker Robinson's Camp was identified during the current survey through personal communication with a local resident and with Gwen, Rod and Brett Duroux (descendants of Tracker Robinson).</p> <p>William Leslie "Tracker" Robinson served as an Aboriginal tracker with the NSW police for 47 years from 1914 (<i>The Northern Star</i>, Saturday October 15 1994 page 7 – see Appendix 4). It is believed that Tracker Robinson spent a period of time living at the camp in the early years of his work as a tracker.</p> <p>It is possible that there are sub-surface archaeological deposits associated with this camp site. It is not known if Tracker Robinson engaged in any traditional practices such as stone tool manufacture; however, historical objects from his period of occupation are possible. The remains of a well was located at this site which may contain historical objects and several historical objects were observed around the site. An AHIMS site card has been prepared.</p>
8.6.10 Aboriginal archaeological potential	<p>There is moderate potential for archaeological deposit to be present in the area along the river bank south of the route option alignment (outside of Corcoran Park). There is also moderate potential for archaeological deposit to be present on the area of floodplain incorporating the properties to the west and north of the cemetery (Figure 18).</p> <p>There is moderate potential for low density artefact scatters to be present along and above the banks of Alummy Creek.</p> <p>The area of Tracker Robinson's Camp has high potential for archaeological deposit to be present. It is not known whether Tracker Robinson undertook any traditional activities such as stone tool making. There is also high potential for historical (European) artefacts to be present as remnants of Tracker Robinson's Camp, so it is also protected by the <i>Heritage Act 1977</i>.</p> <p>The area surrounding Alummy Creek to the east of Queen/Lawrence Street has been designated as having high potential due to the close proximity to a water source and it's location within the culturally important Great Marlow region.</p>

**Table 18: Survey results for the Northern bank of the Clarence River Option 15**






**Legend**

- Route extent
- Properties accessible for survey
- Properties viewed from the street or adjacent property

**Figure 17: Survey coverage in the vicinity of Option 15**


0 240 480 720 960 1,200  
 Metres  
 Scale: 1:24,000 @ A3  
 Coordinate System: GDA 1994 MGA Zone 56



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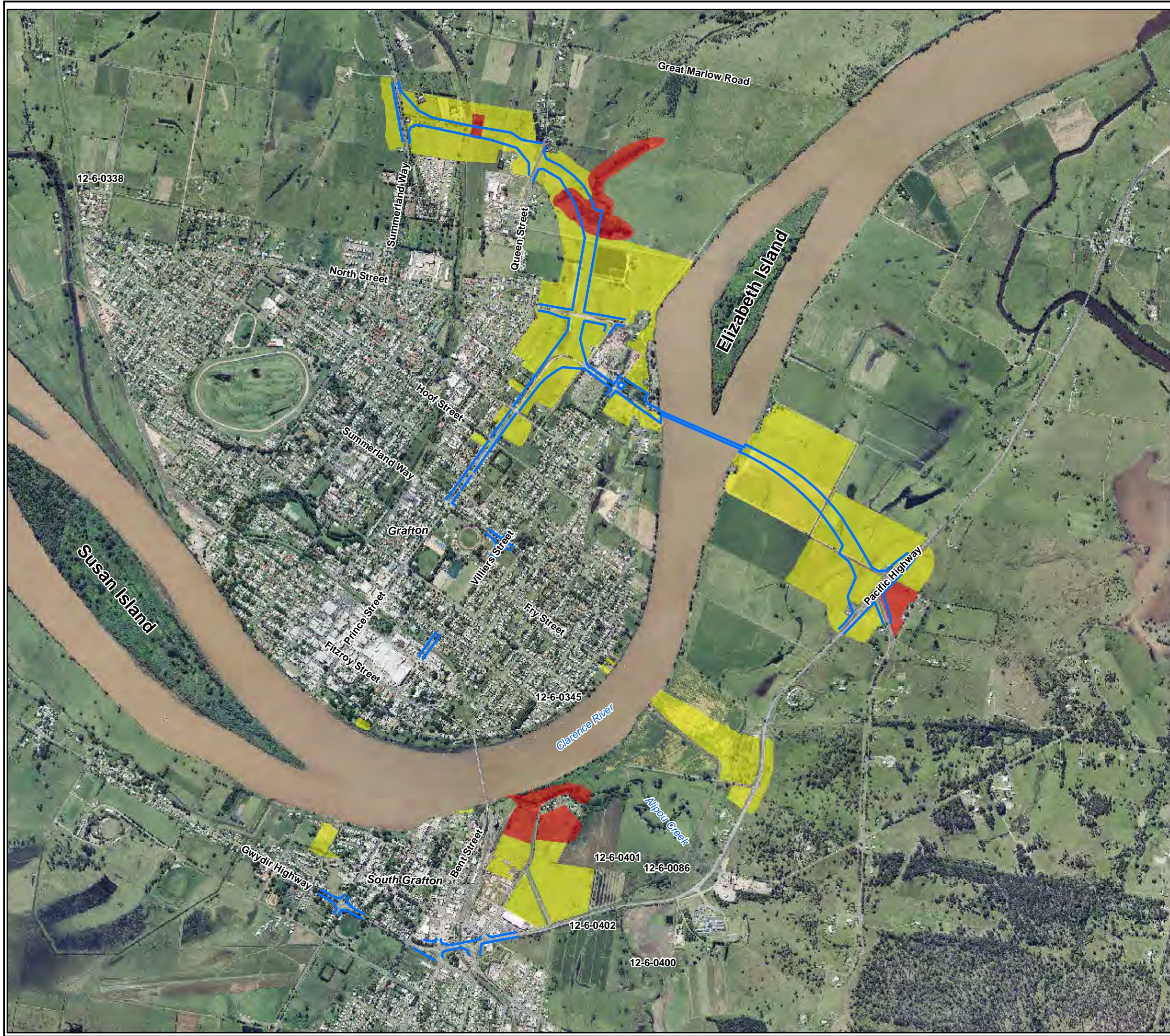
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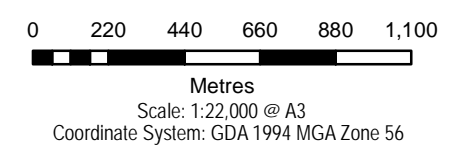




**Legend**

- Route extent
- Archaeological Potential
  - High Archaeological Potential
  - Moderate Archaeological Potential

**Figure 18: Known Aboriginal archaeological sites and areas of Aboriginal archaeological potential in the vicinity of Option 15**



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## 9.0 ROUTE OPTIONS ASSESSMENT

The assessment of archaeological potential for each route option is described below and shown in Figures 8, 10, 12, 14, 16 and 18. The length through areas of high archaeological potential has been measured along the widest part of the area of high potential where it falls within each route option.

### 9.1 Option E

- No impact on known archaeological sites.
- Areas of moderate archaeological potential would be impacted by this option.
- No areas of high archaeological potential would be impacted by this option.

### 9.2 Option A

- No impact on known archaeological sites.
- Areas of moderate archaeological potential would be impacted by this option.
- No areas of high archaeological potential would be impacted by this option.

### 9.3 Option C

- No impact on known archaeological sites.
- Areas of moderate archaeological potential would be impacted by this option.
- The alignment of Option C traverses a length of approximately 170 m through an area of high archaeological potential in South Grafton.
- The alignment of Option C is in close proximity to the Golden Eel site although it does not physically impact it. However, the site could potentially be impacted during construction and the Grafton-Ngerrie LALC has raised concerns about this. Refer to the discussion of cultural values of the Golden Eel site in Part 1 of this technical paper for more information.

### 9.4 Option 11

- No impact on known archaeological sites.
- Mature trees to the east of the Pacific Highway will require further inspection for cultural scarring.
- Areas of moderate archaeological potential would be impacted by this option.
- No areas of high archaeological potential would be impacted by this option.

### 9.5 Option 14

- No impact on known archaeological sites.
- Areas of high and moderate archaeological potential would be impacted by this route option.
- The alignment of Option 14 traverses a length of approximately 175 m adjacent to an area of high archaeological potential.

### 9.6 Option 15

- A site known as Tracker Robinson's Camp was identified during the February 2012 field survey. The site is located in Great Marlow and is in the vicinity of Option 15, although it is not impacted by the alignment of Option 15.
- Tracker Robinson's Camp is of high cultural importance to the local Aboriginal Community and may have cultural importance to the wider Grafton community, as discussed in Part 1 of this technical paper.
- Tracker Robinson's Camp is also an area of Potential Archaeological Deposit (PAD) and is assessed as having high scientific significance.



- Tracker Robinson’s Camp is also a relic as defined by the *Heritage Act 1977*.
- Areas of moderate archaeological potential would be impacted by this route option.
- The alignment of Option 15 traverses a length of approximately 510 m adjacent to and through areas of high archaeological potential.

A summary of the impact assessment of route options on known Aboriginal archaeological potential is provided below in Table 19.

Route Option	Impacts on known archaeological sites	Significance of archaeological sites	Length of High Archaeological Potential impacted (m)
E	N	-	0
A	N	-	0
C	N Golden Eel Site is in close proximity to the option and measures will need to be taken during construction to protect the site	High	170
11	N	-	0
14	N	-	175
15	N Tracker Robinson's Camp site is in close proximity to the option and measures will need to be taken during construction to protect the site	High	510

**Table 19: Impact assessment of route options on known Aboriginal archaeological potential**



## 10.0 RECOMMENDATIONS FOR ARCHAEOLOGICAL VALUES

Based on this investigation, it is recommended that:

### **Report Recommendation:**

This report is culturally sensitive. Permission from the Grafton-Ngerrie LALC and knowledge holders has been received prior to public release.

### **Recommendation 1: *Known Aboriginal objects and Places***

All efforts must be made to avoid impacts to known Aboriginal objects and Places. If avoidance is not possible, consultation with Grafton-Ngerrie LALC must be undertaken and reasoning must be documented.

If works come within 30 m of a known site a physical barrier (e.g. a fence) should be erected to protect the site during construction. All construction staff and managers should also undergo an Aboriginal heritage induction prior to commencing works in the vicinity of known sites. Consultation with Grafton-Ngerrie LALC will also be required. The Grafton-Ngerrie LALC has requested that a culture and heritage induction is presented to all staff by the Grafton-Ngerrie LALC and independent of any government department.

Biosis Research support a combined heritage induction that covers Aboriginal cultural and archaeological heritage values.

If works cannot avoid known sites an Aboriginal Heritage Impact Permit issued by the Office of Environment and Heritage (OEH) may be required.

### **Recommendation 2: *The Golden Eel site at Alipou Creek***

The area identified as the Golden Eel site along Alipou Creek and the mouth of Alipou Creek where it meets the Clarence River will not be physically impacted by the alignment of Option C. There is the potential for impacts to this area during construction works, if Option C is chosen, because of its close proximity. If Option C is chosen a physical barrier (e.g. a 1.8 m high wire mesh fence) should be placed between the mouth of Alipou Creek where it meets the Clarence River and the construction site. Suggested placement of the physical barrier, chosen in consultation with Rod and Brett Duroux, is shown in Figure 3.

Discussion with representatives of the Grafton-Ngerrie LALC has highlighted the need to avoid physical impacts to this site. Further consultation with Grafton-Ngerrie LALC will be required if this option is chosen.

### **Recommendation 3: *Tracker Robinson's Camp***

The area identified as Tracker Robinson's camp should be registered with AHIMS and should be avoided. If Option 15 is chosen a physical barrier (e.g. a 1.8 m high wire mesh fence) should be placed between the camp site and the construction site.

Further consultation with Grafton-Ngerrie LALC will be required if this option is chosen.

### **Recommendation 4: *Areas identified as having high archaeological potential***

Areas identified as having high archaeological potential should be avoided wherever possible (Figures 8, 10, 12, 14, 16 and 18). If impact to these areas cannot be avoided sub-surface investigations (test excavations) will be required prior to the commencement of works.



**Recommendation 5:** Areas identified as having moderate archaeological potential

Areas identified as having moderate archaeological potential should be avoided wherever possible (Figures 8, 10, 12, 14, 16 and 18). If impact to these areas cannot be avoided sub-surface investigations (test excavations) will be required prior to the commencement of works.

**Recommendation 6:** Areas identified as having low archaeological potential

No further investigations are required for areas assessed as having low archaeological potential. This recommendation is conditional upon Recommendations 7 and 8.

**Recommendation 7:** *Discovery of unanticipated Aboriginal objects*

All Aboriginal objects and Places are protected under the *NSW National Parks and Wildlife Act 1974*. It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by the OEH. Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist and the Grafton-Ngerrie LALC. If the find is determined to be an Aboriginal object the archaeologist will provide further recommendations. These will include notifying the OEH and further consultation with Grafton-Ngerrie LALC.

**Recommendation 8:** *Discovery of Aboriginal Ancestral Remains*

Aboriginal ancestral remains may be found in a variety of landscapes in NSW, including middens and sandy or soft sedimentary soils. If any suspected human remains are discovered during any activity you must:

1. Immediately cease all work at that location and not further move or disturb the remains
2. Notify the NSW Police and Office of Environment and Heritage's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location
3. Notify the Grafton-Ngerrie LALC as soon as practicable
4. Not recommence work at that location unless authorised in writing by OEH and the Grafton-Ngerrie LALC

**Recommendation 9:** *Continued consultation with the registered Aboriginal stakeholders*

As per the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW 2010) and the RMS PACHCI (RMS 2011), it is recommended that the proponent provides a copy of this report to the Aboriginal stakeholders and considers all comments received. The proponent should continue to inform these groups about the management of Aboriginal cultural heritage sites within the project area throughout the life of the project.



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## **APPENDICES**



**Appendix 1: Report from Grafton-Ngerrie Local Aboriginal Land Council**





PHONE: 02 6642 6020  
FAX: 02 6642 6994  
EMAIL: gnlalc@bigpond.com

50 WHARF ST  
SOUTH GRAFTON  
PO BOX 314  
SOUTH GRAFTON,  
NSW 2460

10 May 2012  
SIMON MILLICHAMP  
RMS

## ***ABORIGINAL CULTURAL SIGNIFICANCE ASSESMENT***

### **RE: PROPOSED GRAFTON SECOND CROSSING OF THE CLARENCE RIVER.**

DEAR SIMON,

I AM WRITING IN REGARDS TO THE SITE INSPECTIONS THAT HAVE TAKEN PLACE ON THE ABOVE MENTIONED PROPERTIES.

#### **PURPOSE OF THIS ASSESMENT:**

IS TO DETERMINE WHETHER ANY FEATURES OF ABORIGINAL CULTURAL SIGNIFICANCE OCCURRED IN THE STUDY AREA FOR THE PROJECT YOU PROPOSE AND WHETHER THE SIGNIFICANCE WOULD BE AFFECTED BY THE PROPOSED PROJECT/DEVELOPMENT.

#### **PROJECT DETAILS:**

SITE OFFICER BRETT DUROUX AND RODNEY DUROUX UNDERTOOK THE SITE ASSESSMENTS BY FOOT.

#### **LOCATION OF STUDY AREA:**

ALL OPTIONS WITHIN THE CORRIDOR

#### **NAME OF ABORIGINAL SITE OFFICER COMPLETEING THE ASSESMENT & UNDERTAKING THE SITE SURVEY:**

BRETT DUROUX, RODNEY DUROUX

#### **NAME OF ABORIGINAL ORGANISATION REPRESENTED BY THIS STUDY:**

GRAFTON NGERRIE LALC

#### **DATE OF SURVEY/INSPECTION: 2011-2012**

#### **INFORMATION ON THE SITE SURVEY:**

SITE OFFICERS INSPECTED APPLICABLE OPTIONS, CONCERNS REGARDING OPTION (C) WILL NEED A DETAILED FURTHER ASSESMENT, DUE TO THE HIGH SIGNIFICANCE IN THIS AREA (GOLDEN EEL SITE, MARRIAGE TREE, SCARED TREE'S)

OPTION (A) INSPECTED ALONG RIVERBANK, IT IS NOTED THAT ALOT OF EUROPEAN DISTURBANCE HAS OCCURED ALTHOUGH THERE HAVE BEEN NO PREVIOUS INSPECTION OF THESES SITES AND THE POSSIBILITY OF FINDING ABORIGINAL CULTURE AND HERITAGE IS VERY HIGH.

OPTION (E) HIGH POTENTIAL AREA – WOULD REQUEST A (TRANSIC) IN THIS AREA TO ENSURE C&H IS PROTECTED.INSPECTED PAC HWY EGGINS LANE, HIGH SIGNIFICANCE, OPTIONS 4-5-14 HAVE HIGH SIGNIFICANCE IN THESE AREAS. (WITH ALL OPTIONS FURTHER CONSULTATION REQUIRED IF SELECTED BEST OPTION)



OPTION (14) (15) TRACKER ROBINSONS CAMP, MUST BE AVOIDED, FURTHER CONSULT TO ESTABLISH BUFFER ZONE.

OPTION (11) WE WOULD REQUEST A TRANSIC IN THESE AREAS DUE TO UNBROKEN LAND

**SURVEY RESULTS:**

OUR SITE OFFICERS INSPECTED THE PROPERTY AND HAVE INFORMED US THAT IT IS LIKELY THAT ALL DEVELOPMENTS IN THE ABOVE MENTIONED AREA WILL AFFECT THE ABORIGINAL CULTURAL SIGNIFICANCE EITHER KNOWN OR POTENTIAL.

THEREFORE IN OUR OPINION WE RECOMENED THAT ANY OPTIONS FURTHER SHORTLISTED WILL NEED TO BE FURTHER ASSESSED AS DOCUMENTED IN THE ARCHAEOLOGICAL REPORTS.

PLEASE NOTE: FURTHER INTERNAL CONSULTATION WILL COMMENCE WITHIN THE LAND COUNCIL/COMMUNITY TO DISCUSS ALL OPTIONS, OPTION (C) IS A CONCERN TO ALL INVOLVED AND A FINAL DETERMINATION ON OPTION (C) WILL COME FROM THE MEMBERS OF THE GRAFTON NGERRIE LALC.

**THIS ASSESMENT HAS BEEN COMPLETED BY:**


BRETT DUROUX, RODNEY DUROUX

**POSITION:** ABORIGINAL SITES OFFICER

YOURS SINCERELY

BRETT DUROUX,  
ABORIGINAL SITE OFFICER

SIGNED ON BEHALF,

A handwritten signature in black ink, appearing to read 'Wesley Fernando', written over a light-colored rectangular background.

WESLEY FERNANDO  
CHIEF EXECUTIVE OFFICER



**Appendix 2: Comments from Grafton-Ngerrie Local Aboriginal Land Council on the draft report**



**From:** Wesley Fernando [mailto:gnlalc@bigpond.com]  
**Sent:** Monday, 16 July 2012 5:00 PM  
**To:** MILLICHAMP Simon  
**Subject:** Aboriginal Culture and Heritage Report

Hi Simon,

I am writing in regards to the Aboriginal Culture and Heritage report.

I have found a few items that need to be changed.

Page 15: Plaque or monument for any site impacted, this sounds like something we might need to organise in a later stage if need be, although I don't think it is necessary for the report at this stage due to the past history of the RTA with Glenugie, making a statement like this could be used in similar manner as Glenugie to destroy Culture and Heritage values, what we don't want is a tokenistic gesture.

It seems to be the report is highly revolving around "option C", some of the terminology used throughout the document does not reflect our views for example under 4.2 summary it says the golden Eel site (option C) "May" be impacted, this statement seems to be very ambiguous, I distinctly remember saying it "Will" be impacted whether it be by construction or aesthetic values.

Also with the pictures of tracker Robinsons camp, has Rod or Brett or any other member of the community given approval to use the pictures?, I remember that's where we were up to and I hadn't heard back.

(5) Recommendations:

(4) All staff go through a Culture and Heritage induction: They must have a Culture and Heritage induction by Aboriginal people that do not work for OEH or the RTA or any other government department, as they must be independent, they must be inducted by our Land Council.

In my opinion the report is a reflection of our consultation with the above amendments.

As always stated the Land Council must be involved in the thorough consultation process once options are chosen.

Thanks for your time.

Regards,



*Wesley Fernando*

Chief Executive Office

Grafton **Ngerrie Local Aboriginal Land Council**

Office Address : 50 Wharf Street

South Grafton NSW 2460

Postal Address: PO Box 314

South Grafton NSW 2460

Ph: 02 66426020 Fax: 02 66426994 Mob: 0427426020

E-mail: [gnlalc@bigpond.com](mailto:gnlalc@bigpond.com)

Facebook: Grafton Ngerrie LALC

*"Always was, Always will be Aboriginal Land "*



Respectfully, I would like to acknowledge the (Gumbayngirr& Bundjalung) traditional owners of the land on which i work, and also their Elders past and Present.

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**Appendix 3: Approval from Grafton-Ngerrie Local Aboriginal Land Council to release the public version of the Aboriginal Heritage Technical Paper**



## Samantha Gibbins

---

**From:** Wesley Fernando <gnlalc@bigpond.com>  
**Sent:** Friday, 10 August 2012 11:56 AM  
**To:** MILLICHAMP Simon  
**Subject:** RE: Additional crossing of the Clarence River at Grafton - RE: Aboriginal cultural heritage technical paper

Hi Simon,

I have reviewed the latest public version of the Aboriginal cultural heritage technical paper (draft 11, dated 24/7/12) and I acknowledge that the changes that I requested in my email of 16/7/12 have been incorporated into the report.

I am happy for you to include this e-mail 10/08/12 in the report also.

As such, I am also happy for the public report to be released as part of the Route Options Development Report.

Regards,

*Wesley Fernando*

Chief Executive Office

Grafton **Ngerrie Local Aboriginal Land Council**

Office Address : 50 Wharf Street

South Grafton NSW 2460

Postal Address: PO Box 314

South Grafton NSW 2460

Ph: 02 66426020 Fax: 02 66426994 Mob: 0427426020

E-mail: [gnlalc@bigpond.com](mailto:gnlalc@bigpond.com)

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*"Always was, Always will be Aboriginal Land "*



Respectfully, I would like to acknowledge the (Gumbaynggirr & Bundjalung) traditional owners of the land on which I work, and also their Elders past and Present.

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**Appendix 4: Tracker Robinson - Article in *The Northern Star*, October 15 1994, page 7**



# Aboriginal tracker, boxer Bill Robinson, 98, dies

The Northern Rivers lost a precious piece of its heritage on Thursday when 98-year-old former police tracker William Leslie 'Tracker' Robinson died at the Grafton Base Hospital.

Mr Robinson held a unique place in NSW police history after serving as an Aboriginal tracker for 47 years, during which time he had the rare distinction of acquiring the rank of sergeant tracker attached to the police.

A police spokesman yesterday said Mr Robinson took over the role as tracker on his 18th birthday on March 17, 1914.

His start came three days after the retirement at Casino of his father who had served for about 30 years as a tracker.

"It is believed that 'Tracker Bill' was the oldest surviving and longest serving Aboriginal tracker in the NSW Police Service," the spokesman said.

During his career, he was commended three times.

On February 6, 1951, he was commended for outstanding work in connection with the rescue and relief of distressed people during the Clarence River flood in June, 1950.

Long-time friend Mick Moy said Mr Robinson was a legendary character who began life in 1896 on St Patrick's Day.



WILLIAM 'TRACKER' ROBINSON

Mr Moy said Mr Robinson's father was an Aborigine originally from Cunnamulla, Queensland, and his mother was a Maori.

"(Tracker) emerged from boyhood, spent around Goolmangar, near Lismore, as a quick moving, athletic young man who quickly abandoned work on dairy farms to become one of the stars of the Jack Ross Boxing troupe," Mr

Moy wrote.

"Fighting as Bill Roberts, he bore the title of the fast, game, hard-hitting feather-weight boxer of the North Coast — his reputation grew as he successfully took on all challenges at showgrounds and boxing halls."

After a bout in Grafton, Mr Robinson was approached by a Det Sgt Dye, who told him an opportunity existed at Grafton because the fellow in charge of horses was frightened of rough horses and he knew Mr Robinson was not.

Det Sgt Dye approached the young boxer after the bout because he recognised him as a lad who had taken over the horses and stables at the Lismore police station while his father was on holidays a few years earlier.

"Down the two strode to meet Insp Atkins, who had seen the bout (which Tracker won in the second round) and was sufficiently impressed with the demeanour of the young man to confirm his position," Mr Moy wrote.

His roles included educating young horses, driving the paddy wagon, attending the station lawns and gardens, and later as an expert bushman when a criminal was at large or someone had become lost.