

NORTHERN PIPELINE INTERCONNECTOR PROJECT STAGE 2

MANAGEMENT PLAN

Heritage Management Plan

Document number: NNA001-A-PLN-008

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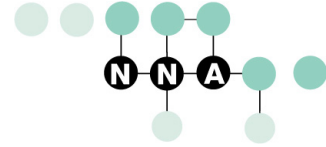
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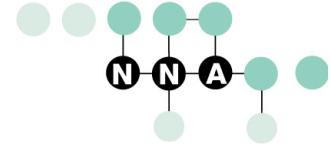
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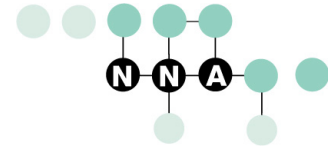


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1 INTRODUCTION

This Heritage Management Plan (HMP) is one component of the Construction Environmental Management Plan (CEMP) (NNA001-A-PLN-017) which provides a system and procedures to ensure that Northern Network Alliance (herein after referred to as the 'Alliance') establishes and maintains best practice controls to manage potential environmental impacts during the construction of the Northern Pipeline Interconnector Stage 2 (NPI – herein referred to as the 'Project') and associated infrastructure and, wherever practicable, realise opportunities for enhanced environmental outcomes.

The Project is a key component of the SEQ grid. Initially, the Project will transport water under existing utilised entitlement (up to 55% or 3600 ML/a has been used by Noosa Shire in the past) authorised under the Water Resource (Mary Basin) Plan 2006 (Mary Basin WRP). This existing entitlement comprises 6500 ML/a (18 ML/d) interim water allocation (high priority) held by the SEQ Water Grid Manager within the Upper Mary River Water Supply Scheme. However, the pipe will be sized and designed to accommodate flows from future bulk water sources on the Sunshine Coast, including the Traveston Crossing Dam, should it be approved.

The Alliance consists of the following partners:

- LinkWater
- Abigroup Contractors Pty Ltd
- McConnell Dowell Constructors (Aust) Pty Ltd
- Kellogg, Brown & Root Pty Ltd.

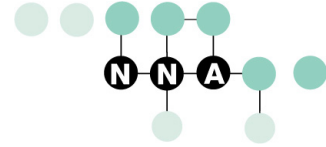
The Alliance is committed to providing the services it offers in a manner that conforms to the contractual requirements and to all relevant regulatory and legislative requirements. To achieve this, the Alliance will plan, implement and control an integrated management system that achieves the stated environmental outcomes.

The Alliance will ensure that controls are properly implemented and regularly monitored and audited to assess their effectiveness. Changes to the controls will be instigated if they are not achieving their objectives.

1.1 Project Description

The Project forms part of the drought contingency pipeline to connect existing and future water infrastructure on the Sunshine Coast with the Brisbane network. The Project will be constructed in two stages and will allow the transfer of up to 65 ML/d of potable water between the Sunshine Coast and Brisbane. Stage 1 of the Project—between Landers Shute water treatment plant (WTP) and Morayfield—is due for completion by 31 December 2008.

The completed Project (Stage 1 and Stage 2) will supply a target volume of 65 ML/d of potable fresh water to existing facilities at Caboolture for distribution to localities in the greater Brisbane region. The Project will have the capacity to deliver up to 18 ML/d (under existing entitlements for the Noosa Shire).



Subsequent interconnection of Stages of the Project may be constructed to link with the proposed Traveston Crossing Dam and/or other bulk water sources proposed for the Sunshine Coast. These subsequent Stages are not considered in this report. However, the use of a large diameter pipe capable of transporting bulk water is a basis for the design of both Stages 1 and 2 of the Project.

The key components of the Project are as follows:

- approximately 48 km of underground pipe between Noosa water treatment plant (WTP) and the termination point of NPI Stage 1 at Eudlo
- a balance tank with a 5 ML capacity
- three new pump stations; and
- a new water quality management facility (WQMF) and upgrades to an existing WQMF at Landsborough.

A number of additional above-ground facilities would be required for commissioning, operation and maintenance of the system. These include:

- water quality maintenance structures
- water branch mains; and
- cleaning and communications stations.

1.2 Purpose and Scope

LinkWater has a commitment to effective environmental management and lists the environment as a key component of its overall vision to become an effective partner in delivering water security to south-east Queensland (LinkWater 2008). LinkWater is committed to adding value to the management of the natural and built environments by adhering to all appropriate local, state and federal environmental guidelines, with an underlying principle of sustainability and positive environmental outcomes (LinkWater 2008).

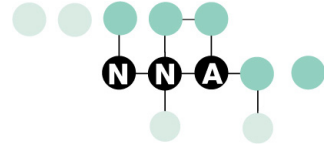
This Heritage Management Plan (HMP) addresses the management of both:

- Aboriginal Cultural Heritage
- Non-Aboriginal Cultural Heritage.

and will identify the following:

- chainages and construction zones and processes for managing areas of known Aboriginal Heritage importance identified in the Cultural Heritage Compliance Management Plan (CHCMP) (*NNA001-A-PLN-028*)
- a process for dealing with any additional activities not included in the Aboriginal CHCMP
- a process for managing potential impact on historical heritage items and sites which may be encountered during the construction phase

This Plan will address the requirements of all applicable legislation and aims to ensure that the commitments made by the Alliance within the Project Environmental Impact Statement (EIS) regarding Aboriginal and Non-Aboriginal are met.



1.3 Related Management Plans

The Heritage Management Plan (HMP) forms part of the overall CEMP for the Project. Where relevant, reference should also be made to the following associated management plans (MPs):

- Cultural Heritage Compliance Management Plan *NNA0001–A-PLN-028*

1.4 Objectives and Targets

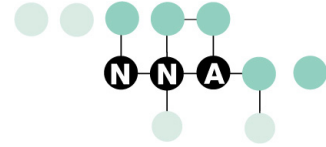
The objectives of this management plan are:

- Protect Aboriginal areas and objects of cultural and heritage value
- Comply with all requirements of the *Aboriginal Cultural Heritage Act* 2003 and Guidelines from the Cultural Heritage Coordination Unit, DNR&W
- Engender cultural awareness within the Alliance and wider community, and develop positive working relationships with Aboriginal parties

The targets associated with this management plan are:

- Develop and adhere to the requirements of the Cultural Heritage Compliance Management Plan (CHCMP) (*NNA001-A-PLN-028*)
- No unauthorised damage to Aboriginal and Historical Cultural Heritage artefacts during construction
- Positive working relationships with Aboriginal parties maintained
- 100% of employees trained in regard to their responsibilities under the *Aboriginal Cultural Heritage Act*, 2003.

The above performance criteria have been developed for this MP to assist in the delivery of desirable environmental outcomes. The performance criteria will be linked to key performance indicators (KPIs) for the Project.



2 LEGISLATION AND REGULATORY REQUIREMENTS

2.1 Licenses/Permits

Department of Infrastructure and Planning (DIP) will approve an Environmental Impact Statement (EIS) that identifies all licences and permits that may be required for the Alliance project. It is anticipated that the heritage sites/objects identified in this HMP will not require any additional licences, permits or approvals.

Note – Schedule 9 of IPA lists development that is exempt from assessment against a planning scheme. The Project has been determined to fall within the exemptions of Schedule 9 where Table 5 Item 4 states that ‘all aspects of a development a person is directed to carry out under a notice, order of direction made under State law’ constitute exempt development. Therefore, the Project is not assessable under local planning schemes (Alliance EIS 2008).

2.1.1 Aboriginal Cultural Heritage

The principal legislation protecting Aboriginal Cultural Heritage in Queensland is the *Aboriginal Cultural Heritage Act 2003*. A Cultural Heritage Compliance Management Plan (CHCMP) (*NNA001-A-PLN-028*) has been developed for the project and forms the required agreement between the appropriate Aboriginal party and LinkWater.

In the first instance that human remains are located, the legislation concerning the burial of human remains is the *Criminal Code Act 1899*. If human remains or suspected bone material are uncovered all work will immediately stop, the location will be isolated and police will be notified. Investigations will be undertaken by the appropriate government authorities to manage the find.

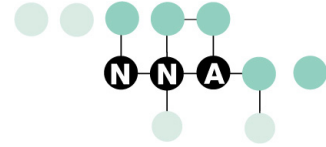
Relevant national legislation includes:

- *Environmental Protection and Biodiversity Conservation Act 1999*
- *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*
- *Australian Heritage Council Act 2003*

Relevant State Legislation includes:

- *Land and Resources Tribunal Act 1999*
- *Aboriginal Cultural Heritage Act 2003*

Registration of the CHCMP (*NNA001-A-PLN-028*) under the *Aboriginal Cultural Heritage Act 2003* enlivens these documents as legally binding agreements upon the parties.



2.1.2 Historic Heritage (non-aboriginal)

The following section discusses national, state and local legislation relevant to historical heritage (non-Aboriginal) and the Project.

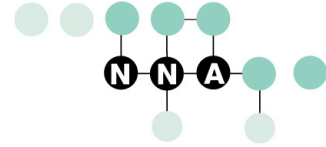
In general terms, any intervention made by the Project on a site which is listed on an abovementioned national, state or local government heritage register will require prior approvals from the relevant government authority.

'Any intervention' is defined as any work and/or associated activities by the Project, which take place within the boundaries of a recognised heritage site. This intervention should also be considered for all sites which are directly adjoining a registered heritage place.

The following table (Table 1) lists the relevant legislation in place for historical sites of national, state and local significance. It also provides an overview of the need for approval and/or permits which may be required and the relevance to the project.

Table 1 Relevant Historic Heritage Legislation

Relevant Legislation	Approval or permit required	Relevance to project
National		
<i>The Environment Protection and Biodiversity Conservation Act 1999</i>	Consultation required for any intervention caused by the Project on sites registered on: The National Heritage Register The Commonwealth Heritage Register Register of the National Estate (RNE) (All above sites are included on the Australian Heritage Database)	Following sites included on the Australian Heritage Database are situated close to (but not on) the Stage2 NPI alignment -Eudlo Creek Environmental Park via Hoopers --Road, Kunda Park -Koongalba, 12 Wharf Street, Yandina -Sunny Brae Private Hospital (former), Bruce Hwy, Eumundi There will be zero interaction with these sites.
State		
<i>Queensland Heritage Act 1992</i>	Consultation required for any intervention caused by the Project on sites registered on: The Queensland Heritage Register CHIEF Database held by EPA	-Koongalba, 12 Wharf Street, Yandina (This site is close to, but not on the Project alignment) -Moreton Central Sugar Mills Nambour. This site is located more than 700m to the west of the Project alignment and is not under threat of impact. There will be zero interaction with these sites.
Local		
Maroochy Shire Council	Consultation required for any intervention caused by the Project on sites registered on: The Maroochy Shire Plan – Schedule 2 Cultural Heritage Areas	Yandina Township Precinct as listed on the Maroochy Shire Council Heritage Citations 2006, the Maroochy Plan 2000 and the Council's Planning Scheme. Of significance is house situated



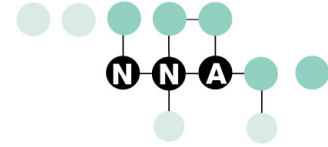
Relevant Legislation	Approval or permit required	Relevance to project
		<p>corner of Buckle and North Streets (27, North Street) which is listed on Maroochy Shire Council's Heritage Citations 2006.</p> <p>Above information conveyed via Maroochy Shire's correspondence of 19 December 2007 which can be viewed on Documentum http://au-webtop-east/AusGI/drl/objectId/09016247800255e1</p>
Noosa Shire Council	Consultation required for any intervention caused by the Project on sites registered on: The Noosa Shire Council Shire Plan	<p>It has been advised by Noosa Shire Council that the Project alignment does not impact upon any historical heritage sites listed in their planning scheme</p> <p>Above information conveyed through Noosa Shire Council's email dated 12 December 2007 which can be viewed on Documentum http://au-webtop-east/AusGI/drl/objectId/0901624780025645</p>
<p>Historical Societies</p> <p>1. Cooroy-Noosa Genealogical & Historical Research Group Inc</p> <p>2. Eumundi and District Historical</p> <p>3. Yandina and District Historical Society Inc</p>	Consultation will be undertaken to determine any potential interaction caused by the Project on sites considered relevant by societies	<u>Consultation in progress</u>

2.2 Guidelines/References

Key Legislation relevant to this HMP includes:

Guidelines gazetted with the *Aboriginal Cultural Heritage Act 2003* include:

- Guidelines to Preparation of a Cultural Heritage Management Plan
- Cultural Heritage Duty of Care Guidelines

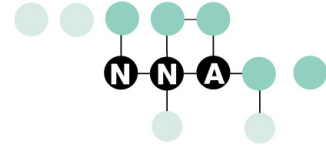


2.3 Commitments

The following commitments are made in the Project EIS and are relevant to this HMP. Table 1 lists these commitments.

Table 2 Cultural Heritage Commitments from the Stage 2 Project EIS

NPI 2EIS Section (December 2008)	Requirement/Commitment
3.9	The approved project cultural heritage management plan will be implemented for construction of the Project
3.9	A native title compliance plan will be completed for the project and any relevant notifications made under s.24KA of the <i>Native Title Act</i> 1993.
3.9	No registered Aboriginal or European cultural heritage sites will be negatively impacted to a significant extent by the project. Any new sites identified will be brought to the attention of relevant government agencies in compliance with the applicable legislation
3.10	Cross-cultural awareness will be maintained within the project team and in dealings with the public.



3 EXISTING ENVIRONMENT

3.1 General Description

3.2 Aboriginal Heritage

Aboriginal Cultural Heritage must be managed by the Alliance in any area where topsoil will be stripped and/or excavation will occur. Management will be undertaken through the following survey and monitoring activities:

- walk overs
- test pits
- more detailed archaeological surveys.

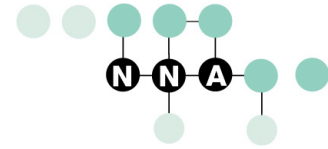
The Gubbi Gubbi has opted for a field survey to locate any sites of Heritage value. The survey has been completed and sites of interest have been nominated for monitoring during construction activities. Due to rain tall grass in most areas made visibility poor during survey. A search has also been conducted of the database held by the Department of Natural Resources and Water, resulting in zero registered sites within the project area.

Approximately two thirds of the Project alignment uses existing cleared easement. The existing environment is one which has been considerably disturbed and where extensive clearing of vegetation has occurred in the past. Extensive road building (for example, Maroochydore Road), particularly in the more densely populated areas near Cooroy, Pomona and enroute to Noosa Water Treatment Plant have played a large part in ground disturbance and tree removals in what would be considered relevant areas for Indigenous cultural heritage. More recently, the establishment of light and heavy industries, particularly in the vicinity of country towns, has been a catalyst for vegetation clearance.

Availability of fresh water was essential for Indigenous people, including the Gubbi Gubbi people. Hence important water courses such as Eudlo Creek, the Maroochy River and Petrie Creek and important sections of the creeks and in the area near to the Maroochy River have been listed for Aboriginal Cultural Heritage monitoring.

The predominant Aboriginal Cultural Heritage items expected to be located within the corridor are stone artefacts. The relevant Aboriginal group will decide what they do with located stone artefacts, for example collect them, relocate and/or leave in situ.

Any additional disturbance outside of the Alliance corridor areas will need to address cultural heritage. Aboriginal Cultural Heritage will need to be managed to the CHCMP (*NNA001-A-PLN-028*) (for example changes to route alignment) – Refer to Section 6.2.1 of this document.



3.3 Historic Heritage

The Project pipeline route traverses the lands of two Shires: Maroochy and Noosa. The Alliance followed a comprehensive process to identify historic heritage sites, refer to table 2. The following were contacted to ascertain sites of significance in their areas:

- Maroochy Shire Council
- Noosa Shire Council
- Cooroy, Yandina and Eumundi Historical Societies.

A Project route survey and investigation was undertaken by Su Davies, (from Davies Heritage Consultants Pty Ltd) and Maroochy/Noosa Area Historian Berenis Alcorn.

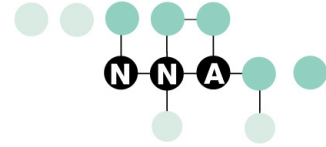
A total of 10 items not registered on Local, State or Nation Heritage Registers were identified during the survey. Of these 10 sites, 4 are potentially interacted with by the project. Table 3 below lists the 10 sites/items identified. Discussion in relation to individual items and recommendations follow (Davies Heritage Consultants Pty Ltd).

Table 3 Stage 2 Project route survey and investigation results

ITEM No.	NPI MAP No	DESCRIPTION	LOT & RP No
1	B3a	Daniel Morcombe Memorial	----
2	B5c	Nambour Showgrounds	----
3	B6a	House, 45 Creightons Road, Kulangoor	Lot 1 RP 137358
4	B6a/B7	Townscape Precinct, Yandina	----
5	B7	House, Brandons Road, Yandina	Lot 1 CG 3849
6	B7	House, 173 Lees Road, Bridges	Lot 3 CG 6223
7	B8	House, 391 Bunya Road, North Arm	Lot 2 SP127417
8	B9	Eumundi Cemetery	----
9	B10	House, Cnr Neeraway Road and Strong Lane, Eerwah	Lot 3 SP 127428

 **Sites potentially interacted with**

Note - Further desktop studies, investigation/surveys may be undertaken prior to construction, as required to satisfy this MP, for example, in the event of route alignment change.



4 POTENTIAL IMPACTS

Any activity conducted as part of the Project may cause impact on cultural heritage values (both Aboriginal and non-Aboriginal). The following are construction activities that are considered to be likely potential sources for impact:

- general surface earthworks particularly during site establishment and establishment of access roads
- earthmoving activities and excavation including construction of batters and stabilisation of earthworks
- blasting, boring and excavation
- movement of vehicles and construction machinery in and around heritage sites
- transportation of construction materials, fill, rubble and waste in and around known sites and areas.

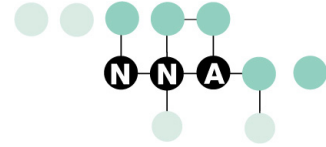
LinkWater as well as the Alliance have a legal obligation under state legislation to meet its 'duty of care' with regards to Aboriginal cultural heritage. Duty of care is reasonable management measures to avoid or minimise harm. Failure to meet duty of care will result in substantial financial penalties to both the involved individual and LinkWater.

4.1 Non-Aboriginal Heritage

The significance of heritage structures is quite often contained in the fabric of the site or place, and this fabric should be protected where possible. Unlike other sites and places that can be repaired, should damage occur, heritage sites and places should be maintained in their original and undamaged condition.

A particular heritage site should not be considered in isolation from its context. The spread and extent of a heritage site can be extensive and may include boundary walls, paths and out buildings, as well as landscapes.

In the event that a site is to be interacted with, refer to Section 5.8 in this document on 'Recording of Sites Directly Affected as Part of the Project'.



5 RECORDS, REPORTING AND DELIVERABLES

5.1 General

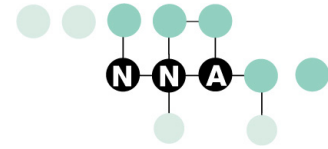
Environmental mitigation measures for Aboriginal Cultural Heritage and Non-Aboriginal Heritage will include a suite of activities that may be undertaken depending on the nature of a specific site:

- Heritage database searches, field surveys and consultation
- Walk overs (site survey)
- Test pits
- Inductions and toolbox talks (including presentations by guest Heritage Specialists)
- Monitoring of works
- Management of unexpected finds
- Removal or relocation of cultural heritage finds
- Consultation with Traditional Owners and/or Heritage Specialists.

5.2 Inductions

The Alliance will ensure that relevant contractors and staff are provided with Aboriginal Cultural Heritage inductions that will include details of responsibilities to the Cultural Heritage duty of care and the requirements for monitoring of Aboriginal Heritage.

Briefings and updates may be provided for staff and contractors which highlight any new and relevant cultural heritage aspects found to exist within the Project area.

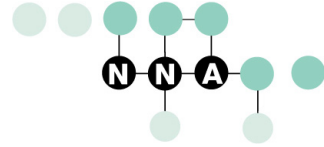


5.3 Monitoring of Works

Table 4: Aboriginal Cultural Heritage Monitoring Locations (Gubbi Gubbi)

Stage of Construction Activity	Aboriginal Cultural Heritage monitoring: Map & km ref.	Number of km to be monitored	Responsibility
Clear & Grade	Map Ref: B1 Km: From 65 to 66.5 (approx)	1.5 km	Environment Manager/Cultural Heritage Advisor
Clear & Grade	Map Ref: B2a, B2b, B3a Km: From 68 to 72.5 (approx)	4.5 km	Environment Manager/Cultural Heritage Advisor
Clear & Grade	Map Ref: B3b Km Ref: 73 to 76 (approx)	3 km	Environment Manager/Cultural Heritage Advisor
Clear & Grade	Map Ref B4 Km Ref: From 76 to 80 (approx)	4 km	Environment Manager/Cultural Heritage Advisor
Clear & Grade	Map Ref: B5e KM Ref: 80 to 81 km	1 km	Environment Manager/Cultural Heritage Advisor
Clear & Grade	Map Ref: B6c & B6b Km Ref: From 84 (approx) to 87.5 km	3.5 km	Environment Manager/Cultural Heritage Advisor
Clear & Grade	Map Ref: B6a; B7; B8 Km Ref: 89.5 (approx) to 95	5.5 km	Environment Manager/Cultural Heritage Advisor
Clear & Grade	Map Ref: B10 Km Ref: 102 to 103	1 km	Environment Manager/Cultural Heritage Advisor
Clear & Grade	Map Ref: B11 Km Ref: 105.5 (approx) to 108.5 (approx.)	3 km	Environment Manager/Cultural Heritage Advisor
Clear & Grade	Map Ref: B12 Km Ref: 110 to 112.5	2.5 km	Environment Manager/Cultural Heritage Advisor

Table 4 above draws from all the Project tenure maps to reflect the specific km which have been recommended for monitoring during the Clear & Grade phase of the construction process.



The CHCMP (*NNA001-A-PLN-028*) makes provision for the Traditional Owners/Representatives to monitor on-site to observe clear and grade construction activities. These monitors will alert construction crews to any heritage items located as identified in Section 2. Appendix 1 is a list of tenure maps depicting areas to be monitored.

Monitoring of historic heritage may be required in the event of discovery of and/or possible disturbance of a site (see Section 5.3).

5.4 Unexpected Finds

During the Project, unexpected cultural heritage material or sites may be discovered and managed using the following measures:

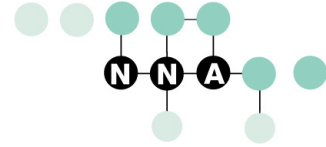
- All work at the location of the find must cease and reasonable efforts to secure the site will be made – a buffer zone of ten metres should be suitable.
- Work can continue at the distance of ten meters from a find area (or more if an extended find is located i.e. large midden). Note that the material should not be removed or disturbed further. Barriers or temporary fences will be erected as a buffer around the find if required.
- The Environmental Manager and Construction Manager will be notified immediately. They will then notify the relevant parties. In the case of Aboriginal Cultural Heritage, the Gubbi Gubbi Party will be notified; in the case of historic heritage, the historical archaeologist appointed to the Project – refer to section 7.3 for contact details.
- The Archaeologist will assess significance and recommend a way forward. These may include i) protect and avoid; ii) excavate, record and remove; iii) investigate and preserve or iv) no action if the item is deemed to have no significance
- The Alliance to advise relevant government agencies as required
- In the case of Aboriginal Cultural Heritage, the Aboriginal Parties will nominate the appropriate management regime.
- In the case of Historic Heritage, the Historical Archaeologist will provide a management recommendation to the Environmental Manager, and agreed approved actions will be undertaken
- If material involves suspected human remains then the work must immediately cease and the Police be immediately contacted. This includes the find of any potential bone material.

5.5 Aboriginal Cultural Heritage

5.5.1 Onsite Packs

In addition to the above mitigation activities, the Alliance will provide 'cultural heritage onsite packs' for contracted monitors to use for preliminary surveys and monitoring. The onsite packs will contain:

- The Alliance (Project) Cultural Heritage Monitoring/Find Sheet/Collection Record Sheet (*Form G-FRM-005*)
- Appropriate Personnel Protective Equipment (PPE)



- Copy of the CHCMP (*NNA001-A-PLN-028*)
- Any other items as considered necessary.

All contracted heritage surveyors and monitors are required to complete the Alliance induction which will include all project requirements (refer Workplace Health and Safety Management Plan, (*NNA001-A-PLN-035*))

5.5.2 Mitigation Measures

Table 5 identifies other mitigation strategies for the successful management of Cultural Heritage.

5.6 Historic Heritage

This section provides specific management guidelines for Historical Cultural Heritage sites and places potentially impacted by construction of the Project.

As much as possible, the prime mitigation option adopted by the Alliance will be avoidance of impacts. For all items identified, their location will be clearly identified on verification maps and associated documentation facilitating construction, to ensure zero interaction.

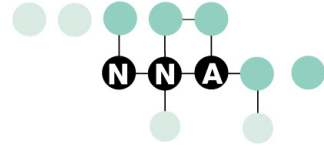
Items found during the design and construction stages of the Project that are considered to have potential cultural heritage relevance, should be treated as significant, until qualified advice states otherwise as outlined in Table 5 below.

5.7 Reporting of a Heritage Site

If design constraints result in the Project being in proximity to a known place of cultural heritage significance, then assessment and management recommendations for the particular site will be documented.

This assessment will provide the Project with:

- A detailed map and description of the features of potential non-Aboriginal Cultural Heritage significance and their location relative to areas of the proposed works.
- An assessment of the features of significance, including a determination on whether the features are considered to be of Local, State or National Significance.
- A description of potential impacts from the works.
- Specific recommendations for the design and construction teams to manage the Project around key historic sites with minimal impact.
- Preparation (if required) of documents required for impact assessment of the Project with relevant Government Bodies.



5.8 Recording of Sites Directly Affected as Part of the Project

In the instance that the retention of a cultural heritage place is not possible as part of the Project (for example a building, stone wall, bridge, roadway or significant tree/s need to be removed), then it is recommended that a full archival recording of the site be undertaken prior to construction. The following steps need to be undertaken:

- Collect historical photographs (if available), and archival and current information about the site.
- Identify the site on a map of the local area.
- Make a sketch plan of the site, and identify all relevant items. Show the relationship of the site to its surroundings.
- Make a photographic record before, during and after demolition of the site.
- Collate all information, maps, sketch plan, and photographs into a report.
- Lodge reports with the Cultural Heritage Branch of the Environmental Protection Agency and any other appropriate Heritage Agency, as required.

For further assistance in the protection and management of cultural heritage places in accordance with Queensland legislation, refer to the following publications:

- *Cultural Heritage Protective Management Guidelines for Nature Refuge Llandholders* (Environmental Protection Agency Queensland Parks and Wildlife Service, 2004). The publication is available on the web: <http://www.epa.qld.gov.au/publications?id=1970>
- Guidelines for Cultural Heritage Management, (EPA, Brisbane, 2001).

The Guidelines for Cultural Heritage Management produced by the Environmental Protection Agency in 2001 are currently under review following the implementation of the *Aboriginal Cultural Heritage Act* 2003, the *Torres Strait Islander Cultural Heritage Act* 2003, and due to recent amendments to the *Queensland Heritage Act* 1992. A revised set of guidelines may become available during 2008.

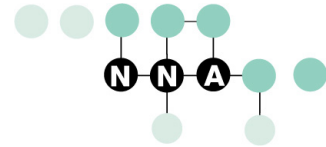
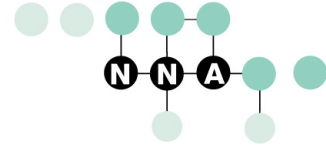


Table 5 Mitigation Strategies for Managing Aboriginal/European Cultural Heritage

Activity / Construction Item or Detail	Management Mitigation Measures	Responsibility	Timing
Pre-construction engagement	Engagement of relevant Aboriginal Party and European Heritage consultant to advise on cultural heritage prior to the commencement of any works	Environmental Manager/ Cultural Heritage Officer	Pre Construction
Inductions	A general project induction must be completed prior to any person commencing work on site	Safety Manager/ Training Manager	Throughout entire project
Construction - Prior to undertaking any disturbance to top soil (for example the stripping of top soil and excavation)	Confirm that construction has been granted go-ahead in areas of interest identified by the Aboriginal Parties including any additional areas	Liaise with Alliance Construction Environmental Team	Construction - A minimum of one week prior to proposed disturbance
Unexpected finds	<p>If any potential significant Aboriginal & European heritage objects or areas are identified in the vicinity of works, works must stop and contact made with the Cultural heritage Officer. Construction can proceed 10m further on.</p> <p>If any Alliance personnel are in doubt regarding any heritage (Aboriginal or European) issues on site work to stop immediately and contact the Cultural Heritage Officer.</p> <p>If human remains or suspected bone material are found work will immediately stop within a 20 meter buffer and police will be notified. Construction can proceed 20m further on. Investigations will be undertaken by the appropriate government authorities to manage the find. If unsure if bones are human, an archaeologist, vet or chemist can be called upon to identify.</p>	Cultural Heritage Officer/ Site Superintendent	In the event that unexpected finds are encountered
Reporting	A copy of any detailed Alliance reports on artefacts finds during construction should be provided to the Cultural Heritage Coordination Unit of the Department of Natural Resources and Water (NR&W) in case of Aboriginal Heritage, and to the Environmental Protection Authority (EPA) in case of European Heritage.	Cultural Heritage Officer in consultation with Traditional Owners and/or Representatives	During life of project

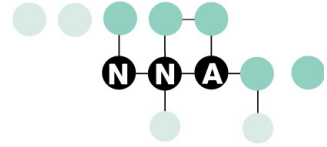


5.9 Verification Procedure

The verification procedure is a mechanism to show that the easement has been inspected, all the environmentally sensitive areas are known and delineated, and the construction supervisor has been advised of and acknowledges environmentally sensitive areas. The verification package is a written record and tangible reminder to the construction supervisor that he has environmental obligations ahead of him; and if he doesn't have signoff, then he doesn't have approval to enter that section of the ROW.

In practical terms, the verification procedure is as follows:

- The Environmental Officer reviews the environmental information available for the easement some days ahead of construction.
- The Environmental Officer identifies from the GIS and alignment sheets all those areas that represent an environmentally sensitive area. These areas may include rare or endangered flora, particular water crossings, habitat of rare or endangered animals, heritage areas [Aboriginal or European], and noise sensitive areas.
- The Aboriginal Heritage Officer will locate and tag known aboriginal heritage sites with construction tape and certify that this task is complete within the designated section of ROW. A 50 metre buffer is to be maintained around aboriginal heritage sites. The Contractor will construct a delineation fence to define the buffer zone. There is to be no activity of any sort within this buffer zone.
- The Environmental Officer should inspect the easement and physically identify all other known sensitive areas with construction tape.
- The details of the site; instructions and description of marking should be recorded and noted in the Verification Checklist process.
- If the Environmental Officer is unfamiliar with a particular environmental aspect [e.g. rare animal capture or plant identification] he should call in suitably qualified personnel who can assist. Sufficient time should be allowed to ensure availability of specialist environmental advisers.
- Once all environmental issues have been identified and flagged out on a specified section of ROW, the Environmental Officer shall point out all the issues in that section with the construction supervisor. The construction supervisor will explain what actions will be taken to protect environmental values and that suitable machinery and material (e.g. spill containment kit) is available to protect flagged out areas.
- The Environmental Officer and the Construction Engineer shall sign off on the verification package prior to the commencement of works. Construction can then commence on that section of the ROW described in the general purpose record.



6 CORRECTIVE AND PREVENTATIVE ACTIONS

6.1 Community Liaison and Complaint Management

See Section 8.1 of the Construction Environmental Management Plan (CEMP) (*NNA001-A-PLN-017*)

6.2 Environmental Incident/Emergency Reporting

See Section 8.2 of the Construction Environmental Management Plan (CEMP) (*NNA001-A-PLN-017*)

6.3 Incident/Emergency Preparedness and Response

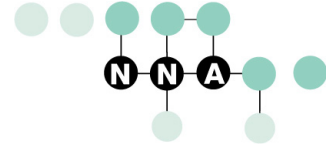
See Section 8.3 of the Construction Environmental Management Plan (CEMP) (*NNA001-A-PLN-017*)

6.4 Incident Investigation

See Section 8.4 of the Construction Environmental Management Plan (CEMP) (*NNA001-A-PLN-017*)

6.5 Non-conformances

See Section 8.5 of the Construction Environmental Management Plan (CEMP) (*NNA001-A-PLN-017*)



7 INSPECTION AND MONITORING

A regular monitoring and reporting program for cultural heritage will be conducted in accordance with the specifications of the relevant site WMSs as follows:

- **Daily** inspections of all cultural heritage management measures by the Site supervisor to ensure that controls are functioning correctly. Any significant issues reported to the Environmental Manager/Officer and/or raised through the non-conformance system.
- **Weekly** routine inspections by the Environment Manager and/or Site Environmental Officer and reported on the Weekly Site Inspection Checklist (refer *Form G-FRM-001*). Any issues that are detected will be reported immediately to the Construction Manager. No work will be permitted that further exacerbates any issues of non-compliance until contingency measures are prescribed and implemented.

7.1 Aboriginal Cultural Heritage

7.1.1 Construction Phase Monitoring

The role of sub-contracted Aboriginal Cultural Heritage monitors is generally to monitor for the find of artefacts during construction (both during clearing and excavation) on areas that the Gubbi Gubbi pre-construction survey has identified as requiring monitoring during construction.

A minimum of one weeks' notice will be required before construction commences in such an area to enable the arrangement of sub-contracted monitors to be present. The preference is for longer-term notification to avoid and manage any unexpected issues with regards to the resourcing of monitors.

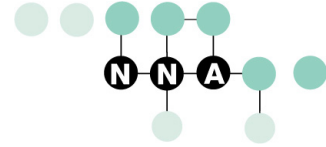
All requests for Monitors must go through the Cultural Heritage Officer for the Alliance, who can inform the relevant aboriginal elder of the date, time and location of where works will take place. An advise notice in then signed by the elder demonstrating that the Gubbi Gubbi have been notified. Once this holdpoint has been satisfied, the Verification Checklist can be signed. These populated documents will be filed on Documentum and hard copies retained.

7.1.2 Reporting

All Alliance personnel have the responsibility to ensure that completed forms are scanned into the Project document database (Documentum) which is the official document control system.

7.2 Non Aboriginal Heritage

Where construction methods include drill and blast, tunnel boring or other major earthworks and these occur within 50 metres of the boundary of an identified heritage site (building), or an item (stone wall) is found on the easement, then the consultant Archaeologist may be called in to review the item. The consultant Archaeologist may recommend the use of a structural heritage engineer to undertake a



detailed visual inspection of each affected site before construction commences. Aims of such an inspection would be to:

- Record the condition of any built fabric within a heritage site, so that the existing structural state of each is understood. Condition reporting should also take into account if timber in any items shows evidence of decay or termite activity, as these can reduce structural adequacy.
- Decide if there are any significant elements within a site which are particularly vulnerable to vibration or explosion, e.g., chimneys, buildings, mineshafts etc.
- Ensure a monitoring regime that takes into account all built fabric of the site, but also emphasises any elements that are particularly vulnerable.

In accordance with the principles of the Burra Charter, no intervention in the building fabric should be carried out as part of the building condition inspection, unless there is good evidence to suggest concealed structural damage.

Any place which is listed on the Queensland Heritage Register will require prior approvals from the Heritage Council for any intervention required.

Monitoring of historical heritage may be required in the event of discovery of and/or possible disturbance of a previously unknown site.

7.3 Contact Details

7.3.1 Aboriginal Monitors and Surveyors

Contact phone numbers for arranging sub-contracted Aboriginal surveyors and monitors are included below.

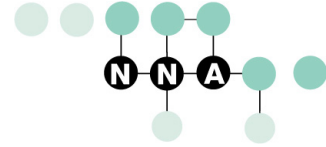
Table 6 Contact Details for Aboriginal Monitors and Surveyors

Area	Company Name	Contact Name	Phone No.
Gubbi Gubbi Country	Ganggala Pty Ltd., 29 Fountain Road, Burpengary, Qld - 4505	Eve Fesl	(07) 38885219 Mob: 0419 023 610

7.3.2 Historic and Aboriginal Archaeologist

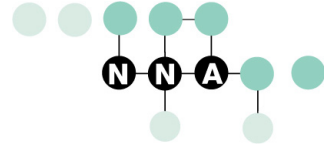
Table 7 Contact Details for Archaeologists

Company Name	Contact Name	Phone No.
Davies Heritage Consultants Pty Ltd	Sue Davies	(07) 3352 6905 Mob: 0419 700 424



8 DEFINITIONS AND ACRONYMS

Acronym	Glossary
Aust	Australia
CEMP	Construction Environmental Management Plan (<i>NNA001-A-PLN-017</i>)
CHCMP	Cultural Heritage Compliance Management Plan (<i>NNA001-A-PLN-028</i>)
DIP	Department of Infrastructure and Planning
EIN	Environmental Improvement Notice
EIS	Environmental Impact Statement
EPA	Queensland Government Environmental Protection Agency
GIS	Geographical Information System
HMP	Heritage Management Plan
KPI	Key Performance Indicator
LinkWater	SRWPCo now trading as LinkWater and is 100 per cent owned by the Queensland Government
Mary Basin WRP	<i>Water Resource (Mary Basin) Water Resource Plan 2006</i>
MP	Management Plan
MSDS	Material Safety Data Sheet
NCR	Non-conformance Report
NNA	Northern Network Alliance
NPI	Northern Pipeline Interconnector
NR&W	Department of Natural Resources & Water
PPE	Personnel Protective Equipment
QESE	Quality Environmental Safety Engineering database
RNE	Register of the National Estate
WMS	Work Method Statement
WQMF	Water Quality Management Facility
WTP	Water Treatment Plant



9 REFERENCE DOCUMENTS

Aboriginal and Torres Strait Islander Heritage Protection Act 1984

Aboriginal Cultural Heritage Act 2003

Australia ICOMOS, The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 1999.

Australian Heritage Council Act 2003

Blyth, A. 2003 Streets and Roads of Yandina & District: their History and Origins. Including the Localities of: Bridges,

Community and Stakeholder Management Plan (*NNA001-A-PLN-027*)

Construction Environmental Management Plan (*NNA001-A-PLN-017*)

Cooloolabin, Kiamba, Kulangoor, Maroochy River, North Arm, Valdora and Yandina Creek.

Queensland Complete Printing Services: Nambour

Criminal Code Act 1899

Cultural Heritage Act 2003

Cultural Heritage Management Plan (*NNA001-A-PLN-028*)

Cultural Heritage Protective Management Guidelines for Nature Refuge Landholders (Environmental Protection Agency Queensland Parks and Wildlife Service, 2004). The publication is available on the web: <http://www.epa.qld.gov.au/publications?id=1970>

Environmental Protection Act 1994.

Guidelines from the Cultural Heritage Coordination Unit DNR&W

Native Title Act 1993

Qld Heritage Act 1992

Torres Strait Islander Cultural Heritage Act 2003

Workplace Health & Safety Management Plan (*NNA001-A-PLN-035*)