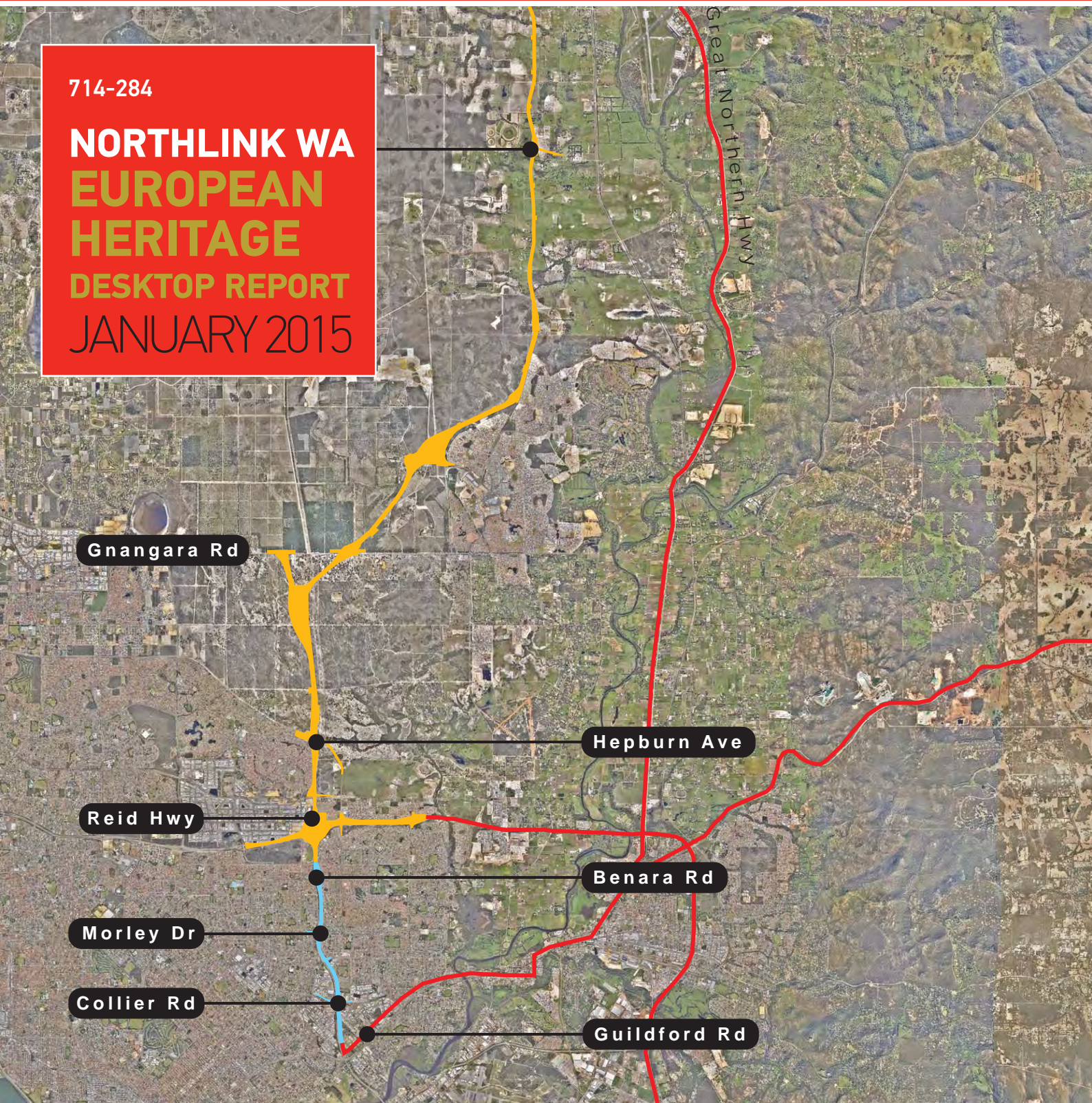


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NORTHLINK WA
EUROPEAN
HERITAGE
DESKTOP REPORT
JANUARY 2015



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Executive Summary

This European Heritage Desktop Report has been prepared as part of the environmental impact assessment for the NorthLink WA Project. The Project is a program of road projects proposed to be undertaken by Main Roads Western Australia (MRWA), which form vital components of a wider series of improvements to the Perth-Darwin National Highway. This report provides details of the findings of a desktop survey, which has identified existing and potential heritage places within and adjacent to the study area.

Existing statutory and non-statutory heritage lists/inventories were investigated to identify the location and details of any existing heritage listed places within and adjacent to the study area. The investigations identified the following two locally listed heritage places, which are afforded statutory protection under the Shire of Chittering's Local Planning Scheme No.6:

- Muchela - No. 30 Brand Highway, Muchea
- Drainage/Irrigation Channel - parallel to Muchea South Road

It also identifies that the Ellenbrook Estate Area traverses the Study area. This place is included on both the National Trust List of Classified Places and the Register of the National Estate, however, these are non-statutory lists. The investigations also identified a number of places adjacent to the study area, which are included on either a Local Government Inventory (non-statutory) or Local Planning Scheme Heritage List (statutory).

The Project will involve some demolition works and a substantial amount of clearing to facilitate the construction of the road improvements. This report highlights that any properties owned by the State Government, which are required to be demolished, will be subject to the Government Heritage Property Disposal Process (GHPDP) if they meet the following criteria:

- Are more than 60 years old;
- Are already listed on an existing heritage list such as a local government inventory (Municipal Inventory); or
- Display other evidence of potential significance in terms of aesthetic, historic, social or scientific value.

The GHPDP is managed by the State Heritage Office and seeks to identify and assess the heritage value of government property under consideration for disposal, and to provide relevant protection where appropriate. This report identified that the following places within the study area, will need to go through the GHPDP:

- No. 44 (Lot 71) Harvest Road, Morley - as it is over 60 years old
- Forestry Department's Divisional Headquarters' and Fire Lookout - as it displays other evidence of potential significance in terms of historic and scientific value
- Ellenbrook Estate Area - as it is already listed on an existing heritage list (National Trust List of Classified Places and the Register of the National Estate)

There was insufficient information to determine whether the following properties were over 60 years old. These places may be subject to the GHPDP:

- No. 3599 (M1606) Great Northern Highway, Muchea
- No. 3571 (Lots 5 and 6) Great Northern Highway, Muchea
- The dwellings along the western side of Harvest Road, between Mickleham Road & Morley Drive Morley

This report concludes with a series of recommendations to manage the impacts of the Project on the European Heritage values and to satisfy the requirements of the GHPDP in and adjacent to the study area:

- Undertake a site visit to enable external photographs to be taken of the Ellenbrook Estate Area, Muchela, Drainage/Irrigation Channel and the properties along Harvest Road and Great Northern Highway that are and may be subject to the GHPDP. The purpose of the site visit should be to gain an understanding of the nature and extent of original/historic fabric (if any) remaining on site.

- Have a qualified archaeologist (Snappy Gum) undertake a site visit to the Forestry Department's Divisional Headquarters' and Fire Lookout in Lexia. The purpose of the site visit should be to take photographs of any visible remains of the headquarters and to determine the likelihood of the site's archaeological potential.
- To comply with the GHPDP prepare a letter to the State Heritage Office advising of the future demolition of properties along Harvest Road and Great Northern Highway; and the further clearance of the Ellenbrook Estate Area, Muchela, the Drainage/Irrigation Channel and the Forestry Department's Divisional Headquarters' and Fire Lookout site. Attach images and available information on these properties to assist the State Heritage Office and Heritage Council make a decision as to whether these places need to undergo the full GHPDP.
- Write to the Shire of Chittering and advise that the project is occurring and will directly impact on two locally listed heritage places - Muchela and the Drainage/Irrigation Channel. Seek confirmation on the status of these places on the Shire's Heritage List and what process is required to enable the further clearance of this site.
- Mark the places that have been identified adjacent to the study area on future mapping for the Project to ensure all consultants are aware of their location and the need for care during construction or with any future boundary changes.
- Advise the City of Swan, Shire of Chittering and City of Bayswater that the Project is occurring and that it is occurring in close proximity to locally listed heritage places.

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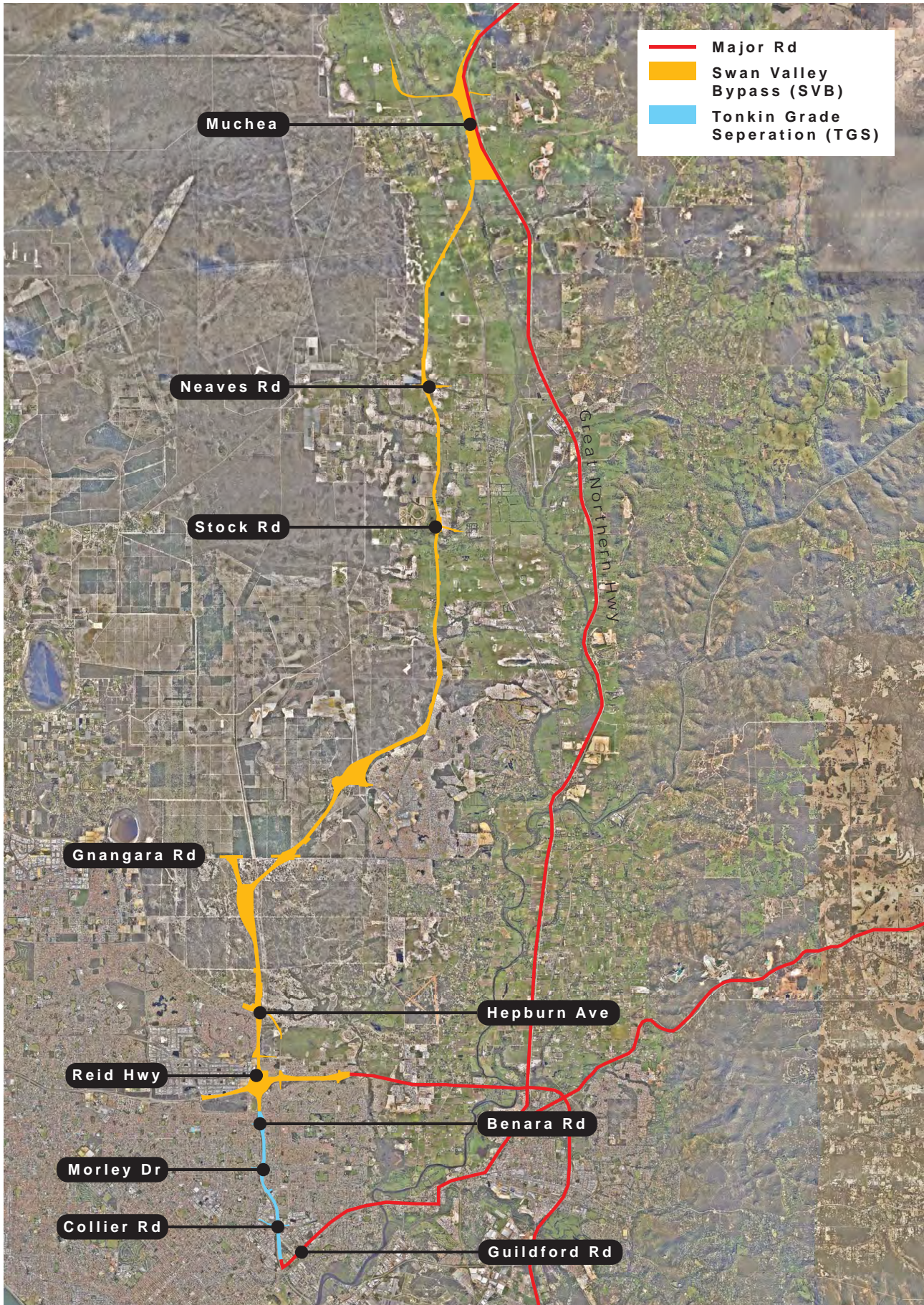


Fig 1. Study Area

1. Introduction

TPG Heritage has prepared this European Heritage Desktop Report as part of the environmental impact assessment for the NorthLink WA Project (the Project).

The Project is a program of road projects proposed to be undertaken by Main Roads Western Australia (MRWA), which form vital components of a wider series of improvements to the Perth-Darwin National Highway. The primary objective of these improvements is to enhance freight efficiency and productivity by reducing travel time and journey time reliability between the Perth metropolitan area and the north west of Australia.

In relation to European Heritage the brief outlines that investigations and recommendations are to be made for managing identified European heritage issues that may be affected by the Project in accordance with the requirements of the Heritage of Western Australia Act 1990 (WA) including preparing all submissions for obtaining appropriate approvals.

This European Heritage Desktop Report has been prepared to investigate whether there are any European heritage 'issues' associated with the Project. Issues are taken to be places that are afforded protection under the provisions of the:

- *Environment Protection and Biodiversity Conservation Act 1999*
- *Heritage of Western Australia Act 1990; or*
- *Planning and Development Act 2005.*

1.1 Study Area

The Project comprises the following two parts, which combined are referred to in this report as the study area:

- PDNH (Swan Valley Bypass) – a new 37 km highway link between the junction of Reid Highway/Tonkin Highway and Great Northern Highway/Brand Highway at Muchea; and
- Tonkin Grade Separations – the grade separation of the intersections of Tonkin Highway with Collier Road, Morley Drive and Benara Road, together with associated works.

The study area runs through four Local Government Authorities and a number of suburbs:

City of Bayswater	Town of Bassendean	City of Swan	Shire of Chittering
Bayswater	Bassendean	Bennett Springs	Muchea
Embleton		Beechboro	
Morley		Malaga	
Noranda		Ballajura	
		Cullacabardee	
		Whiteman	
		Lexia	
		Melaleuca	
		Ellenbrook	
		The Vines	
		Bullsbrook	

Table 1 - Local Government and Suburbs within the Study Area

1.2 NorthLink WA Consultancy Services Team

As the project proponent, MRWA has appointed BG&E as the lead design engineer for the project. BG&E has engaged Coffey to manage the environmental and heritage aspects of the project.

BG&E has also engaged other consultancies to manage other aspects of the project. These consultancies together with BG&E form the NorthLink WA Consultancy Services Team.

The Aboriginal and European heritage investigations have been awarded to Amergin Consulting (Australia) Pty Ltd (Amergin) and are being managed and contracted by Coffey. Amergin is subcontracting the following components of these works:

- European heritage investigations – TPG Heritage:
 - Nerida Moredount B.Sc., B. Arch., Grad Dip. Sc., RAIA, M.ICOMOS
 - Susannah Kendall B.A (Cultural Heritage), MA (Urban and Regional Planning)
- Archaeological investigations - Snappy Gum Heritage Services

2. Methodology

This desktop assessment has been undertaken to identify existing and potential heritage places within and adjacent to the study area and has involved:

- Searches of the following databases to identify heritage places within and adjacent to the study area:
 - Australian Heritage Database
 - inHerit – a portal run by the State Heritage Office for information about heritage places and listings in Western Australia. This list identifies places on the:
 - State Register of Heritage Places
 - Local Government Heritage Lists
 - Local Government Inventories
 - National Trust's List of Classified Places
- City of Bayswater:
 - Local Government Inventory
 - Heritage List
 - Online Mapping
- Shire of Chittering Local Government Inventory
- City of Swan Heritage List
- Liaison with the following agencies to clarify the location of various places due to insufficient address records:
 - The National Trust
 - The Shire of Chittering
 - The City of Bayswater
- Review of previous reports/investigations.

In addition to the above, a review of historic aerial imagery has been undertaken to establish whether there are any buildings in the study area, which are over 60 years old and may be subject to heritage processes (as further explored in section 3.2 relating to the Government Heritage Property Disposal Process).

2.1 Previous Reports

In October 2013, GHD prepared an Environmental Impact Assessment and Biological Survey for the Perth-Darwin National Highway - Tonkin Highway Link (PDNH) for Main Roads. The Environmental Impact Assessment built upon desktop investigations and included findings from fieldwork investigations over a broad range of disciplines including European Heritage.

Dr Gaye Nayton was commissioned by GHD on behalf of Main Roads to undertake an assessment of European heritage sites within a portion of the PDNH-Tonkin Link Study Area in December 2012. The report entitled European Heritage Sites of Perth-Darwin National Highway – Desktop Survey (Desktop Survey) looked at a portion of the current study area, which included the following suburbs:

- Whiteman
- Lexia
- Cullacabardee
- Gnangara

The purpose of the assessment was to investigate and make recommendations for managing identified non-indigenous heritage issues that may be affected by the highway in accordance with the requirements of the Heritage Council of WA. The results of the assessment are summarised below.

Nayton's Desktop Survey (2012) identified no heritage listed non-indigenous places. It did however locate one potential heritage place - the Forestry Department's Divisional Headquarters' and Fire Lookout. Nayton (2012) recommended that an archaeological and heritage survey be carried out on this place if the planned construction works were likely to impact on or close to the site. Such a survey would determine the extent and nature of surviving archaeological and built heritage features.

The GHD report (2013) noted that during the flora and fauna survey undertaken by GHD in spring 2012, the area was traversed and there were no buildings remaining on site. It was acknowledged that this area had been highly disturbed however there was evidence of scattered building rubble, concrete slabs, rubbish and introduced vegetation which indicated that there was once a building/structure in the area.

Nayton's Desktop Survey (2012) also identified two dwellings (Santa Rosa farmhouse and the 'Cottage') that had been built prior to 1960 within the Rick Hamersley Centre, located off Gngara Road. Whilst located outside the study area the Desktop Survey recommended that if either dwelling was required to be demolished that an archival record be undertaken of both houses prior to demolition (Nayton 2012).

3. Heritage Management Framework

There are two core aspects of the Heritage Management Framework that are applicable to the Project, these are:

- Heritage listing; and
- Government Heritage Property Disposal Process.

These aspects are explored in this section and provide a foundation for the remainder of the report.

3.1 Heritage Lists/ Inventories

Places of cultural heritage value are recognised through inclusion on a heritage list/inventory. Some of these listings give statutory protection to heritage places, through requirements for heritage-related approvals or referrals. Other listings are unofficial or quasi-official designations, often arising from local, community-based or thematic surveys.

Statutory Listings – lists and other legal instruments that affect or may affect the use and development of land and buildings.

Other Listings and Surveys – lists that do not have any effect on the use and development of land and buildings.

The main listings that may apply to the Project are summarised below.

3.1.1 Statutory Listings

3.1.1.1 National Heritage List

Under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), the Minister for the Environment, Heritage and the Arts (the Minister) is responsible for the National Heritage List. The National Heritage List is a list of places deemed to be of outstanding heritage significance to Australia.

Under this Act approval is to be obtained before any action takes place that could have a significant impact on the national heritage values of a listed place.

3.1.1.2 State Register of Heritage Places

The Heritage Council of Western Australia (Heritage Council) maintains the State Register of Heritage Places (State Register) under the *Heritage Act of Western Australia 1990* (the Heritage Act), which aims to recognise and protect places of cultural heritage significance to the people of Western Australia.

The Register includes historic buildings, structures, gardens, cemeteries, landscapes and archaeological sites. Any proposals in relation to a State listed place must be referred to the Heritage Council for advice. Specifically, planning, building, demolition and other applications affecting a place in the State Register are referred by the relevant decision making authority (usually a Local Government).

3.1.1.3 Local Planning Scheme Heritage List

The provisions of the *Planning and Development Act 2005* (Planning Act), set out that Local Planning Schemes can adopt a Heritage List to enable the preservation and statutory protection of places and objects of cultural heritage significance to the locality.

The inclusion of a place on the Heritage List does have implications for owners as it requires that planning approval be obtained for demolition, alterations and additions in order for an assessment to be made of the impact of the proposal upon the heritage value of the listed place. Weight is given to the heritage significance of these places when planning applications are submitted.

Local Planning Scheme Heritage Lists typically comprise all, or a subset of, the Local Government Inventory (see following section on Local Government Inventory).

3.1.2 Other Heritage Listings - Surveys

3.1.2.1 Local Government Inventory

In addition to the establishment of the State Register, the Heritage Act also requires Local Governments to compile a Local Government Inventory (LGI) previously known as a Municipal Heritage Inventory. In terms of form and substance, Local Government Inventories can best be described as 'local heritage surveys', which identify places that are, or may become, of cultural heritage significance.

Inclusion on an LGI offers no statutory planning protection unless it is adopted under the relevant Local Government Local Planning Scheme as their Heritage List (as explored above).

3.1.2.2 List of Classified Places

This list is maintained by the National Trust of Australia (WA), a non-profit, community-based organisation involved in heritage identification, education, promotion, interpretation, advocacy and management of heritage sites across WA.

3.1.2.3 Register of the National Estate

The RNE was originally established under the *Australian Heritage Commission Act 1975* (repealed). Under that Act, the former Australian Heritage Commission entered more than 13,000 places in the register, including many places of local or state significance.

The Australian Heritage Commission Act 1975 provided a basic level of statutory protection for places in the RNE, limited to actions by the Commonwealth. Commonwealth agencies were required to avoid taking actions that would adversely affect places in the RNE, unless there was no feasible and prudent alternative.

The Register of the National Estate was closed in 2007 and is no longer a statutory list. The RNE is maintained on a non-statutory basis as a publicly available archive and educational resource.

3.2 Government Heritage Property Disposal Process

The State Cultural Heritage Policy outlines the partnership role Government agencies have in recognising, conserving and protecting important publicly owned places. To meet this policy objective the State Heritage Office implement the Government Heritage Property Disposal Process (GHPDP) to identify and assess the heritage value of government property under consideration for disposal, and to provide relevant protection where appropriate.

"Disposal" includes the sale, transfer or lease of a property outside the State Government sector (where transfer or lease is for a duration of at least 10 years), and includes the demolition of places.

Any properties owned by the State Government within the study area, which meet the following criteria must go through the Government Heritage Property Disposal Process:

- Are more than 60 years old;
- Are already listed on an existing heritage list such as a local government inventory (Municipal Inventory); or
- Display other evidence of potential significance in terms of aesthetic, historic, social or scientific value.

NOTE: This process also applies to properties acquired by the project team throughout the project, which are then subsequently demolished. This report may not have addressed all these potential properties as it is not known what may be required to be acquired and demolished.

4. Results Desktop Survey

4.1 Heritage Database Investigation – Statutory Listings

4.1.1 Protected places within the study area

A desktop survey of the various Heritage Databases identified no places within the study area on any of the statutory National or State Heritage Lists. The survey identified the following two places on the Shire of Chittering's Heritage List ¹:

- Muchela – No. 30 Brand Highway, Muchea
- Drainage/Irrigation Channel

Details on these places are provided on the following pages

¹ The Shire of Chittering has advised that the Municipal Heritage Inventory is their Heritage List, which has been adopted under Local Planning Scheme No. 6 and hence afforded protection. Our desktop research has revealed information that suggests the Municipal Heritage Inventory has not been adopted as the Shire's Heritage List. However, moving forward it is wise to proceed on the basis that the Municipal Heritage Inventory is afforded statutory protection.

4.1.1.1 Muchela



Fig 2. Aerial showing Muchela at No. 30 Brand Highway, Muchea

Address:	No. 30 Brand Highway, Muchea
Local Government:	Shire of Chittering
Heritage Status:	Municipal Heritage Inventory
Management Category:	5
Management Category Description:	A site of some cultural heritage significance to the Shire of Chittering.
Statement of Significance:	<i>The site has significance as it was first selected by George Fletcher Moore, who named it Muchela after which the town of Muchea was named.</i>
Description:	The Shire of Chittering's Place Record Form offers no Physical Description for the site. It simply states 'Site not accessed.'
History:	On 20 June 1845, the property was auctioned by the government and it was purchased by George Fletcher Moore. It had a frontage along 'Ellen's Brook'. He named the property 'Muchela' which means running water. It was amongst the first of the lands to be surveyed in what was then the Gingin district. Moore never farmed this land. On August 1913, the land was transferred from Moore's nephew, who had inherited the property, to Henry O'Neill of Chittering.
Reference:	Shire of Chittering Place Record Form Place: M22

4.1.1.2 Irrigation Channel



Fig 3. Aerial showing possible location of irrigation channel along Muchea South Road

Address:	The Shire have advised that these are the drains that run alongside Muchea South Road
Local Government:	Shire of Chittering
Heritage Status:	Municipal Heritage Inventory
Management Category:	5
Management Category Description:	A site of some cultural heritage significance to the Shire of Chittering.
Statement of Significance:	<i>The various sites are significant for their association with early drainage practices in the Muchea district.</i>
Description:	The channels are 0.450 wide x 0.450 metres deep.
History:	W R Steer dug the drains to reduce the acidity of the winter rains and to raise the levels of the land. The channels were further developed by individual landowners for drainage in winter and irrigation in summer. The irrigation originated from Hellgate Swamp - 1 3/4 Brook which was a natural spring. The individual channels had diversion channels with blocks being used to alter the direction of the spring water. Roadside drainage was supervised by a Road Board member who was the Roadside Elector. He took levels and directed where drainage would go.
Reference:	Shire of Chittering Place Record Form Place: M25

4.1.2 Protected places adjacent the study area

The desktop survey did identify a number of places directly adjacent to the study area that had some level of heritage protection through inclusion on a Local Planning Scheme Heritage List:

City of Swan – Local Planning Scheme No.17

- The Barnard Spring's Trough & Wetland - No.35 (Lot 8247) Sawpit Road, Bullsbrook
- Remnant Bushland and Wetland – No. 458 Maralla Road, Bullsbrook

Shire of Chittering - Local Planning Scheme No.6

- Tiwest – No. 175 Old Gingin Road
- Muchea Roadhouse - No. 3614 Great Northern Highway, Muchea
- Wartime Airstrip - Great Northern Highway, Muchea
- Van Ooran's House - No. 299 (Lot 2929) Brand Highway, Muchea

Details on these places are provided on the following pages.

4.1.2.1 The Barnard Spring's Trough & Wetland



Fig 4. Aerial showing the Barnard Spring's Trough & Wetland at No.35 (Lot 8247) Sawpit Road, Bullsbrook

Address:	No.35 (Lot 8247) Sawpit Road, Bullsbrook
Local Government:	City of Swan
Heritage Status:	Heritage Lists adopted under Local Planning Scheme No. 17
Management Category:	Considerable Significance
Management Category Description:	Very important to the heritage of the locality.
Desirable Outcome:	Conservation of the place is highly desirable. Any alterations or extensions should be sympathetic to the heritage values of the place.
Statement of Significance:	<i>Barnard Springs Trough and wetland are of scientific and educational importance. The place represents a diversity of species, plant communities and presence of endangered species. The wetland and remnant vegetation support an array of aquatic life including long-necked tortoises.</i>
	<i>The place is of aesthetic and recreational significance.</i>
	<i>The trough and dam are of historical significance and are rare and fragile.</i>
	<i>The place is associated with Barnard Drummond Clarkson, a pastoralist, farmer and explorer who was the property owner in 1896.</i>
Description:	The site consists of an historic dam and stock watering trough carved from two sections of trees and includes a feeder pipe between the dam and the trough. A permanent natural spring feeds the dam, which feeds the natural wetland after passing through the pipe and trough. There are also other small springs in the wetland. The flooded gum forest is also a significant vegetation complex, which is rare.
History:	According to local sources, the spring in Bullsbrook was a watering place before the trough was built for stock travelling to the metropolitan markets. The year the dam and trough was built is unknown.
Reference:	City of Swan Heritage List Place Record Form Place: 631

4.1.2.2 Remnant Bushland and Wetland

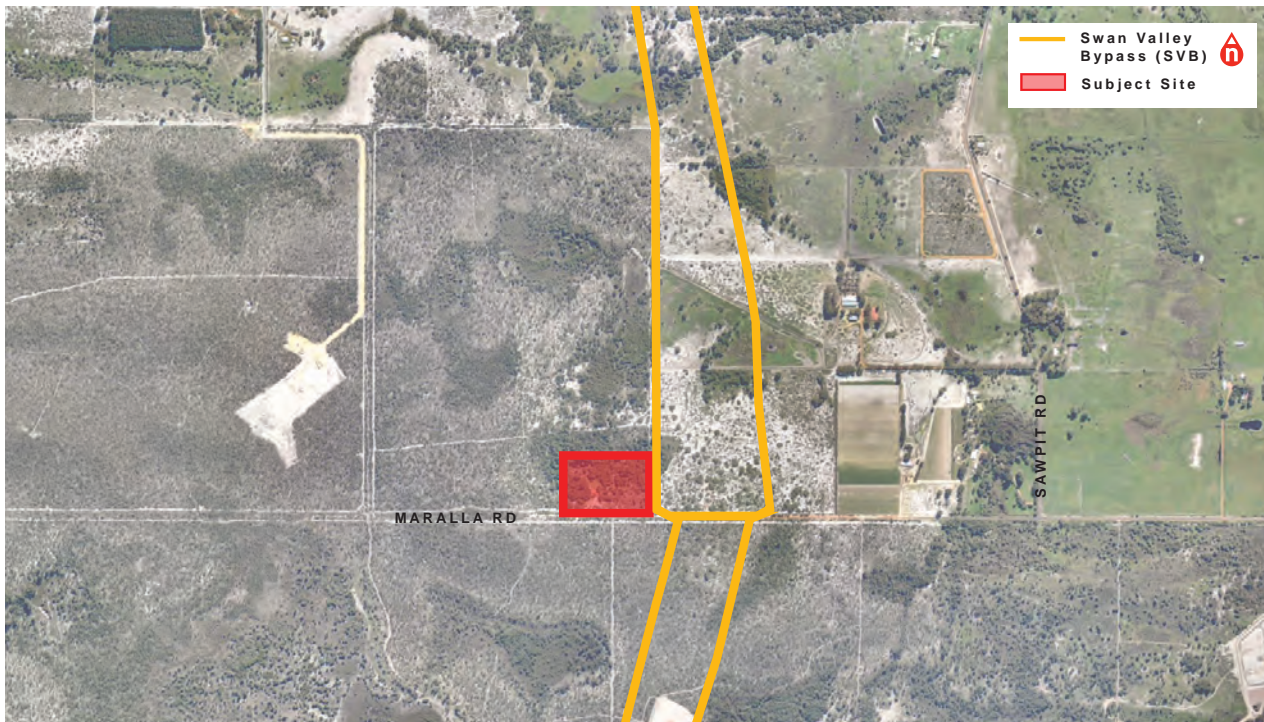


Fig 5. Aerial showing Remnant Bushland and Wetland at No. 458 (Lot 1452) Maralla Road, Bullsbrook

Address:	No. 458 (Lot 1452) Maralla Road, Bullsbrook
Local Government:	City of Swan
Heritage Status:	Heritage List adopted under Local Planning Scheme No. 17
Management Category:	Exceptional significance
Management Category Description:	Essential to the heritage of the locality. Rare or outstanding example.
Desirable Outcome:	The place should be retained and conserved unless there is no feasible and prudent alternative to doing otherwise. Any alterations or extensions should be sympathetic to the heritage values of the place and in accordance with a Conservation Plan (if one exists).
Statement of Significance:	<i>The remnant bush and wetlands support a diversity of flora and fauna and create an aesthetically rich landscape.</i>
Description:	A block of dense remnant bush and wetland in intact condition, with a small modified area accommodating a dwelling and its curtilage.
History:	-
Reference:	City of Swan Heritage List Place Record Form Place: 630

4.1.2.3 Muchea Roadhouse



Fig 6. Aerial showing Muchea Roadhouse at No. 3614 (Lot 30) Great Northern Highway, Muchea

Address:	No. 3614 (Lot 30) Great Northern Highway, Muchea
Local Government:	Shire of Chittering
Heritage Status:	Municipal Heritage Inventory
Management Category:	4
Management Category Description:	Encourage retention, or document if not possible to retain.
Statement of Significance:	<i>The place is significant for its continuous use and development as a hospitality and transport stop for travellers, and for its association with the McGlews.</i>
Description:	Timber framed, asbestos clad with a hipped tile roof.
History:	McGlew first came to Muchea in 1924 and established a poultry farm ('Prospect Farm' in west Muchea), after previously settling in Lower Chittering in 1897. In 1930, the McGlews moved into the tearooms which had been running about 3-4 years. The tearooms had a mobile petrol pump, sold melons, and ran a carrying business to cart farm supplies and backload. No passengers were allowed. McGlew carried chickens and eggs for the Egg Board, and during the war, he cut and sold firewood. During the war when McGlew was sick, his daughter Phyllis drove the truck. She is said to have been the first woman in Western Australia to have a truck licence. Ray McGlew took over the carrying business, followed by Vic Harding and Ian Fewster. In 1978, McGlew sold the former tearooms (roadhouse) to Bertoli, who owned the house next door.
Reference:	Shire of Chittering Place Record Form Place: M20

4.1.2.4 Tiwest

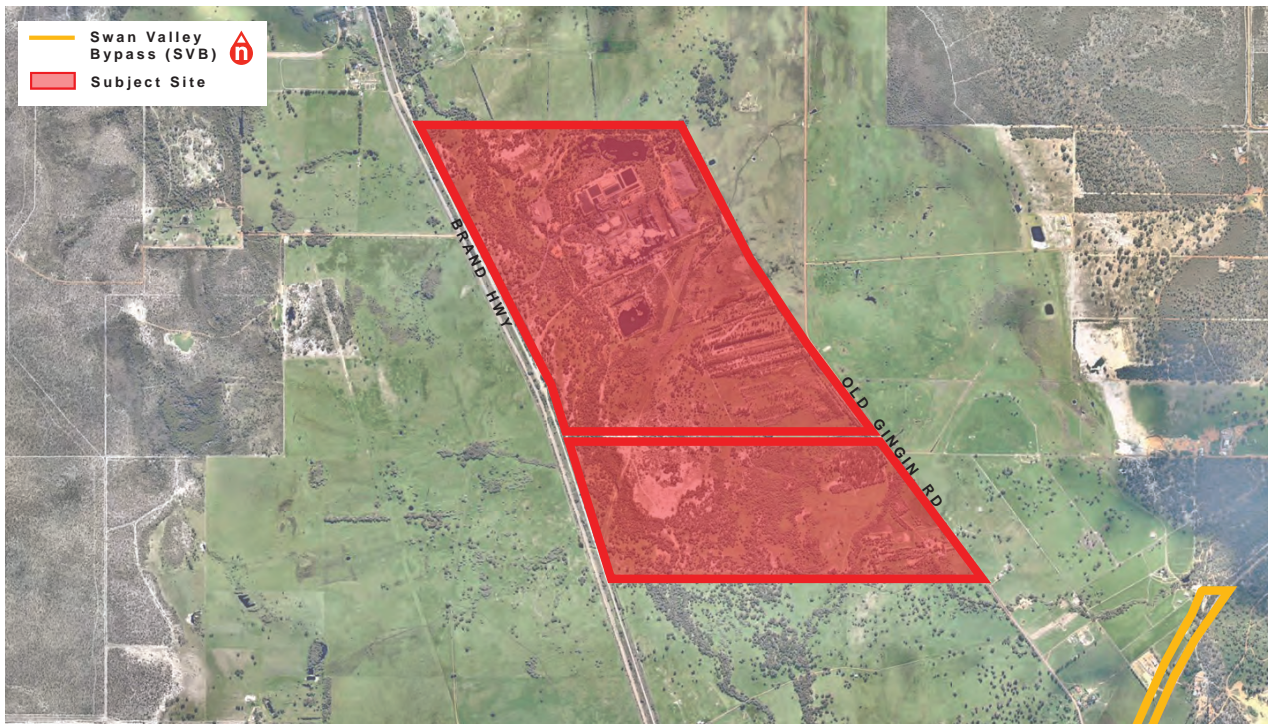


Fig 7. Aerial showing Tiwest at No. 175 Old Gingin Road, Muchea

Address:	No. 175 Old Gingin Road, Muchea
Local Government:	Shire of Chittering
Heritage Status:	Municipal Heritage Inventory
Management Category:	4
Management Category Description:	Encourage retention, or document if not possible to retain.
Statement of Significance:	<i>The place is significant for its association with the mining and mineral processing industries in Western Australia, and as a major source of employment and income in the Shire of Chittering.</i>
Description:	Titanium minerals processing plant.
History:	Established in 1988. Tiwest was a joint venture between KMCC Western Australia Pty Ltd, a subsidiary of Kerr McGee Chemicals LLC and the subsidiaries of Australian based Ticon Resources Pty Ltd. The joint venture developed a fully integrated titanium minerals processing project in Western Australia based on titanium rich sands at the Cooljarloo mine near Cataby, 170km north of Perth, WA. The processing sequence which turns minerals into finished products begin at the Chandala complex. The complex includes three major plants - a dry mill which separates the minerals, a synthetic rutile plant which upgrades ilmenite into high quality titanium dioxide pigment feedstock, and a waste management plant. The dry mill produces 420 000 tonnes of ilmenite, 70 000 tonnes of zircon, 25 000 tonnes of rutile, and 15 000 tonnes of leucoxene a year. Tiwest is now owned by Tronox. In 2012 the joint venture was taken over by the parent company Tronox.
Reference:	Shire of Chittering Place Record Form Place: M27

4.1.2.5 Wartime Airstrip



Fig 8. Aerial showing the Wartime Airstrip at Lot 50 D12338 Great Northern Highway

Address:	Lot 50 D12338 Great Northern Highway
Local Government:	Shire of Chittering
Heritage Status:	Municipal Heritage Inventory
Management Category:	5
Management Category Description:	A site of some cultural heritage significance to the Shire of Chittering.
Statement of Significance:	<i>The place is significant as one of a number of small emergency airstrips established during World War 2.</i>
Description:	No description provided
History:	One of a number of small emergency airstrips that were established during World War 2 following the bombing of Darwin by the Japanese. The airstrip was constructed in the event aircraft at the Pearce Airbase needed to be evacuated.
Reference:	Shire of Chittering Place Record Form