



## **Wilcannia Weir Replacement**

**Statement of Heritage Impact**

**Final**

**05 July 2022**

**Water Infrastructure NSW**



## Wilcannia Weir Replacement

Project No: IS350400  
Document Title: Statement of Heritage Impact  
Revision: 06  
Document Status: Final  
Date: 05 July 2022  
Client Name: Water Infrastructure NSW  
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File Name: IS350400\_Non-Aboriginal-Heritage-Assessment\_Final\_220705

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## Executive summary

### Introduction

Water Infrastructure NSW proposes to replace the existing Wilcannia Weir on the Darling River (Baaka) at Wilcannia, with a new weir located about five river kilometres downstream of the existing weir (the proposal). The existing weir would also be partially removed and decommissioned as part of the proposal. Wilcannia is located on the Darling River (Baaka) in Western NSW, about 780 kilometres north west of Sydney and 190 kilometres north east of Broken Hill. The existing weir is located about 430 metres northeast of the Wilcannia Bridge, with the site of the proposed weir at Union Bend, about 2.3 kilometres south of the Wilcannia Bridge.

The proposal is located in the Central Darling local government area and would provide a more reliable long-term town water supply for Wilcannia to meet community needs. The proposal is funded by a \$30 million commitment from both the NSW and Commonwealth governments. Jacobs Group (Australia) Pty Ltd was commissioned by Water Infrastructure NSW to prepare an assessment of impact on non-Aboriginal heritage values associated with the replacement of the weir to inform the environmental impact statement for the proposal.

### Heritage items

The study area is defined as the construction footprint and extended weir pool inundation area extent. Within the study there is one listed heritage item, one conservation area and two unlisted heritage items of local significance:

- Centre lift bridge over the Darling River (LEP ID #I15) (referred to throughout as Wilcannia Bridge);
- Wilcannia Conservation Area (LEP ID #C1)
- The existing Wilcannia Weir (assessed as local significance)
- Potential brick kilns (assessed as local significance).

### Impact assessment

There is a potential for minor direct impacts to Wilcannia Bridge (LEP ID #I15) and the Wilcannia Conservation Area (LEP ID #C1) through the elevated water level in the river beneath the bridge potentially affecting pier corrosion and degradation. The partial removal and decommissioning of the existing Wilcannia Weir and its inundation by the new weir pool would be of major direct and indirect impact to the weir as a heritage item. Given that its primary value relates to historical and social significance there is potential for these impacts to be mitigated through appropriate recommendations. The proposal would have no direct or indirect impacts on the potential brick kilns site.

The heritage impacts of the proposal are summarised in the table below.

Question/Aspect	Assessment
The following aspects of the proposal respect or enhance the heritage significance of the item(s) or conservation area for the following reasons	<ul style="list-style-type: none"> <li>▪ The new weir structure works are located away from any known or potential heritage items.</li> <li>▪ While the existing Wilcannia Weir (assessed as being of local significance) would be partially removed and decommissioned to allow water flow and fish passage as part of the proposal, opportunities exist to mitigate the key heritage values identified. The proposal provides a new site for recreation and community utilisation, where interpretive material may be presented which provides a record of the existing Wilcannia Weir and its history. Development of the interpretation plan will occur during the detailed</li> </ul>

Question/Aspect	Assessment
<p>The following aspects of the proposal could detrimentally impact on heritage significance.</p> <p>The reasons are explained as well as the measures to be taken to minimise impacts.</p>	<p>design and pre-construction phases, in consultation with the local community and Heritage NSW.</p> <ul style="list-style-type: none"> <li>While major direct impacts are anticipated for the existing weir it is proposed that certain elements of the weir remain in situ. Of the 43-metre wide existing weir structure, about 16 metres would be removed via excavation of its central section. The remaining remnant structure would be stabilised prior to inundation by: <ul style="list-style-type: none"> <li>Removal of the 1980s concrete capping</li> <li>Removal of sheet piles where practical to ensure the remaining structure cannot retain water</li> <li>Retention of the existing earth and rockfill embankment with original timber in the abutment areas</li> <li>Rehabilitation of the disturbed areas.</li> </ul> </li> <li>Impacted heritage values of the existing weir (historical, aesthetic, social) are considered acceptable because the new weir would provide long-term water security for the town and the existing weir is no longer fit for purpose due to its poor condition. These impacts will also be mitigated, as described above.</li> <li>The construction of the new weir and extended weir pool would raise the water level around Wilcannia Bridge (LEP ID #115). Given current corrosion concerns, the new water level may accelerate existing damage by submerging more of the substructure, complicating any plans for stabilisation or remediation. This impact would be managed through the completion of any requisite repair works prior to commissioning of the new weir and inundation of the extended weir pool. The repair work would be carried out by Central Darling Shire Council and does not form part of the proposal.</li> </ul>
<p>The following sympathetic solutions have been considered and discounted</p>	<ul style="list-style-type: none"> <li>To 'do nothing' is not a viable option for the continued operation of the existing Wilcannia Weir. It is inconsistent with the primary objective of the proposal, which is to help secure existing and future water supply for the township of Wilcannia. It is also inconsistent with the other objectives of the proposal, which are to enhance cultural connection to the river, improve water management of the weir pool, increase tourism opportunities and investment, provide better recreational amenity to walk, swim, picnic and fish and improve native fish migration.</li> <li>Repairing and/or upgrading of the existing Wilcannia Weir would also not meet the water security and other objectives of the proposal. The existing weir is nearing the end of its effective design life and if it were to be upgraded to meet the town's future water demand it would be necessary to install a new line of steel sheet piling and a fishway. As a result, the cost of upgrading the existing weir would be similar to that of constructing a new weir and fishway. Without a cost advantage, the option of upgrading the existing weir would have few benefits relative to developing a new weir and fishway.</li> <li>Opportunities to retain the existing weir completely in situ while still constructing the new weir were also examined as part of the preliminary assessments for the proposal. However, it was determined that this would not be feasible as the general operating conditions of the increased weir pool would be approximately the full</li> </ul>

Question/Aspect	Assessment
	<p>supply level of the existing weir and it would not be visible. Furthermore, if the weir was to be fully retained, it would continue to serve as a blockage to fish passage, which is not acceptable from an ecological point of view. Healthier native fish populations is a benefit of the new weir which is strongly supported by the local community.</p> <ul style="list-style-type: none"> <li>▪ Further discussion on the options considered in developing the proposal is provided in Section 2.2 of the environmental impact statement for the proposal.</li> </ul>

## Mitigation and management measures

### Measure NAH1 – stabilisation and remediation work to Wilcannia Bridge (LEP ID #I15)

A community proposal has been put forward to undertake cathodic protection and repair of the Wilcannia Bridge substructure. Water Infrastructure NSW has confirmed that Central Darling Shire Council has sought separate funding from the Department of Planning and Environment to undertake these works, with confirmation in December 2020 that there is a commitment to fund these works and complete prior to the commissioning of the new weir. The following measures are proposed:

- In order to preserve the heritage fabric of Wilcannia Bridge (LEP ID #I15), the stabilisation of the existing corrosion damage and remediation works will be undertaken prior to the commissioning of the new weir as per the community proposal
- Water Infrastructure NSW will continue to liaise with the Department of Planning and Environment and Central Darling Shire Council regarding the timing of the proposed remediation to ensure, if possible, that works are completed prior to the commissioning of the new weir.

### Measure NAH2 – archival recording

The proposal includes the partial removal and decommissioning of the existing Wilcannia Weir, which has been assessed as being of local heritage significance. The following measures are proposed:

- 3D scan the existing weir to create a reality textured model
- Prior to and during its partial removal and decommissioning, a full archival recording of the existing weir will be undertaken by an appropriately experienced heritage professional in accordance with *Photographic Recording of Heritage Items Using Film or Digital Capture* (Heritage Council of NSW 2006) and *How to Prepare Archival Records of Heritage Items* (Heritage Council of NSW 1998) at a minimum
- The accompanying report to the archival recording will include the collection of oral histories related to the weir from the local community

### Measure NAH3 – heritage interpretation

The existing Wilcannia Weir has been assessed as being of local significance for its historical and aesthetic values, but predominantly for its social value. It is deeply entwined in the history of Wilcannia since its initial conception, and contemporary oral histories related to its construction and operation are known to survive within the community. As the proposal involves its partial removal, opportunities for interpretation will be explored in consultation with the local community, including the following measures:

- A heritage interpretation plan for the weir will be prepared to provide a framework for its interpretation, set out its key interpretive themes and identify appropriate communication strategies
- Opportunities for interpretation which will be considered during the development of the heritage interpretation plan include:
  - Adaptive reuse of some of the weir fabric, e.g. the sandstone rock fill, in the new community river place

- Interpretive signage commemorating the history and location of the existing weir at a suitable location.

#### **Measure NAH4 – management of unexpected heritage finds and archaeological deposits**

While the potential for unexpected finds is low, the following measures will be implemented as part of the proposal:

- An unexpected finds procedure will be developed for inclusion in the construction environmental management plan to provide a consistent method for managing any unexpected heritage or archaeological items (including unexpected human remains) for the duration of the demolition and construction phases of the proposal
- Any human skeletal remains discovered during construction will be managed in accordance with relevant legislation and guidelines including the *Public Health Regulation 2012* (NSW), *Heritage Act 1977* (NSW), *Work Health and Safety Act 2011* (NSW), *NSW Government Health Procedures – Exhumation of Human Remains* (NSW Health 2013), and *Skeletal Remains – Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977* (NSW Heritage Office 1998).

#### **Measure NAH5 – heritage awareness training**

- Historical heritage awareness training will be undertaken by all site workers prior to commencement of demolition or construction works. This training will promote an understanding of potential heritage items in the area and the requirements of the unexpected finds procedure.

#### **Measure NAH6 – salvaging of weir rocks**

- In consultation with the local community, salvage and re-use weir rocks in landscape remediation works including at the community river place and new and existing weir sites.

**Glossary of terms and abbreviations**

Term	Definition
AHD	Australian Height Datum
Central Darling LEP 2012	Central Darling Local Environmental Plan 2012
HCA	Heritage conservation area
CHL	Commonwealth Heritage List
EP&A Act	<i>Environmental Planning &amp; Assessment Act 1979 (NSW)</i>
EPBC Act	<i>Environment Protection &amp; Biodiversity Conservation Act 1999 (Commonwealth)</i>
Heritage Act	<i>Heritage Act 1977 (NSW)</i>
Jacobs	Jacobs Group (Australia) Pty Ltd
Left and right	Reference to left and right (of river) is with respect to the view in the downstream direction, in accordance with industry practice
LEP	Local environmental plan
NHL	National Heritage List
River kilometre	Distance along the centreline of a river (i.e. not in a straight line), measured in kilometres
RNE	Register of the National Estate
SEARs	Secretary's environmental assessment requirements
SHI	State Heritage Inventory
SHR	State Heritage Register
TSR	Travelling stock route or travelling stock reserve



## 1. Introduction

Water Infrastructure NSW proposes to replace the existing Wilcannia Weir on the Darling River (Baaka) at Wilcannia, with a new weir located about five river kilometres downstream of the existing weir location (the proposal) (refer to **Figure 1-1**). The existing weir would also be partially removed and decommissioned as part of the proposal. The proposal is located in the Central Darling local government area and would provide a more reliable long-term town water supply for Wilcannia to meet community needs. The proposal is funded by a \$30 million commitment from both the NSW and Commonwealth governments.

### 1.1 Approval and assessment requirements

The proposal is declared State significant infrastructure under section 2.13 and Schedule 3 of the State Environmental Planning Policy (Planning Systems) 2021. The proposal is subject to assessment in accordance with Part 5 Division 5.2 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and the environmental assessment requirements of the Secretary of the NSW Department of Planning and Environment (the SEARs) (SSI-10050), dated 28 August 2020.

The Minister for Planning approves State significant infrastructure projects in accordance with section 5.14 of the EP&A Act.

During planning for the proposal, approval as critical State significant infrastructure in accordance with Schedule 3 of the *Water Supply (Critical Needs) Act 2019* was proposed, however the expiry of this Act on 21 November 2021 means that this is no longer a viable planning approval pathway. Water Infrastructure NSW has advised the DPE of this change to the planning approval pathway for the proposal and its intention to submit a State significant infrastructure application.

The proposal is also determined to be a controlled action under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and requires approval from the Australian Minister for the Environment.

This report has been prepared by Jacobs Group (Australia) Pty Ltd (Jacobs) as part of the environmental impact statement for the proposal. The environmental impact statement has been prepared to support the application for approval of the proposal and address the SEARs. This Statement of Heritage Impact addresses SEAR number 6 (refer to **Table 1-1**).

### 1.2 Proposal description

The proposed new weir would be located about two kilometres south of the Wilcannia township, and about five river kilometres downstream of the existing weir. The key design features of the proposal are shown in **Figure 1-2** and include:

- A new weir with storage capacity of about 7,832 megalitres of water when the weir gates and fishway gates are closed
- A fixed crest portion of the weir about five metres high and 21.5 metres wide, next to the left bank (southern side) of the river
- A fishway about 120 metres long and 10.5 metres wide, next to the right bank (northern side) of the river to provide fish passage past the weir
- Remotely operated gates (with a manual function) to manage the storage, release, and quality of water within the weir pool
- A small recreation area, known as a community river place, at Union Bend
- An upgraded unsealed access track about three kilometres long, between the Barrier Highway and the left side of the new weir (southern side)

- A permanent access track about 120 metres long, from the top of the right riverbank extending along the length of the fishway
- An electricity easement about 360 metres long, from the existing overhead powerlines on Union Bend Road to a new substation on the right side of the new weir. The substation would connect to a main switchboard installed within a prefabricated concrete switch room at the top of the right riverbank near the weir gates
- Conversion of an existing flow gauging station, located between the new and existing weirs, into a weir pool height gauging station
- Partial removal and decommissioning of the existing weir on the Darling River (Baaka) in the Wilcannia township, located between Victory Park Caravan Park (left riverbank) and Field Street (right riverbank).

The existing weir pool extends about 61.79 river kilometres along the Darling River (Baaka) upstream from the existing weir. Construction of the new weir would create a new section of weir pool of about 4.92 river kilometres between the new and existing weirs, to extend the total weir pool to about 66.71 river kilometres when the new weir is at the existing full supply level of 65.71 metres Australian Height Datum (AHD).

The new weir would have dual modes of operation: a normal operation mode when the weir would operate at the existing full supply level (65.71 metres AHD), and a drought security operation mode, when it would operate at a new full supply level of 66.71 metres AHD. This temporary increase in the full supply level of one metre would result in the weir pool being one metre deeper and extending about 18.81 river kilometres further upstream than the existing weir pool, to create a weir pool that is about 85.52 river kilometres long (refer to **Figure 1-1**).

In addition to the proposal features described above, the following temporary construction features would be required:

- Construction compounds and materials laydown areas on both sides of the river near the new weir
- A staging area on the left side of the river near the existing weir
- Access tracks down to the bed of the river from both sides of the river at the new weir
- An access track down to the bed of the river from the southern side of the river at the existing weir site (within the Victory Park Caravan Park)
- Cofferdams to create dry work areas within the river channel.

The key construction features proposed at the new weir and existing weir are shown in **Figure 1-3** and **Figure 1-4** respectively.

Construction would commence once all necessary approvals are obtained, and the detailed design is complete. It is anticipated that construction would start in early 2023 and take about 12 to 18 months to complete. Partial removal and decommissioning of the existing weir would occur after construction of the new weir is completed.

### 1.3 Purpose and scope of this report

The purpose of this report is to assess the potential impacts on non-Aboriginal heritage values from constructing and operating the proposal. The report:

- Addresses SEAR number 6 as shown in **Table 1-1**
- Describes the existing environment with respect to non-Aboriginal heritage
- Assesses the impacts of constructing and operating the proposal on non-Aboriginal heritage
- Identifies measures to mitigate and manage the impacts identified.

The methodology for the assessment is described in **Section 3**.

Table 1-1 How this assessment addresses SEAR number 6

Requirement	Section addressed
<b>Key issue 6. Non-Aboriginal heritage</b>	
Provide a heritage assessment including but not limited to an assessment of impacts to State and local heritage	This report fulfils this condition
Where there are impacts, outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the NSW Heritage Manual (1996)	<b>Section 7 and Section 8</b>
Where there are impacts, the assessment shall be undertaken by a suitably qualified heritage consultant(s)	<b>Table 1-2 in Section 1.5</b>
Where there are impacts, any archaeological excavations that are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Criteria	Not applicable as no archaeological excavations are proposed
Where there are impacts, the assessment shall include a statement of heritage impact for all heritage items (including significance assessment)	<b>Section 6</b> (significance assessment) and <b>Section 7</b> (statements of heritage impact)
Where there are impacts, the assessment shall consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant)	<b>Section 7</b>
Where potential archaeological impacts have been identified develop and appropriate archaeological assessment methodology, including research design, to guide	Not applicable as there are no archaeological impacts

## 1.4 Report structure

The structure of the report is as follows:

- **Section 1** – introduces the report
- **Section 2** – provides an overview legislation, policies and guidelines application to this assessment
- **Section 3** – describes the methodology and approach for the assessment
- **Section 4** – described the existing environment, including historical context, statutory database search results and a literature review
- **Section 5** – describes the results of the field survey
- **Section 6** – provides a significance assessment of all items potentially to be impacted
- **Section 7** – provides an assessment of impacts to heritage items and potential archaeological deposits
- **Section 8** – identifies mitigation measures.

## 1.5 Authorship

The assessment was carried out by a team of suitably qualified heritage consultants as listed in **Table 1-2**.

Table 1-2 Heritage consultants carrying out this assessment

Name	Qualifications	Role
Deborah Farina	<ul style="list-style-type: none"> <li>Master of History (current)</li> <li>Bachelor of Arts (Archaeology/ Palaeoanthropology)</li> <li>Bachelor of Laws</li> </ul>	<ul style="list-style-type: none"> <li>Assessment lead</li> <li>Primary author</li> <li>Field survey</li> </ul>
Clare Leever	<ul style="list-style-type: none"> <li>Graduate Diploma of Archaeology</li> <li>Bachelor of Archaeology</li> </ul>	<ul style="list-style-type: none"> <li>Field survey</li> <li>Report preparation</li> </ul>
Alexandra Seifertova	<ul style="list-style-type: none"> <li>BA (Hons) Archaeology</li> <li>BA Archaeology and Studies of Religion</li> </ul>	<ul style="list-style-type: none"> <li>Report preparation</li> </ul>
Dr Karen Murphy	<ul style="list-style-type: none"> <li>PhD (Historical Archaeology)</li> <li>Bachelor of Arts (Honours) (Archaeology)</li> </ul>	<ul style="list-style-type: none"> <li>Technical review</li> </ul>

## 1.6 Acknowledgements

The authors of this report would like to thank and acknowledge the following people in the preparation of this report.

Table 1-3 Acknowledgements

Name	Organisation
Nicole Philps, Simon Cornell	Project Managers, Jacobs
Doug Williams, Oliver MacGregor	Aboriginal heritage, Jacobs
Jorja Vernon	Aquatic ecologist, Jacobs
Beth Garland	Local resident and historian, Broken Hill
Bill and Chris Elliott	Local residents and historian, Wilcannia
Paul Brown	Local resident, Wilcannia
Anthony Pease	Local resident, Wilcannia

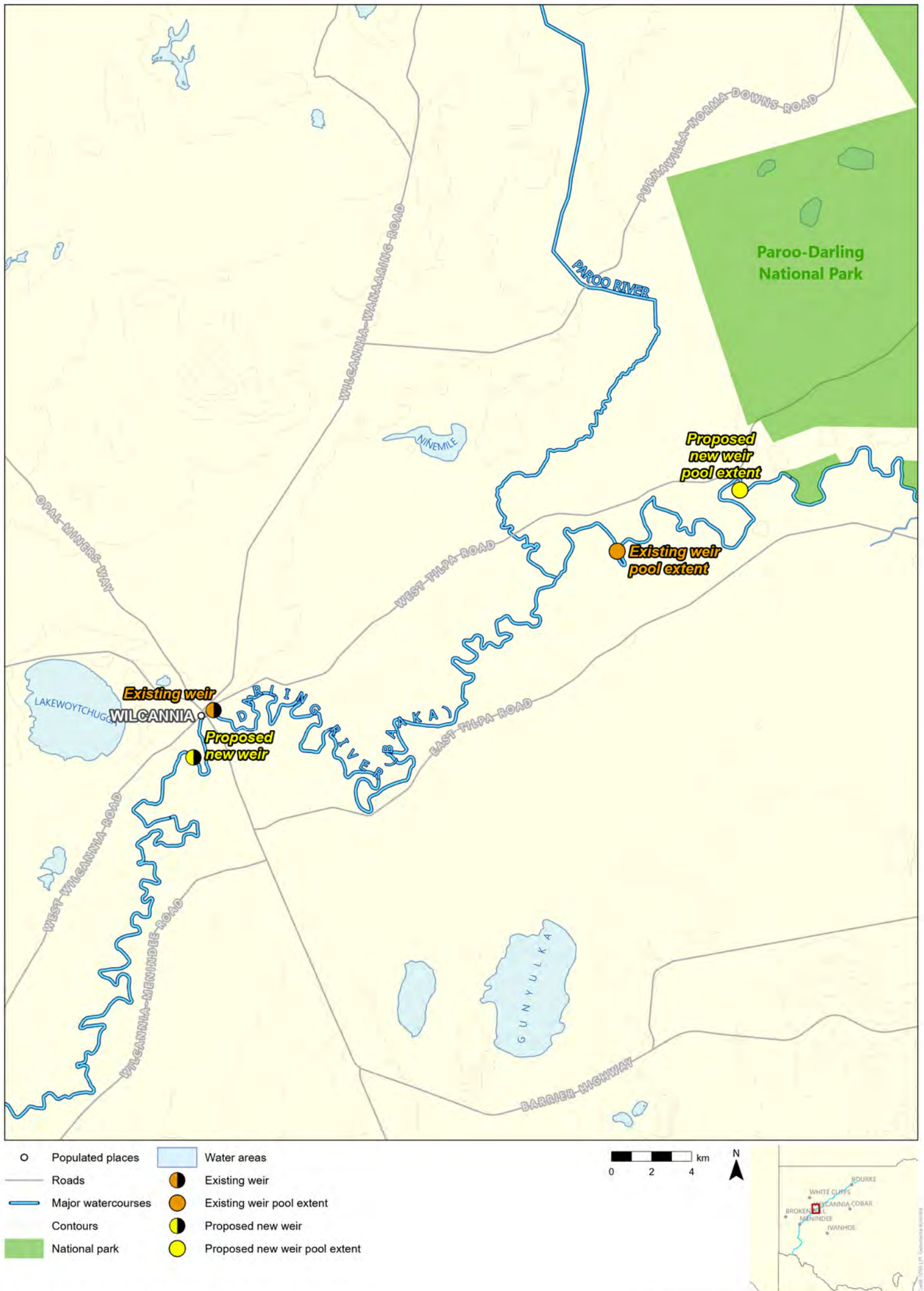
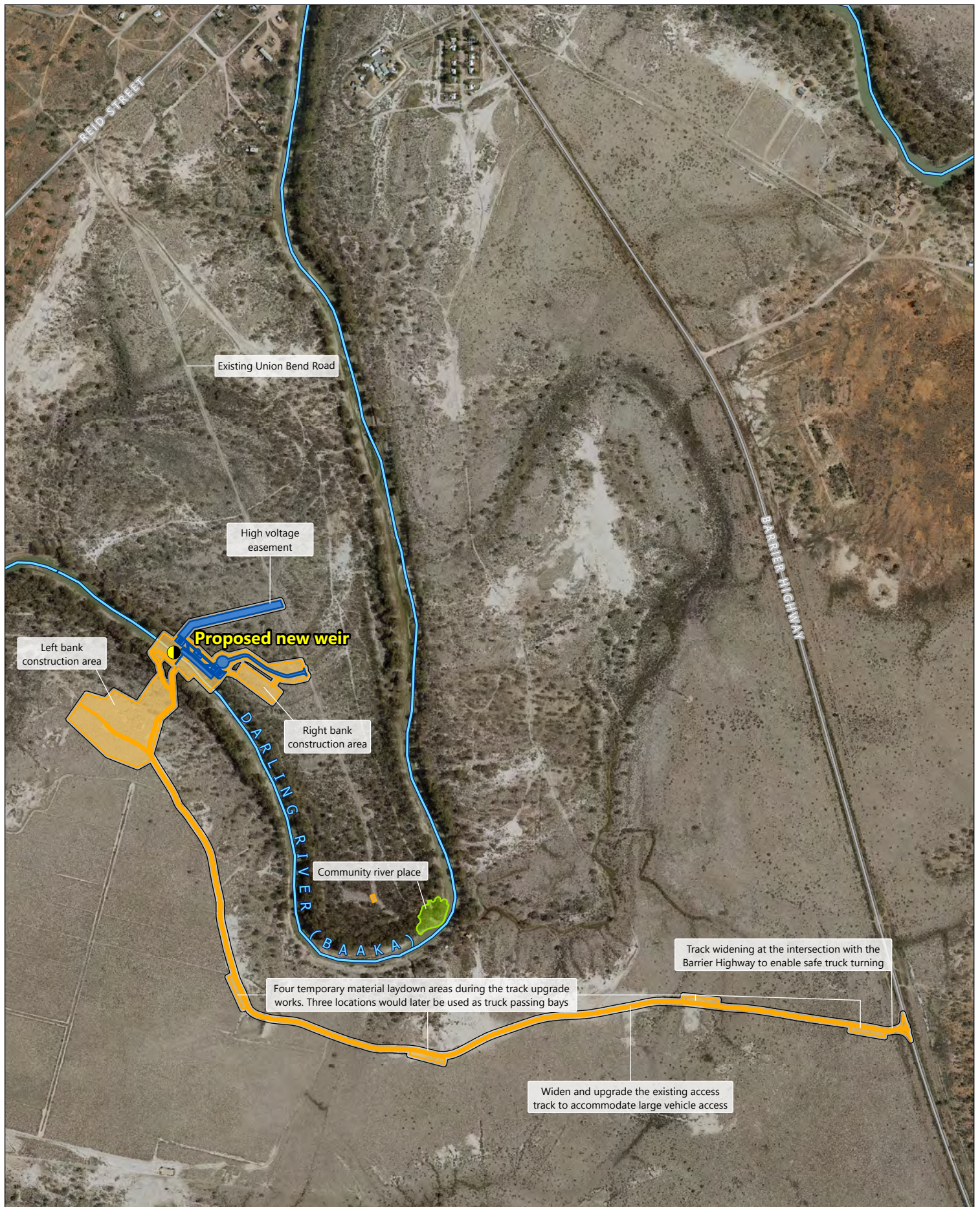


Figure 1-1: Proposal location and regional context





- Proposed new weir
- Roads
- Major watercourses
- Construction footprint
- Clearing boundary
- Operational footprint
- Community river place

0 100 200 300 400 m

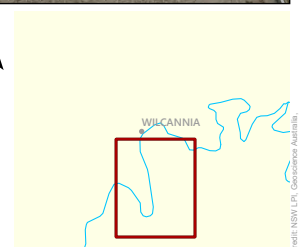
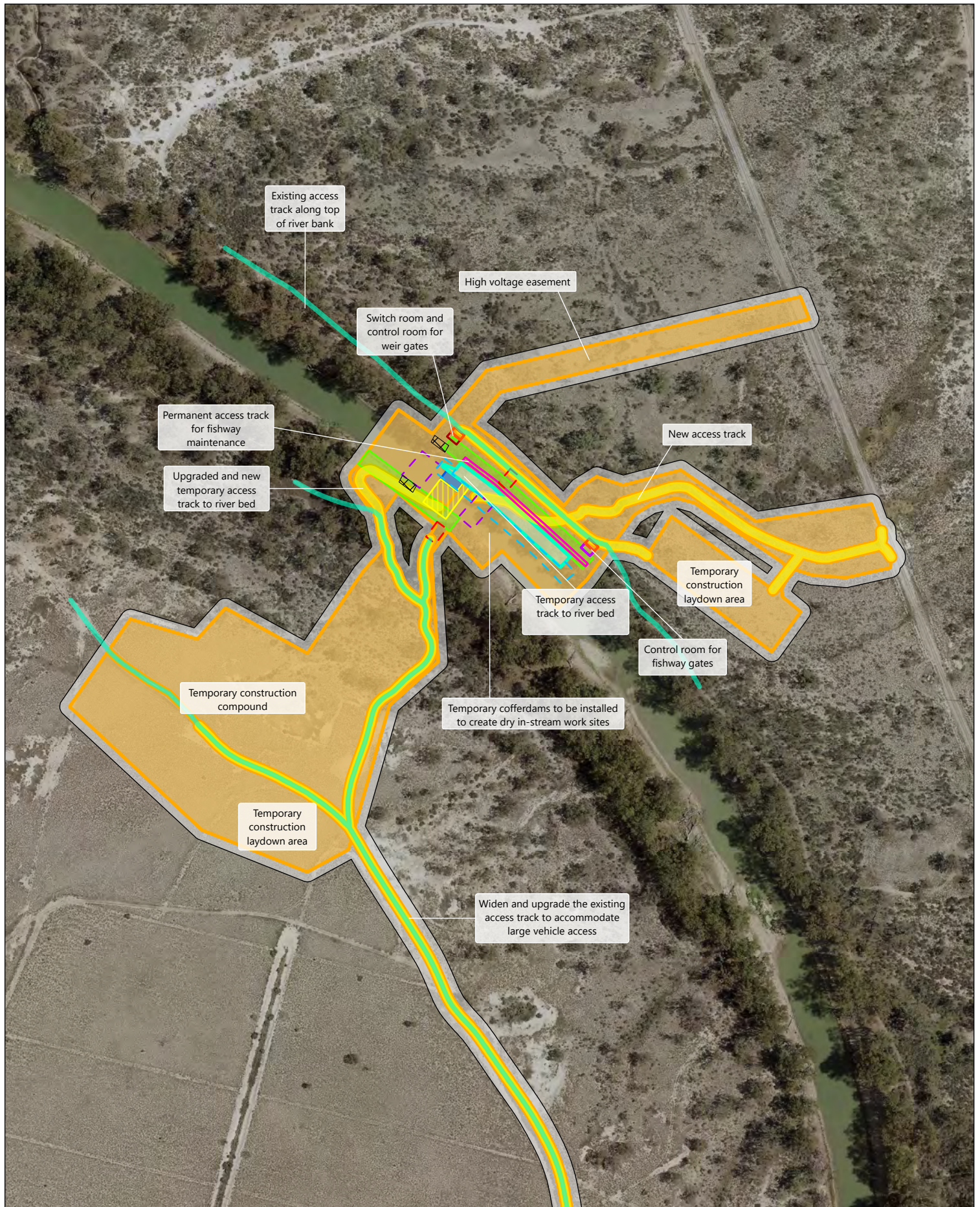


Figure 1-2: Key design features of the proposal – new weir site (overview)





- |                             |  |  |
|-----------------------------|--|--|
| Construction footprint      | New weir and downstream embankment footprint   | Temporary bank reshaping for construction and access                   |
| Clearing boundary           | Parking area                                   | Temporary cofferdam for construction of fishway and right side of weir |
| Temporary crane staging pad | Permanent access track for fishway maintenance | Temporary cofferdams for construction of left side of weir             |
| Construction access tracks  | Plunge pool                                    | Temporary wharves  |
| Existing access tracks      | Switch room                                    | Weir crest   |
| Crane staging pad           |  |  |
| Fishway gate control room   |  |  |

0 25 50 75 100 m

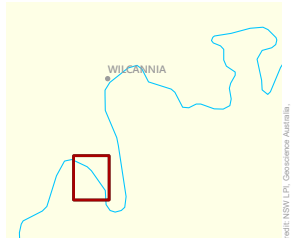


Figure 1-3: Key construction features – new weir site (detail)



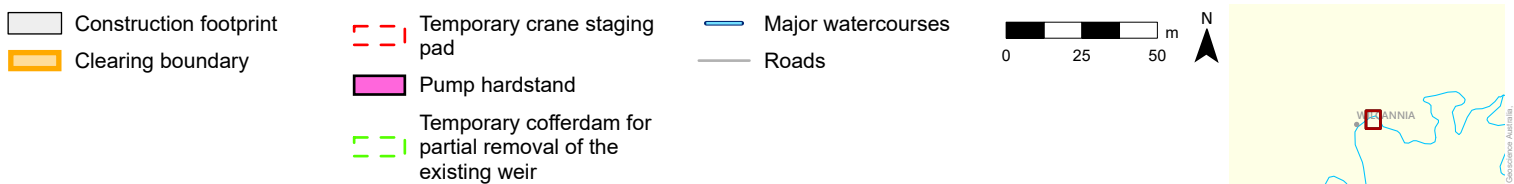


Figure 1-4: Key construction features - existing weir site



## 2. Legislative and policy context

### 2.1 Commonwealth legislation

#### 2.1.1 Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act includes 'national heritage' as a Matter of National Environmental Significance and protects listed places to the fullest extent under the Constitution. It also establishes the National Heritage List (NHL) and the Commonwealth Heritage List (CHL).

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

#### 2.1.2 Commonwealth Heritage List

The CHL is a list of properties owned by the Commonwealth that have been assessed as having significant heritage value. Any proposed actions on CHL places must be assessed for their impact on the heritage values of the place in accordance with *Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies (Significant Impact Guidelines 1.2)* (Department of Sustainability, Environment, Water, Population and Communities 2013). The guidelines require the proponent to undertake a self-assessment process to decide whether or not the action is likely to have a significant impact on the environment, including the heritage value of places. If an action is likely to have a significant impact an EPBC Act referral must be prepared and submitted to the Commonwealth Minister for the Environment for approval.

#### 2.1.3 National Heritage List

The NHL is a list of places with outstanding heritage value to Australia, including places overseas. Any proposed actions on NHL places must be assessed for their impact on the heritage values of the place in accordance with *Matters of National Environmental Significance (Significant Impact Guidelines 1.1)* (Department of the Environment 2013). The guidelines require the proponent to undertake a self-assessment process to decide whether or not the action is likely to have a significant impact on a matter of National Environmental Significance, including the national heritage value of places. If an action is likely to have a significant impact an EPBC Act referral must be prepared and submitted to the Commonwealth Minister for the Environment for approval.

#### 2.1.4 Register of the National Estate

The Register of the National Estate (RNE) was formerly compiled as a record of Australia's natural, cultural, and Aboriginal heritage places worth keeping for the future. The RNE was frozen on 19 February 2007, which means that no new places have been added or removed since that time. From February 2012 all references to the RNE were removed from the EPBC Act. The RNE is maintained on a non-statutory basis as a publicly available archive.

### 2.2 State legislation

#### 2.2.1 Environmental Planning & Assessment Act 1979

The EP&A Act requires that environmental impacts are considered in land-use planning, including impacts on Aboriginal and non-Aboriginal heritage. Part 5 Division 5.2 of the EP&A Act applies for projects designated as SSI. This influences the way in which other legislation, including the *Heritage Act 1977* (Heritage Act) is applied, as detailed in Sections 2.2.2.1 and 2.2.2.2.

#### 2.2.2 Heritage Act 1977

The Heritage Act provides a number of mechanisms by which items and places of heritage significance may be protected. The Heritage Act is designed to protect both listed non-Aboriginal heritage items and potential non-

Aboriginal archaeological remains or relics. Currently, non-Aboriginal heritage is administered by Heritage NSW under the Department of Premier and Cabinet.

NSW heritage items can be searched via the State Heritage Inventory (SHI), a database of heritage items in NSW which includes:

- Declared Aboriginal Places
- Items listed on the State Heritage Register (SHR) (see **Section 2.2.2.1**)
- Listed Interim Heritage Orders
- Items on State Agency Heritage Registers (see **Section 2.2.2.4**)
- Items listed of local heritage significance on a local council's Local Environmental Plan (see **Section 2.3**).

#### **2.2.2.1 State Heritage Register**

Section 31 of the Heritage Act creates the SHR. Only those items which have been designated as being of State heritage significance in NSW by the Minister for Environment and Heritage are listed on the SHR. Listing on the SHR controls activities such as alteration, damage, demolition, and development. When a place is listed on the SHR, the approval of the Heritage Council of NSW is required for any major work, including the following:

- Demolishing the building or work
- Carrying out any development in relation to the land on which the building, work or relic is situated, the land that comprises the place, or land within the precinct
- Altering the building, work, relic, or moveable object.

Ordinarily, an application under section 60 of the Heritage Act must be made to Heritage NSW in order to carry out any such activities. However, section 5.23 (1) (c) of the EP&A Act specifically exempts approved State significant infrastructure from requiring either a permit under section 60 or any other approval under Part 4 of the Heritage Act.

#### **2.2.2.2 Archaeological relics**

Part 6 Division 9 of the Heritage Act protects archaeological 'relics' from being 'exposed, moved, damaged or destroyed' by the disturbance or excavation of land. This protection extends to the situation where a person has 'reasonable cause to suspect' that archaeological remains may be affected by the disturbance or excavation of the land. It applies to all land in NSW that is not included in the SHR. A 'relic' is defined at Section 4 of the Heritage Act as:

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

- (a) Relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and*
- (b) Is of State or local heritage significance.*

Ordinarily, section 139 of the Heritage Act requires any person who knows or has reasonable cause to suspect that their proposed works will expose or disturb a 'relic' to first obtain an Excavation Permit from the Heritage Council of NSW (pursuant to section 140), unless there is an applicable exception (pursuant to section 139(4)). However, under section 5.23 (1) (c) of the EP&A Act, the requirement for an approval under section 139 is specifically excluded for projects designated as State Significant Infrastructure.

The provisions under Division 5.2 of the EP&A Act, however, apply only to approvals in Part 4 of the Heritage Act. All other sections of the Heritage Act, such as section 146 (requiring any person who is aware or believes that they have discovered or located a relic notifying the Heritage Council of NSW and providing details of the location and other information required) remain applicable to the proposal.



### 2.2.2.3 Works

The Heritage Act identifies 'works' as a category separate to relics. 'Works' refer to past evidence of infrastructure which may even be buried, and so therefore 'archaeological' in nature and with the potential to provide information that contributes to our knowledge. Exposure of a 'work' does not trigger reporting obligations under the Heritage Act. However, good environmental practice recognises the archaeological potential of such discoveries and the need to balance these against the requirements of development. Unexpected finds protocols provide guidance for the way such finds are to be managed when uncovered during construction and other activities.

### 2.2.2.4 Section 170 Heritage and Conservation Registers

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

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

### 2.2.2.5 Maritime heritage

Maritime heritage within the State waters of NSW is managed by Heritage NSW under the shipwreck and relics provisions of the Heritage Act. Shipwrecks located inland (within rivers, harbours, lakes, enclosed bays and dune areas), which are more than 75 years of age and of recognised local or State significance are protected as relics under the Heritage Act and cannot be disturbed in any way without prior approval of the Heritage Council of NSW. Heritage NSW also maintain the NSW Maritime Heritage Database, a register of shipwrecks, relics and other underwater and maritime cultural heritage.

## 2.3 Local heritage

Items of local heritage significance are administered by local councils, under their Local Environmental Plans (LEPs). Many LEPs now follow a standard format, which requires development consent prior to the demolition, moving or alteration of a heritage item or potential archaeological deposits (clause 5.10, standard instrument, Principal LEP). A council may elect to waive this requirement if it is satisfied that the works are minor in nature, are maintenance works, will otherwise not impact on the heritage significance of the item or is exempt development (clause 5.10 [3]). In all other cases, a development application must be submitted to council and a Statement of Heritage Impact may be required (clause 5.10 [5]).

## 2.4 Policies and guidelines

### 2.4.1 The Burra Charter

In addition to the above legislation, Australia is party to numerous international treaties and protocols relating to the protection of heritage places. The most important of these is the *Australia ICOMOS Charter for Places of Cultural Significance (The Burra Charter)*, which forms the basis of most heritage legislation and best practice guidelines.

The purpose of the Burra Charter is to provide best practice standards for heritage management. It provides steps for the assessment and management of heritage, as well as principles for the effective conservation, maintenance and/or preservation of items of cultural heritage.

#### 2.4.2 NSW Heritage Manual

The *NSW Heritage Manual* (1996) is a collection of policies and documents prepared by the former Heritage Branch, now known as Heritage NSW. The policies and documents provide guidance and minimum standards expected in the assessment, reporting and excavation of non-Aboriginal heritage in NSW and provide the basic framework for this report and its assessment. These minimum standards include:

- *Guidance and standards relating to the assessment of significance* (Heritage Office 2001)
- *Guidance and minimum standards relating to the preparation of Statements of Heritage Impact* (Heritage Office and Department of Urban Affairs and Planning 2002)
- *Significance and Significant Fabric* (Heritage NSW 2020).

In addition, there are minimum requirements for the approval of Excavation Directors in NSW (Heritage NSW 2019).

## 3. Methodology

### 3.1 Scope of the report

This assessment is to establish and assess the non-Aboriginal (historic) heritage items and values within the study area, and the extent to which those items and values will be impacted by the proposal. The methodology described below has been designed to reflect the requirements outlined in the NSW Heritage Manual, professional best practice and to address the requirements of the SEARs.

### 3.2 Study area

The study area is defined as the construction footprint and extended weir pool inundation area extent (refer to **Figure 3-1**). For thoroughness, the initial desktop assessment and field survey stages considered a broader area which comprised the study area plus a 150 metre buffer zone. This was then refined for the later assessment and reporting stage to the construction footprint plus the area within the river channel, as the indirect impacts of the project are expected to be constrained to the immediate surrounds of the new and existing weirs. The significance assessment of listed and potential heritage items has been prepared for only those items which directly intersect with the study area. The impact assessment has considered impacts to those same items.

### 3.3 Overview of methodology

The assessment of non-Aboriginal heritage values was completed in the following stages.

#### 3.3.1 Desktop assessment

- Review of relevant heritage registers and databases including the CHL, NHL, SHR, SHI, Section 170 Registers, NSW Maritime Heritage Database and Central Darling Local Environmental Plan 2012 (Central Darling LEP 2012)
- Review of primary and secondary sources including parish maps, public libraries, heritage and archaeological databases, community heritage information and previous heritage studies and reports
- Review of recent aerial imagery for the study area to identify potential areas of historical occupation and development
- Consultation with local historians to identify and source information on potential heritage items
- Review of levels of significance for registered items
- Identification of any potential heritage items.

#### 3.3.2 Field survey

- Site inspection of the study area and the 150 metre buffer zone, including inspection of any potential heritage items identified from the desktop assessment, and identification of additional potential heritage items.

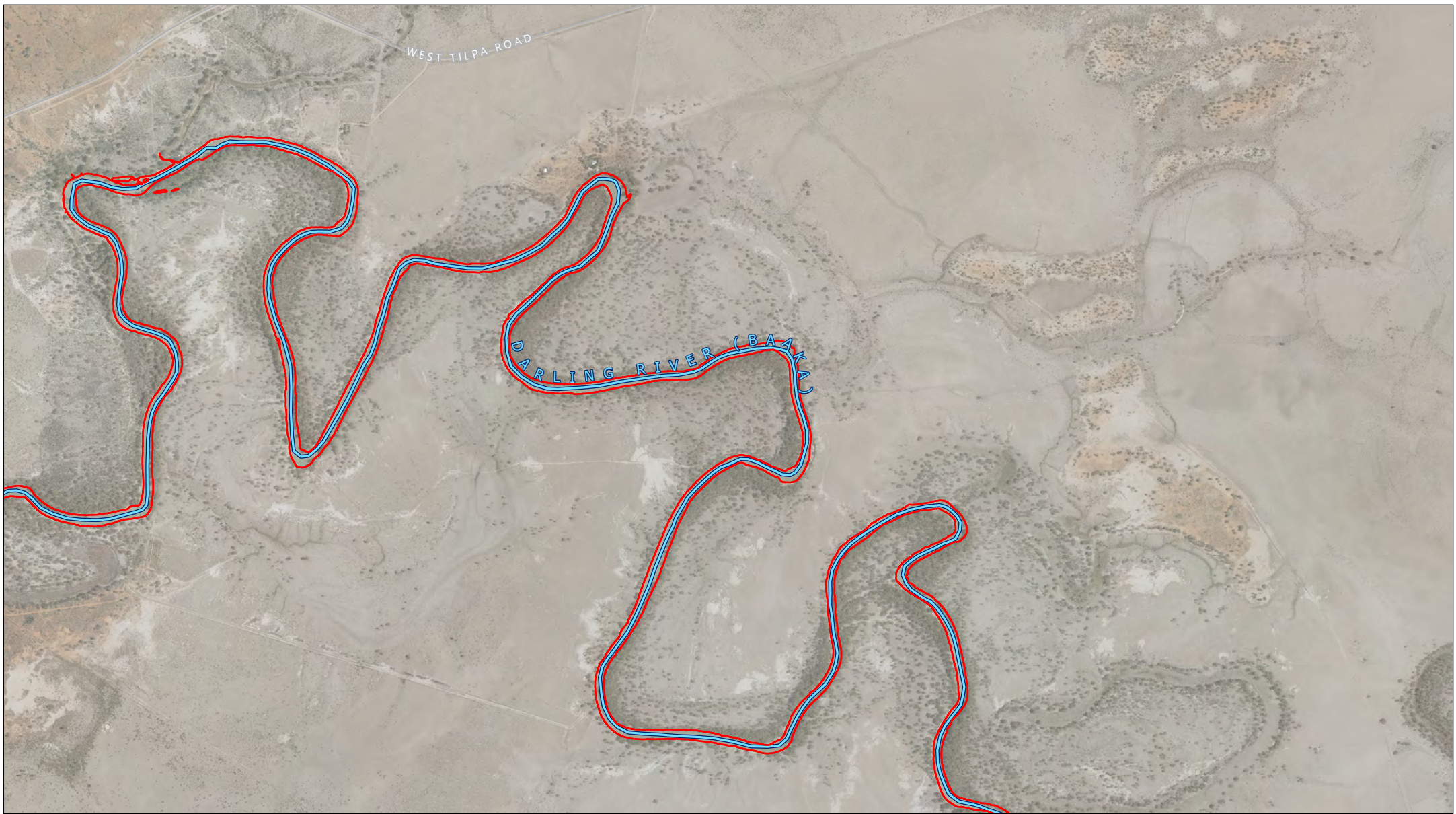
#### 3.3.3 Assessment and reporting

- Assessment of identified heritage items in accordance with the SEARs, including significance assessments of heritage items and potential heritage items within the study area against the NSW Heritage Council criteria
- Completion of an impact assessment of identified heritage items within the study area and preparation of a Statement of Heritage Impact
- Provision of management and mitigation measures for the proposal, as appropriate.









- Populated places
- Roads
- Study area
- Major watercourses
- △ Potential heritage items

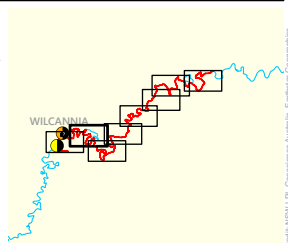
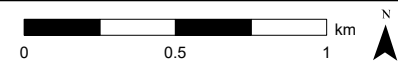


Figure 3-1: Study area





- Populated places
- Roads
- Study area
- Major watercourses
- △ Potential heritage items

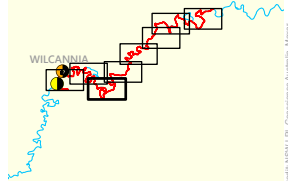
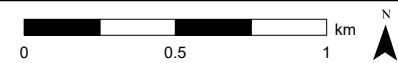


Figure 3-1: Study area





Figure 3-1: Study area





- Populated places
- Roads
- Study area
- Major watercourses
- △ Potential heritage items

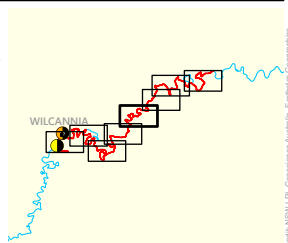
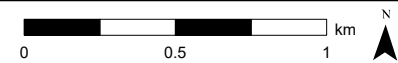


Figure 3-1: Study area













### 3.4 Significance assessment

Heritage significance in NSW is assessed using the gazetted heritage significance criteria (refer to **Table 3-1**) detailed in *Assessing Heritage Significance* (NSW Heritage Office 2001), which is based on the principles established in the Burra Charter (Australia ICOMOS 2013). In order to be considered of heritage significance, an item must fulfil at least one of the criteria. Standard practice also includes an assessment of intactness and integrity of a heritage item when assessing significance and grading.

Significance assessments were reproduced or prepared for each listed or potential heritage item located within the study area. Places outside of the study area that were identified in the desktop or field survey component prior to the refinement of the study area (removal of the 150 metre buffer) were not assessed for their significance, as their physical distance from the proposal makes them unlikely to be impacted.

Table 3-1 NSW heritage significance criteria

Criterion	Description	Short title
A	An item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area)	Historical significance
B	An item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area)	Associative significance
C	An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area)	Aesthetic/technical significance
D	An item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural, or spiritual reasons	Social significance
E	An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area)	Research potential
F	An item possesses uncommon, rare, or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area)	Rarity
G	An item is important in demonstrating the principal characteristics of a class of NSW's: <ul style="list-style-type: none"> <li>▪ Cultural or natural places; or</li> <li>▪ Cultural or natural environments</li> </ul> (or a class of the local area's: <ul style="list-style-type: none"> <li>▪ Cultural or natural places; or</li> <li>▪ Cultural or natural environments).</li> </ul>	Representativeness

Source: *Assessing Heritage Significance* (NSW Heritage Office 2001)

#### 3.4.1 Grading of significance

Assessments of heritage significance can be complemented or supported by a descriptive ranking of the individual elements of a place. A grading system has been derived from *The Conservation Plan* (Kerr 2013) and is provided in *Assessing Heritage Significance* (NSW Heritage Office 2001) and reproduced. Developed primarily



for built and landscape heritage, element grading systems do not translate easily to assessing archaeological resources. Given the archaeological potential or straightforward nature of the built heritage within the study area, the grading system is considered to be unnecessary for the current assessment.

### 3.4.2 NSW Heritage Criteria for Assessing Significance related to Archaeological Sites and Relics

In order for an archaeological deposit, resource, or feature to qualify as a 'relic' under the Heritage Act, it must be deemed to have heritage significance at a local or State level (regardless of age). The identified values of the relics will also help determine appropriate management options. Archaeological significance has long been linked to archaeological (or scientific) research potential and is generally guided by three questions developed by Bickford and Sullivan (NSW Heritage Branch 2009:8):

- 1) Can the site contribute knowledge that no other resource can?
- 2) Can the site contribute knowledge that no other site can?
- 3) Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

Use of the Bickford and Sullivan questions will provide basic but essential information. To build upon that essential information, questions framed around the current NSW Heritage Criteria are used to allow consideration of how an individual archaeological site or 'relic' may be assessed in its own right and also compared with other sites (refer to **Table 3-2**).

Table 3-2 Categories of archaeological significance as related to current NSW Heritage Criteria

Significance category	NSW Heritage Criteria (refer to <b>Table 3-1</b> )	Guiding questions as relevant to the criteria
Archaeological research potential	E	<ul style="list-style-type: none"> <li>▪ To which contexts (historical, archaeological and research-based) is it anticipated that the site would yield important information?</li> <li>▪ Is the site likely to contain the mixed remains of several occupations and eras, or is it expected that the site has the remains of a single occupation or a short time-period?</li> <li>▪ Is the site rare or representative in terms of the extent, nature, integrity and preservation of the deposits (if known)?</li> <li>▪ Are there a large number of similar sites?</li> <li>▪ Is this type of site already well-documented in the historical record?</li> <li>▪ Has this site type already been previously investigated with results available?</li> <li>▪ Is the excavation of this site likely to enhance or duplicate the data set?</li> </ul>
Associations with individuals, events, or groups of historical importance	A, B and D	<ul style="list-style-type: none"> <li>▪ Does the archaeological site link to any NSW Historic Themes?</li> <li>▪ Will the site contain 'relics' and remains which may illustrate a significant pattern in State or local history?</li> <li>▪ Is the site widely recognised?</li> <li>▪ Does the site have symbolic value?</li> <li>▪ Is there a community of interest (past or present) which identifies with, and values the specific site?</li> </ul>

Significance category	NSW Heritage Criteria (refer to Table 3-1)	Guiding questions as relevant to the criteria
		<ul style="list-style-type: none"> <li>Is the site likely to provide material expression of a particular event or cultural identity?</li> <li>Is the site associated with an important person? (the role of the person in State or local history must be demonstrated/known)</li> <li>What is the strength of association between the person and the site?</li> <li>Did the person live or work at the site? During the phase of their career for which they are most recognised? Is that likely to be evident in the archaeology /physical evidence of the site?</li> <li>Did a significant event or discovery take place at the site? Is that evident/or likely to be evident in the archaeology/physical evidence of the site?</li> </ul>
Aesthetic or technical significance	C	<ul style="list-style-type: none"> <li>Does the site/is the site likely to have aesthetic value?</li> <li>Does the site/is the site likely to embody distinctive characteristics?</li> <li>Does the site/is the site likely to embody a distinctive architectural or engineering style or pattern/layout?</li> <li>Does the site demonstrate a technology which is the first or last of its kind?</li> <li>Does the site demonstrate a range of, or change in, technology?</li> </ul>
Ability to demonstrate the past through archaeological remains	A, C, F and G	<ul style="list-style-type: none"> <li>Does the site contain well-preserved or rare examples of technologies or occupations which are typical of particular historic periods or eras of particular significance?</li> <li>Was it a long-term or short-term use?</li> <li>Does the site demonstrate a short period of occupation and therefore represents only a limited phase of the operations of a site or technology or site? Or does the site reflect occupation over a long period?</li> <li>Does the site demonstrate continuity or change?</li> <li>Are the remains at the site highly intact, legible, and readily able to be interpreted?</li> </ul>

Source: *Assessing Significance for Historical Archaeological Sites and 'Relics'* (NSW Heritage Branch 2009)

### 3.5 Impact assessment

Levels of potential impact have been defined based on their scale and potential for mitigation and are listed in Table 3-3.

Table 3-3 Levels of potential impact to heritage items

<b>Level of impact</b>	<b>Definition</b>
Neutral	Actions or activities that would result in a very minor change or impact to the heritage item. Generally, no mitigation is required.
Minor	Actions or activities that would result in a minor alteration to the heritage item. Generally, these actions can be mitigated.
Moderate	Actions or activities that would result in a modification to the heritage item, including its setting or landscape. These impacts may be partially mitigated.
Major	Actions or activities that would result in a long-term or otherwise substantial modification to a heritage item, its setting or landscape. These actions cannot be fully mitigated.

## 4. Existing environment

### 4.1 Historical context

#### 4.1.1 Early explorations

The traditional owners of the Wilcannia area are the *Barkandji* people (alternate spelling *Barkindji*). In the Barkandji language (Paakantyi language of the Pama-Nyungan family), the name Wilcannia translates to 'a gap in the bank where the flood waters escape' (McDougall and Vines 2017:5). The river itself is known as the *Barka* or *Baaka* in local language.

In 1828, Charles Sturt set off to explore the upper sections of the Darling River (Baaka) near Bourke, with the prevailing theory of the time being that it led to a great inland sea. Following Sturt's explorations, the Surveyor General, Major Thomas Mitchell, was tasked with investigating the large river system discovered by Sturt and set out in 1835. Mitchell's party started at Bourke and followed the course of the Darling in Sturt's footsteps. The exploration started on a boat, however after a short distance the boat was abandoned due to dwindling water on the Darling, and the party continued on foot. They made it as far as Menindee, about 110 kilometres south west of Wilcannia, which Mitchell named "Laidley Ponds". After an armed conflict with local Aboriginal people, resulting in the death of several Aboriginals, he and his party returned to Sydney, with only a small portion of the Darling surveyed (Baker 1967).

In a later exploration of the Murray in 1836, Mitchell traced the route of the Murray then on reaching the confluence at present day Wentworth, turned northwards to survey the southern reaches of the Darling. His party was within about 200 kilometres of Menindee when Mitchell decided to return to the Murray and explore its full length (Baker 1967) (refer to **Figure 4-1**). The remainder of the Darling was explored by Sturt in 1844.

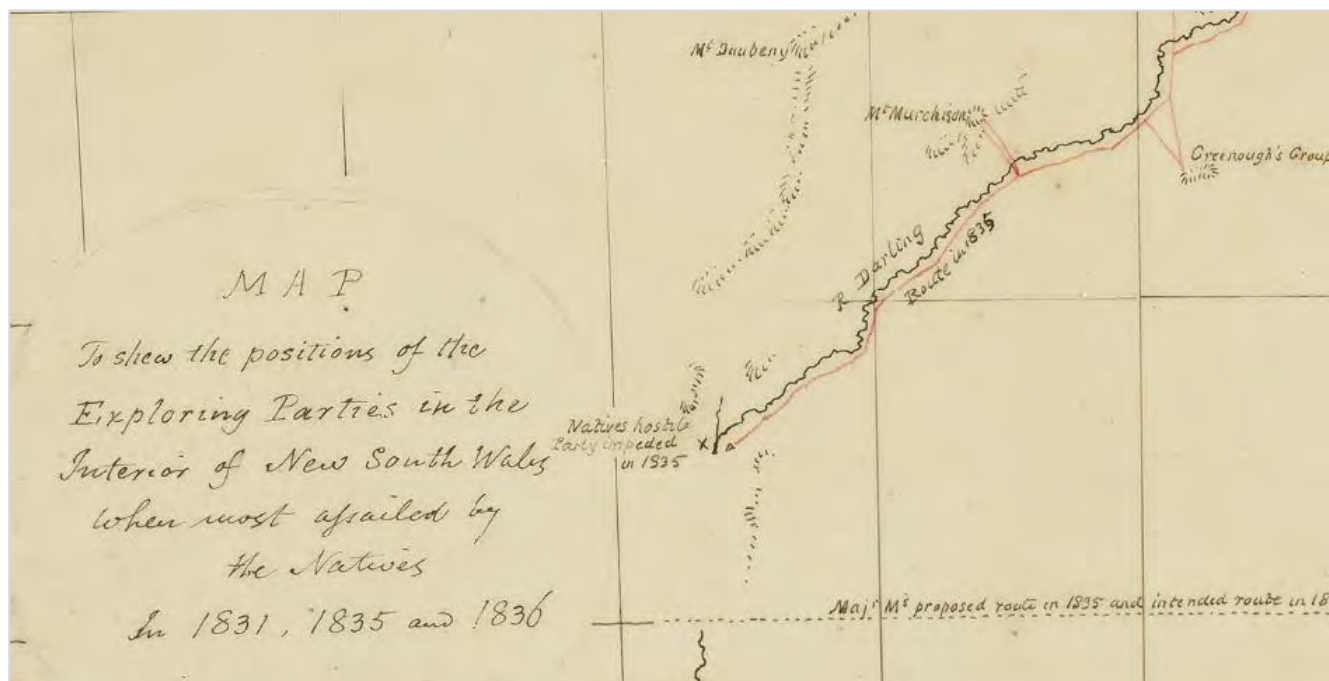


Figure 4-1 Detail of map showing route of explorations in 1835 (Courtesy: State Library of NSW, M Z/M2 805/1836/1).

#### 4.1.2 Pastoralism

Following Sturt and Mitchell's explorations, squatters began arriving along the Darling River (Baaka) from around the 1840s. By the mid-1840s most of the Lower Darling was divided into squatting stations by absentee owners (Heritage Office and Department of Urban Affairs and Planning 1996:193). One of the earliest pastoral

stations in the Wilcannia area was Mount Murchison, named after a hill about 16 kilometres north of the town. The hill was given the name "Mount Murchison" by Major Mitchell after a geologist friend during his 1835 expedition (Mitchell 1848).

Mount Murchison was settled by brothers Hugh and Bushby Jamieson, who also held the Mildura Station on the Murray. They arrived in the area in 1856, first taking up Tallandra and Moorabin blocks, and extending that holding with Mount Murchison Station by about 200 square miles (517 square kilometres) (refer to **Figure 4-2**) (Jervis 1948:150). A newspaper article indicates that sheep were transported from Mildura to stock the new station.

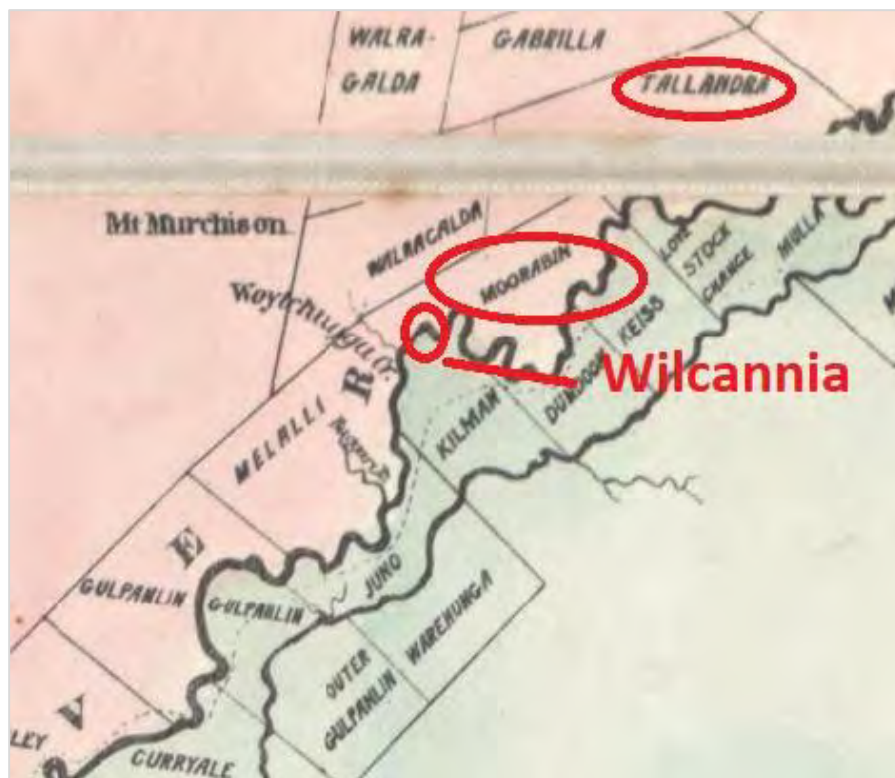


Figure 4-2 Detail from Reuss and Browne's map of pastoral stations (c.1860) showing locations of Tallandra and Moorabin stations. The approximate location of Wilcannia is also marked (Courtesy: National Library of Australia)

The future town was part of the Moorabin (also spelt 'Mooraben') run (refer to **Figure 4-2**).

As Hugh Jamieson was noted in 1862 as a JP of Mildura (rather than of Wilcannia), it is unlikely that the Jamiesons lived on the property. In any case, the Mount Murchison station (also known in the 1860s as the 'Jamieson run') was sold to R B Smith and Ross T Reid for £55,000 inclusive of its 45,000 sheep (Argus 1864:5) (refer to **Figure 4-3**). In 1875 the Mt Murchison station was sold to the Bonney Brothers of neighbouring Mombo Station, to form one of the largest leasehold properties in NSW (Adelaide Observer 1875:12).



Figure 4-3 Mount Murchison homestead, near Wilcannia, c. 1865 (Courtesy: National Library of Australia, PIC/8131/32 LOC Album 1026)

#### 4.1.3 Shipping on the Darling River (Baaka)

Captain Francis Cadell began running paddle steamers along the Murray in 1855, principally the *Melbourne* and *Albury*. Cadell had narrowly missed being the first person to successfully navigate the Murray on *Lady Augusta* in 1853, to William Randell in the *Mary Ann*.

In 1859, Cadell was successful in navigating the Darling. According to a contemporary newspaper article, in his first attempt to navigate the Darling Cadell did not reach Bourke (still known then as "Fort Bourke") but in an eight-day journey from the junction of the Darling with the Murray, he reached Mount Murchison. The journey was also a commercial one; in this maiden voyage he transported flour and other goods on the *Albury* to the Jamiesons of Mount Murchison, near Wilcannia, and returned with a hundred bales of wool. It was observed that:

*The settlers on the banks, who are most interested in encouraging the navigation of the river, will doubtless make observations as to the rise and fall of the water at different seasons, and the extent to which freshes are caused by rains on the Upper Namoi. It is too early yet to predict that the river will be navigable every year, but the probability is that in all but unusual seasons there will be months where the settlers can snatch at the opportunity of getting up stores and sending down their produce. A depot has been formed at Laidley Ponds (Menindee) which is a central point for a large area of pastoral country (Wagga Wagga Express and Murrumbidgee District Advertiser 1859:4).*

A public landing place was soon after designated near the Mount Murchison woolshed. Numerous businesses located along the river constructed their own wharves (refer to **Figure 4-4**).

The depot at Menindee mentioned in the above article was started by Cadell himself:

*...I have succeeded in getting up the Darling as far as Mount Murchison. My reception from the settlers was everything I could desire, and I will use my best endeavours to work that river with steamers.*

*...It may be useful to overlanders to know that I have established a small depot at Menindie (sic) where they can be supplied with rations on their way down the Darling. I have also established a large store at the Darling junction (Letter from Cadell to R P Raymond dated 3 March 1859, in Jervis 1948, p. 156).*



William Randell followed Cadell up the Darling as far as Fort Bourke. Of the country between Mount Murchison and Fort Bourke, Randell stated:

*The country from Mount Murchison upwards improves in character very much, and its sheep carrying qualities can scarcely be overrated, the grass for miles being so thick and long that it can only be walked through with difficulty (Randell in Jervis 1948, p. 157).*



Figure 4-4 Undated photograph of private wharf at Wilcannia c.1912 (Courtesy: McDougall & Vines 2012, p. 6)

By 1875, the river trade was booming (refer to **Figure 4-5**). However, unlike other river towns, it was the relative reliability of the Darling as far as Wilcannia that set it apart and led to it becoming an important port and commercial centre:

*...imports and exports take place via steamers and barges, a fleet of which, numbering twenty to thirty, travel steadily from and to Victorian or South Australian ports. In this respect, Wilcannia is more fortunately located than Bourke, as month after month, boats are able to reach here when the river is unnavigable higher up.*

It became part of a large network of river ports stretching from South Australia, Victoria, New South Wales to Southern Queensland (refer to **Figure 4-6**). The river traffic along the Darling was so prolific that it became known colloquially as “the New South Wales West Coast” (GHD, 2003:27).



Figure 4-5 Paddle steamers near Wilcannia, c. 1905 (Courtesy: State Library of NSW, "At Work and Play – 05540")

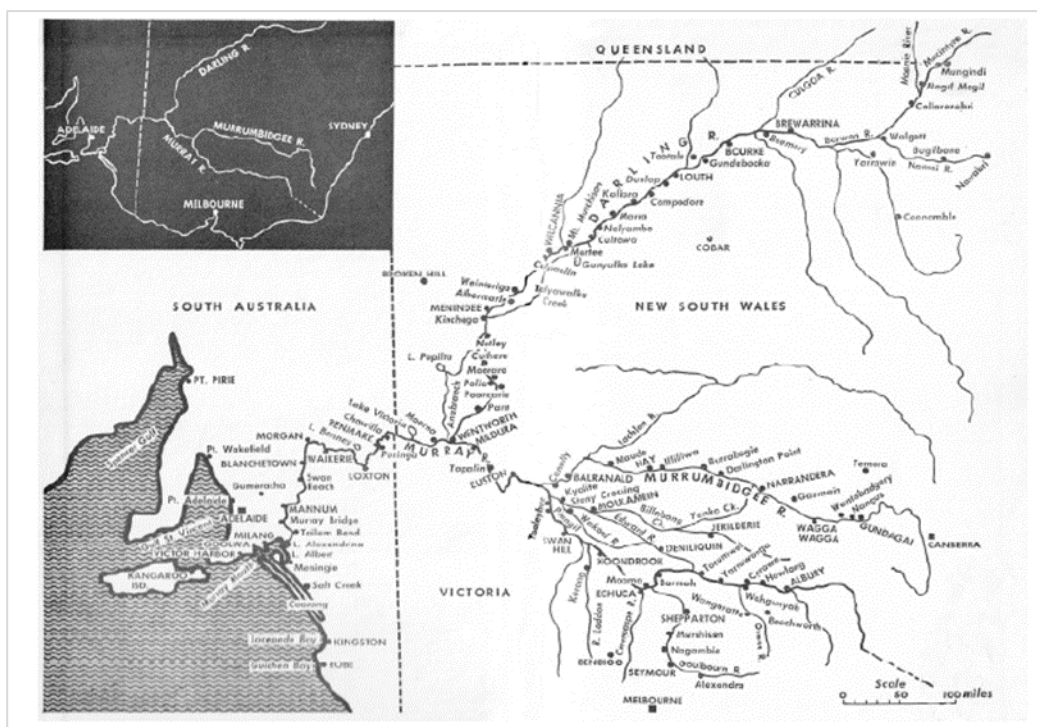


Figure 4-6 The Darling-Murray-Murrumbidgee river boat network (Mudle in GHD 2015, p. 27)

Although providing transport of goods and services as well as prosperity for Wilcannia, the paddle steamers were at the mercy of the river's fluctuations and dangers. Water levels were good in the winter months but would drop significantly during the summer months. Other dangers, such as floating logs caused navigation hazards; there are 10 known shipwrecks along the Darling River (Baaka). Other hazards came from the paddle steamers themselves. One such vessel, the *Providence*, was destroyed near Menindee when the boiler exploded, resulting in five deaths (Nutley and Smith 2003, p. 31). Another vessel, the *Moir*, burned to the waterline while tied up at Wilcannia wharf, fortunately without loss of life (Sydney Morning Herald, 1904, p. 7).

Harold Dell was born in Wilcannia in 1894. He remembered the importance of the shipping to Wilcannia and the surrounding district, even in the early 20<sup>th</sup> century:

*... the town of Wilcannia was the hub for the whole district. All roads lead out – one to Bourke, Cobar, Menindee, one to White Cliffs, one to Wanaaring... this was their centre. The boats would unload here and then the goods would be distributed from here – a boat would come in with 200 tons of food, you know station supplies... at that time, I suppose there'd be four or five big stores and they'd be all busy stores and then the teams would come in (Transcript of Harold Dan Dell, 1981).*

The teams referred to were teams of bullocks, that would transport goods from Wilcannia to outlying towns such as White Cliffs. Dell characterised the river boats as “the life blood of the community”:

*It was what made the town so big... the river that made this town cheap transit... There was a public wharf that was just a cutting in the bank and they sloped it and lined it with stone and the horses couldn't pull up the incline. They had to build a fresh one but you see a boat might discharge a hundred tons in that wharf and it had to be put on a dray and drawn up into the town. You see a boat would bring up 200 tons of stuff (Transcript of Harold Dell, 1981).*

Camel trains were also used to transport goods to and from the Wilcannia river port (refer to **Figure 4-7**). Used extensively in inland pastoral stations, the camels would bring wool from the stations to the ports, then return to the stations with supplies. One journalist observed of the Wilcannia camels:

*In this part of the country, as a beast of burden, the camel is without equal. What with bad roads the scarcity of feed, horses fare very poorly; but the camel feeds on gum leaves and any herbage it may see, and makes far longer stages in the same time than horses or bullocks... Momba Station, 30 miles from here, have gone in extensively for breeding camels and carry their own wood to this place with Afghan drivers... one .. travelled a distance of 113 miles in eight hours. When trained, they can travel eight miles an hour with ease and keep going for a day. (Sydney Mail and New South Wales Advertiser 1895, p. 1165).*



Figure 4-7 Arrival of camels and Wilcannia, bringing stores from Burra Burra, South Australia, c. 1869 (Courtesy: National Library of Australia, Call No. PIC/8131/60 LOC Album 1026)

#### 4.1.4 Development of Wilcannia township

After the sale of Mount Murchison to Smith and Reid and the successful navigation of paddle steamers on the Darling, a wharf was constructed near the Mount Murchison Woolshed. The woolshed was located in what is now Baker Park, adjacent to the Wilcannia Post Office, while the wharf was located to the immediate north of the road bridge. The wharf became a depot for wool from the surrounding area to be transported back down the Darling and Murray and then to major trading centres. The paddle steamers began delivering mail between Wentworth and Wilcannia in 1862.



With the success of the port, Wilcannia became a commercial centre for the area. Land from Moorabin was reserved for a town named Wilcannia, and construction for the town began soon after. Its success was rapid, evidenced by descriptions of the town less than fifteen years later:

*From a little log hut, it has risen gradually to an important town, and now claims to banks, a court-house, a lockup, a goodly array of substantially-built stores and houses, a local newspaper and a population protected by a sergeant of police, two constables, a trooper and black tracker. A stipendiary magistrate resides in the town, and there is business enough to warrant the daily attendance of "His Worship" at the courthouse. The foundations of two churches are laid (one a Protestant, the other Catholic), and before the close of the present year Wilcannia will probably possess a district hospital – a large sum having already been subscribed towards the establishment of one – a new courthouse, suitable for holding quarter-sessions there, and a post and telegraph office with some pretensions to size and comfort, in lieu of the present box. (Riverine Grazier 1878, p. 4).*

By the 1880s there were at least four pubs in Wilcannia, all along Reid Street, although at one time there were at least 13. The earliest was the Club Hotel, established in 1879 on the site of an earlier wooden pub known as 'Mother Kinnevans' (refer to **Figure 4-8**). Others included the Queens Head, the Courthouse (formerly the Punt Hotel) and Byrnes Royal Hotel (refer to **Figure 4-9**).



Figure 4-8 Club Hotel, on the north west corner of the Reid Street/Barrier Highway intersection, Wilcannia, c. 1931 (Courtesy: NSW State Archives and Records, Item NRS-549-1-[14/1745]-[2]-102)



Figure 4-9 Queens Head hotel and Byrne's Royal Hotel, Reid Street, Wilcannia, undated. The two-storey building at right is the Club Hotel (Courtesy: Wilcannia Historical Society)

With the transport of wool from surrounding pastoral stations driving the local economy, other industries connected with the wool industry began in Wilcannia. John Garland came to Wilcannia and married Clara Maskrey there in 1894. Garland was a wool classer, as was his father, grandfather, and brother. He set up the woolscour, which included two houses, outbuildings, and work sheds (refer to **Figure 4-10**). He and Clara lived on site with three of their children until 1899. The success of the woolscour led to John purchasing several shops and a house on Reid Street (Beth Garland, pers. Comm., email 2 December 2020).



Figure 4-10 John Garland's woolscour, c. 1890 (Courtesy: Chris Elliott)

As the town grew, the population diversified. The first account ledger of the Australasian Joint Stock Bank in 1874 recorded transactions with hotel keepers, storekeepers, labourers, hawkers, teamsters, tank sinkers and a washer woman, and the names suggested a variety of nationalities, including Chinese gardeners, woolscourers, station workers and cooks. African-American wharf labourers were also recorded (Svenson, 1994, p. 18). According to old residents of Wilcannia, the Chinese community had their own temple and market gardens on the southern outskirts of the town, near the cemetery. Owing to their skills as gardeners, they also often acted as market gardeners on the nearby pastoral stations (Transcript of oral history of Lilian Dell, undated).

With the port being the central unloading dock for goods for almost the entire north-west of New South Wales, transport was needed from Wilcannia to outlying communities, such as White Cliffs and Tibooburra. While teams of bullocks were used, Afghans with camel teams were also used for longer journeys through the outback. The teams could be as many as 20 camels carrying goods from the port (Transcript of Lillian Ottaway 1969).

A newspaper was established for the Wilcannia township, the *Wilcannia Times*, which was published bi-weekly from 1874 until 1888. The *Western Grazier*, which covered the central Darling River (Baaka) region, was also published in Wilcannia until 1940, after which it was moved to Broken Hill. The *Western Grazier* was established in 1880 and ran until 1951.

#### 4.1.5 Religion

There were three main churches in Wilcannia: Anglican, Catholic and Methodist. Each of the permanent churches were constructed in the 1880s; until then, visiting clergy saw to the spiritual needs of the people of Wilcannia. The foundation stone for St James Anglican church was laid by the bishop of Bathurst in 1875 and consecrated in 1883. The following year, the Sisters of Mercy opened a school opposite St James, before opening a larger Convent School at 48-50 Woore Street. A catholic church was constructed adjacent to the convent school in 1884 (refer to **Figure 4-11**). The school operated until its closure in the 1920s (Young 1939, p. 26).



Figure 4-11 St John the Apostle Catholic Church, Wilcannia (Young 1939, p. 29)

In 1885, a Wesleyan (Methodist) chapel was constructed (refer to **Figure 4-12**). The Sydney Morning Herald carried an article regarding the establishment of the church:

*In our newest and most remote circuit, Wilcannia, the Rev. Benjamin Lane has succeeded in establishing Wesleyan Methodist Church ordinances. He has gathered a congregation of 80 persons, a Sabbath-school of 70 scholars, and a society class of 13 members. A new church has just been erected at a cost of £500. The site for which was purchased by your committee at a cost of £150. (Sydney Morning Herald 1887, p. 11).*





Figure 4-12 Methodist Church, Wilcannia, c. 1939 (Young 1939, p. 28)

#### 4.1.6 Mining

Wilcannia's importance as a commercial hub was augmented by reports of the discovery of gold. The diggings at Mount Brown, about 110 kilometres southwest of Wilcannia, were reported to have about 100 people digging, with over 200 miners' rights issued (Evening Journal 1881, p. 2). A further discovery at Warratta, about 230 kilometres northwest of Wilcannia was also called a "Wilcannia gold discovery" (Australian Star 1894, p. 5).

In the 1890s, opals were discovered at White Cliffs, about 80 kilometres north of Wilcannia. Together with the gold, this further enhanced Wilcannia as a centre for mining as well as wool-growing (McDougall & Vines 2006, p. 3).

##### 4.1.6.1 Civic buildings

Following the ascendancy of Wilcannia as a port town, the Colonial Architect, James Barnet, designed a series of buildings for official purposes, being the Courthouse (c.1878), Post Office (c.1880) (refer to **Figure 4-13**), Post Master's Office (c.1880), Police Station (c.1881) and maximum-security prison (c.1881) (replacing an earlier 1860s lock-up) (refer to **Figure 4-14**). During the same time period, Cyril Blacket, son of eminent architect Edmund Blacket, designed and built the Wilcannia Hospital (c.1879). These buildings are all still extant and listed on the local heritage register, with the Post Office and Residence also listed on the SHR.



Figure 4-13 Wilcannia Post Office, c. 1909 (Courtesy: National Archives of Australia, C4076, HN131)



Figure 4-14 Wilcannia Gaol, c. 1939, (Young 1939, p. 17)

A school had first opened in 1868, shortly after the establishment of the town. It was a wooden building, replaced in 1875 with the current sandstone school building (refer to **Figure 4-15**). The school building is still in use.



Figure 4-15 Wilcannia Public School, c. 1912 (Courtesy: NSW Archives & Records, Item NRS-15051-1-35-[1959])

#### 4.1.7 Travelling Stock Routes or Reserves

As a centre for transport until the railway at Menindee in 1919, Wilcannia had a number of Travelling Stock Routes (TSRs). Also known as “long paddocks”, these routes are parcels of Crown land that allowed the movement and agistment of stock over long distances. They were usually on productive land with watercourses to allow for the feeding and watering of stock (Rural Lands Protection Boards 2001).

As a town that depended on the movement of stock for its livelihood, there were a number of TSRs and Public Watering Places near Wilcannia. A parish map from 1924 indicates a series of TSRs following the approximate route of White Cliffs Road to the north west of the town, terminated about seven kilometres north west of the town (refer to **Figure 4-16**).

In 1955, a TSR was also notified over a Permanent Common to the west of the tow, leading to a TSR at Steamers Point, to the south east of the township (refer to **Figure 4-17**).





Figure 4-16 Detail of Parish Map of Wilcannia, c.1924 (Courtesy: National Library of Australia, Call No. MAP G8971.G46 svar (Copy 1))



Figure 4-17 TSRs (outlined in green with the Steamer's Point portion coloured white) notified in 1955 (Courtesy: Historical Land Records Viewer, wL\_phWilcannia\_Young.jp2)

TSRs are often protected for heritage reasons. The Steamer's Point TSR (refer to **Figure 4-18**) was recently classified a category 2 TSR, meaning that it is also important for reasons such as biodiversity, heritage or recreational purposes (Local Land Services 2019, p. 6).

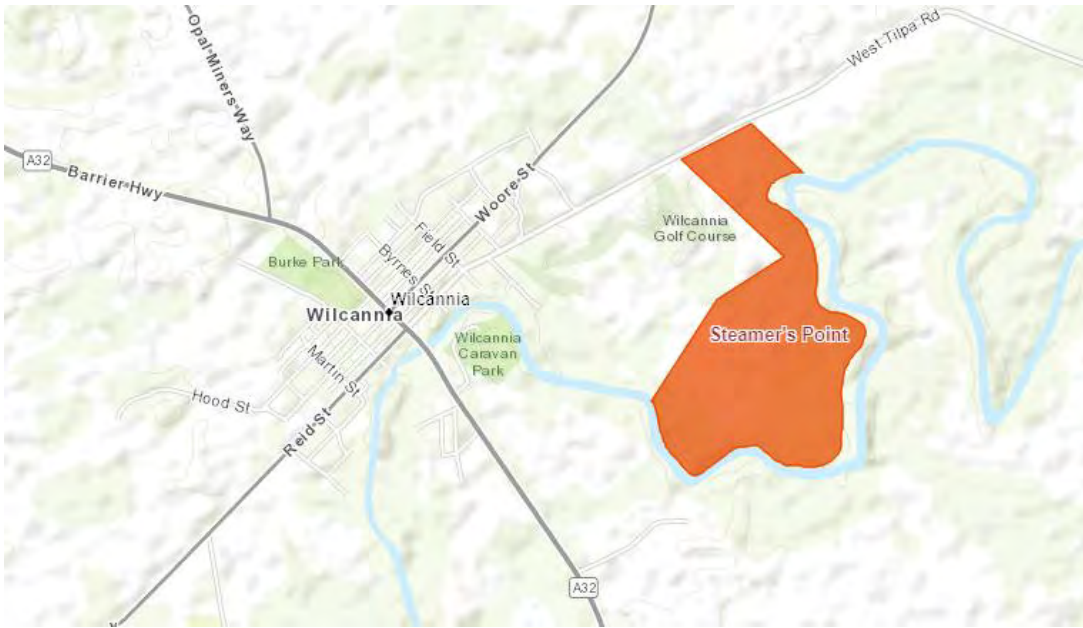


Figure 4- 18 Current Category 2 TSR-R77748 to the east of Wilcannia, named "Steamers Point" (Courtesy: Local Land Services)

#### 4.1.8 Resch's Brewery

Following their time in the Victorian and NSW goldfields, German immigrant brothers, Richard and Edmund Resch, bought a cordial and aerated water factory in Wilcannia in 1877. Shortly afterwards they began brewing beer as the "Lion Brewery". The success of the Resch's brewery allowed them to buy breweries at Cootamundra and Tibooburra, both named "Lion Brewery" (refer to **Figure 4-19**). By 1885, Richard Resch focussed his efforts on the Cootamundra and Tibooburra breweries, while Edmund remained in Wilcannia and developed a reputation as an excellent brewer (Walsh 1988).

A contemporary description of the brewery noted:

*The brewery covers an area of 2680 square feet, which is divided into two portions for carrying on the manufacture of aerated waters and brewing, the whole worked by steam power of five-horse, which also pumps the water from a well 70 feet deep to the reservoirs, containing 800 gallons, to supply the various departments when required. (Wilcannia Times 1879(a)).*

Other components of the brewery included a malt mill, a cooler, a cellar, fermenting room and two washing sheds. The brewery was capable of producing 180 hogsheads of beer weekly (about 9,720 gallons or 265 litres) (Wilcannia Times, 1879(a)). Following the opening of the brewery, the beer was described as "palatable", although "a little new", but that as a light ale, it "would commend itself to the beer drinking community" given Wilcannia's climate (Wilcannia Times 1879 (b)).

Being located in a port town and Resch's growing reputation as an excellent brewer, the Wilcannia brewery flourished. Appointing a manager to oversee the operations at Wilcannia, Edmund Resch retired to Melbourne in 1892, however moved to Sydney in 1895 to manage an early business associate's brewery. The brewery continued under the management of another of the Resch brothers, Emil. Edmund Resch transferred the Wilcannia brewery to his son in the 1920s. Resch Snr died in 1923 and the Wilcannia brewery closed in 1928, after being taken over by Tooth & Co.

The Wilcannia Golf Club is on the site and incorporates parts of the original Resch's brewery building (refer to **Figure 4-20** and **Figure 4-21**).



Figure 4-19 Postcard depicting brewery tower and engine shed of Resch's Brewery, Wilcannia, c.1905-1915 (Courtesy: Museum of Applied Arts & Sciences, Item 62565)



Figure 4-20 Early incarnation of the Wilcannia Golf Club, incorporating the ruins of the former Resch's Lion Brewery, c. 1970 (Courtesy: Beth Garland)





Figure 4-21 Recent photograph of Wilcannia Golf Club with remnants of the Resch's brewery incorporated (Jacobs 2020)

#### 4.1.9 Darling River (Baaka) crossing

Prior to the construction of the lift bridge in 1896, crossing the Darling at Wilcannia was via a punt at the end of Cleaton Street (refer to **Figure 4-22**). Punts during that time period were usually small, timber pontoons, hand-operated through a wire cable across the river and a set of gears onboard (GHD 2015, p. 11). It operated close to the rock bar, which in times of low water levels would be used as a crossing place for stock.

While the punts were cheap to manufacture and operate, they were also slow and unreliable, resulting in delays and congestion in river crossings. Other social problems were associated with the taverns and shanties often situated near to river crossings – teamsters (people who drove teams of draft animals) would take the opportunity of visiting these establishments before the river crossings, resulting in lost time, money and sometimes engage in brawling and other anti-social behaviour (GHD 2015, p. 11).

In order to facilitate movement of stock and people between townships by road and to decrease reliance on punts for river crossings, the NSW Government embarked on a program of bridge construction along the Darling River (Baaka), commencing in the late 1880s with the construction of the bridge at Brewarrina and continuing until the late 1890s. The bridge design with the central lifting platform was to ensure the free passage of paddle steamers along the Darling River (Baaka) (GHD 2015, p. 36).

Although the original design for vertical lift bridges originated in Europe, Australian engineers modified the European design to suit Australian conditions and purposes (GHD 2015, p. 46). In 1895, J A McDonald designed the Tocomwal bridge and included modifications to the counterweights by placing them outside the towers. In 1896, renowned engineer E M De Burgh modified the lifting mechanism by including wire ropes in the lifting mechanism. The Wilcannia Bridge is modelled after the Tocomwal bridge (GHD 2015, p. 50).



Figure 4-22 Wilcannia punt, in background (paddle steamer at Government wharf in foreground), c. 1870 (Courtesy: National Library of Australia, Call No. PIC/8131/62/LOC Album 1026)

The bridge was opened to traffic in January 1896 (refer to **Figure 4-23**). At the time of its opening, it was described as:

*It consists of five spans, a total length of 310 feet, the centre span being a lift span to permit the passage of steamers when the river is high. This portion is constructed entirely of steel. It can be lifted a distance of 21 feet, leaving a passage 52 feet 4 inches in the clear, with a headway above the highest flood level recorded of 25 feet. Each corner of the lift span is supported by four steel wire ropes, and counter-balanced by weights hung outside the tower, and the accuracy with which the weight is balanced will be understood, when it is stated that one man only is needed to lift the span, which weighs 36 tons, to the full height of 21 feet, in about three or four minutes (Riverina Recorder 1896, p. 4).*



Figure 4-23 Lift bridge looking south, c. 1931. Note wharf and winch at right (Courtesy: NSW State Archives and Records, Item NRS-540-1[14/1745]-[2]-105)

#### 4.1.10 Wilcannia Weir

The water levels of the Darling River (Baaka) have been of great importance to the prosperity of Wilcannia. Suffering from regular drought and floods, attempts to control the rise and fall of the Darling River (Baaka) were made. A temporary dam was constructed below Wilcannia in an attempt to raise the water level near the town

(refer to **Figure 4-24**). Before the construction of the temporary dam, the river's level had been measured at four inches (Sydney Mail and New South Wales Advertiser 1899, p. 443).



Figure 4-24 Temporary dam at Wilcannia, 1899 (Courtesy: Sydney Mail and New South Wales Advertiser 1899, p. 443)

Wilcannia Weir was constructed in the early 1940s to conserve sufficient water to sustain Wilcannia for a period of twelve months during a dry river event (Western Grazier 1940, p. 2). It was anticipated that the weir would be "nine feet high and will bank the water back for 30 miles" (Daily Advertiser 1943, p. 2). It was reported to have been constructed with local and returned servicemen labour under the supervision of the Public Works Department and the council (Barrier Miner 29 Oct 1942, p. 2).

The weir's initial construction was controversial due to its chosen location, poor construction quality, cost blow outs and the immediate damage it withstood after completion. Planning for the works began in 1940 and construction was reported to be well advanced by 1942 but had to stop due to high water levels (Barrier Miner 29 Oct 1942, p. 2). The fluctuations in the river's water levels continued to delay work, and after several false starts works commenced again in 1943. An unnamed alderman commented "The weir was built in the wrong location in the first place. Even if they finish it, it will silt up". A businessman stated, "they tackle these jobs with next to no equipment: they employ 10 men where they should have a hundred". A worker on the job remarked, "I don't suppose we'll do much good, but I'm getting a job out of it. They pay me to fill sandbags, not to build the blasted thing" (Western Grazier 1946, p. 1).

Secretary for Public Works reported the weir sustained considerable damage by flood waters during its original construction and after completion. The timber portion of the structure remained practically unaffected but other damage consisted of scouring away the earth work and stone filling (Barrier Daily Truth 5 September 1946). Weir damage in March 1945 was examined by the district engineer and this revealed that considerable work would be needed to remediate, including the addition of sheet piling (Western Herald 23 March 1945, p. 6). By February 1946, the weir's remediation had not been completed however 'satisfactory repairs' were carried out by that September with costs for sheet piling and remedial work being met by the government (Barrier Daily Truth 5 September 1946).

The weir's design was typical of post-World War II weir technologies, including sheet piling. The weir's size reflected a new focus on smaller scale weirs for local water management. Construction drawings of the original



weir and later works are held at NSW State Records. The original structure constructed and rehabilitated in 1942-46 is believed to include:

- An impervious clay earthfill embankment core
- A central line of steel sheet piling with concrete capping, serving as the main provision for seepage control with the clay core
- Timber piling at each bank abutment
- Stepped timber crib work on the downstream side filed with stone and anchored at each step with additional timber piling
- Hewn sandstone rubble and boulders rockfill scour protection on both upstream and downstream embankment batters.

Forty years later in 1987/8, upgrade and refurbishment works were undertaken on the weir and included:

- Concrete cap and main crest raising
- Extension of the sheet pile concrete capping on left abutment and addition of 0.3 m wing walls (raised crest sections) on both abutments
- Restoration of adjacent riverbank due to scouring
- Placement of rockfill to reform upstream and downstream embankment batters.

The original weir was strengthened and provided with additional capping on sheet piles and wing walls in the 1980s rather than any major replacement of original elements.

#### 4.1.11 Decline

A drought and resulting recession in the 1890s had a profound effect on the large pastoral stations in the district and had a direct impact on the prosperity of the town. Many stations, such as Mombo/Mt Murchison, were portioned off. In 1897, it was reported:

*The drought in the Wilcannia district at the present time is being severely felt. Amongst the lambing ewes, heavy losses are bound to occur... and in any case, should rain fall shortly, owing to their weak state, numbers will succumb before feed can grow. On some stations very heavy losses of stock have already occurred. On one holding alone the manager estimates that sheep are now dying at the rate of a thousand a day. Within a radius of a hundred miles of Wilcannia the country had the appearance of a desert right through to Wentworth, a distance of 280 miles. (Northern Star 1897, p. 4).*

Further contributing to Wilcannia's decline was that despite lobbying for the railway come to Wilcannia, in 1919 that honour went to Menindee, when the Broken Hill to Menindee section of the Great Western line was constructed. With Menindee located about 130 kilometres south of Wilcannia, the rail provided a cheaper and more reliable form of transport. The river port began to lose its importance, and with it went Wilcannia's position as a commercial centre (McDougall & Vines 2017, p. 5).

## 4.2 Database searches

All database searches were undertaken on 21 October 2020, 3 December 2020 and 8 December 2021. The heritage items within the study area and in the 150 metre buffer zone are mapped in **Figure 4-25**.

### 4.2.1 Australian Heritage Database

There are no places on the WHL, NHL or CHL in the study area or in the 150 metre buffer zone.

#### 4.2.2 State Heritage Register

There are no heritage items listed on the SHR within the study area, and only one within the 150 metre buffer zone (refer to **Table 4-1**).

Table 4-1 Items on the SHR

Item	Address	SHR ID No
Wilcannia Post Office & Post Master's Residence	45-47 Reid Street, Wilcannia	02033

#### 4.2.3 Local heritage

There is one heritage item and one heritage conservation area on the Central Darling LEP 2012 within the study area, and a further 35 in the 150 metre buffer zone (refer to **Table 4-2**).

Table 4-2 Items on the Central Darling LEP 2012

Item	Address	LEP ID No	Distance from study area
Centre lift bridge over the Darling River (referred to throughout as Wilcannia Bridge)	Barrier Highway, Wilcannia	I15	Intersecting
Wilcannia Conservation Area	Wilcannia	C1	Intersecting
Hospital	1-7 Ross Street, Wilcannia	I19	Less than 50 metres
Knox and Downs Store (former)	44 Reid Street, Wilcannia	I20	Less than 50 metres
Old Wharf and winch and portable steam engine	41-43 Reid Street, Wilcannia	I45	Less than 50 metres
Memorial: World War I	Baker Park, Wilcannia	I22	Less than 50 metres <sup>1</sup>
Post Office residence	45 Reid Street, Wilcannia	I32	Less than 50 metres
Rich and Co Warehouse	71 Reid Street, Wilcannia	I33	Less than 50 metres
House "Riversleigh"	69 Reid Street, Wilcannia	I49	Less than 50 metres
Butcher's shop	50 Reid Street, Wilcannia	I14	Greater than 50 metres
Club Hotel	46 Reid Street, Wilcannia	I16	Greater than 50 metres
Courthouse	66-68 Reid Street, Wilcannia	I17	Greater than 50 metres
Golf club	25-29 Ross Street, Wilcannia	I18	Greater than 50 metres
Maximum security prison and police station	70-72 Reid Street, Wilcannia	I21	Greater than 50 metres
Museum/Wilcannia Athenaeum	37 Reid Street, Wilcannia	I23	Greater than 50 metres
Old Newsagency	48 Reid Street, Wilcannia	I24	Greater than 50 metres
Old Queens Head Hotel	64 Reid Street, Wilcannia	I25	Greater than 50 metres
Old Roman Catholic convent	52-54 Woore Street, Wilcannia	I26	Greater than 50 metres

<sup>1</sup> The formal LEP curtilage is currently mapped to the wrong location, the war memorial is located in the western half of Baker Park, not adjacent to Wilcannia Bridge

Item	Address	LEP ID No	Distance from study area
Old sandstone shop	30 Reid Street, Wilcannia	I27	Greater than 50 metres
Old Wilcannia Central School	77-79 Hood Street, Wilcannia	I29	Greater than 50 metres
Police Residence	74-76 Reid Street, Wilcannia	I31	Greater than 50 metres
Shire office complex	21 Reid Street, Wilcannia	I34	Greater than 50 metres
St James Anglican Church	80-82 Woore Street, Wilcannia	I35	Greater than 50 metres
Two sandstone houses	24 Myers Street, Wilcannia	I36	Greater than 50 metres
House, former brewery residence	19-23 Bonney Street, Wilcannia	I39	Greater than 50 metres
House	15-17 Hood Street, Wilcannia	I41	Greater than 50 metres
Former Commercial Bank	25 Reid Street, Wilcannia	I42	Greater than 50 metres
Wilcannia Community Development Employment Projects (CDEP) Building (former West Darling Transport)	39 Reid Street, Wilcannia	I43	Greater than 50 metres
Row of shops	40A, 40B, and 40C Reid Street, Wilcannia	I44	Greater than 50 metres
Shop and house	54 Reid Street, Wilcannia	I46	Greater than 50 metres
Auto repair workshop	60 Reid Street, Wilcannia	I47	Greater than 50 metres
Former Courthouse Hotel	65-67 Reid Street (corner Cleaton Street)	I48	Greater than 50 metres
Sandstone house	81 Reid Street, Wilcannia	I50	Greater than 50 metres
Sandstone house	83 Reid Street, Wilcannia	I51	Greater than 50 metres
Sandstone house	93-99 Reid Street, Wilcannia	I52	Greater than 50 metres
Steam Engines and Old Wilcannia water tower	6-8 Ross Street, Wilcannia	I53	Greater than 50 metres
Cemetery	West Wilcannia Road, Wilcannia	I54	Greater than 50 metres

#### 4.2.4 Register of the National Estate

There is one heritage item on the RNE for its historic heritage values within the study area (Barrier Highway Bridge over Darling (Baaka) River), and five within the 150 metre buffer zone (all of which are also listed on the Central Darling LEP 2012) (refer to **Table 4-3**).

Table 4-3 Items on the RNE

Name	Address	Present on other heritage databases Y/N
Barrier Highway Bridge over Darling River	Barrier Highway, Wilcannia	Yes (LEP)
Butchers Shop	50 Reid Street, Wilcannia	Yes (LEP)
Central Darling Shire Office	21 Reid Street, Wilcannia	Yes (LEP)



Name	Address	Present on other heritage databases Y/N
Knox and Downs Store (former)	44 Reid Street, Wilcannia	Yes (LEP)
Newsagency	48 Reid Street, Wilcannia	Yes (LEP)
Newsagent Group	48-50 Reid Street, Wilcannia	Yes (LEP)

#### 4.2.5 Section 170 register items

There are no heritage items on s170 registers within the study area, with four located within the 150 metre buffer zone (refer to **Table 4-4**). All of these are also listed on the Central Darling LEP 2012.

Table 4-4 Items listed on a S170 register

Item	Address	Agency owner
Wilcannia Central School – Building B00F	90-98 Woore Street, Wilcannia	Department of Education
Wilcannia Courthouse and Residence	Reid Street, Wilcannia	Department of Justice and Attorney-General
Wilcannia Official Residence 2	Lot 9 Reid Street, Wilcannia	NSW Police Service
Wilcannia Police Station	Lot 8 Reid Street, Wilcannia	NSW Police Service

#### 4.2.6 NSW maritime heritage database

There are three entries in the NSW maritime heritage database within the study area (**Table 4-5**).

Table 4-5 Items of maritime heritage

Item	Approximate location	Notes	Site ID	Distance from study area
Paddle steamer <i>Moira</i>	Former Wilcannia Wharf	<p>Contemporary newspaper reports in the Sydney Morning Herald described the wooden paddle steamer 'Moira' being burnt to the waterline while tied up at Wilcannia Wharf on 21 March 1904. Property of Mr O'Connell, the steamer was reported to have been sunk at her moorings as a result of the 'mysterious' fire. Later reports in the Western Grazier on 15 September in 1951 further describes the fate of the hulk which 'remained where is sunk'. These reports detailed that the sunken hulk presented an obstacle for other boats, so its remains were hauled away (date unknown).</p> <p>Historical references indicate the sunken fire-damaged steamer was hauled away, and therefore it is not considered further as a heritage item.</p>	836	Potentially intersecting

Item	Approximate location	Notes	Site ID	Distance from study area
River port, Wilcannia	Wilcannia	Former bustling river port on Darling River (Baaka). This is only an historical reference to the port and is not a physical heritage item.	2152	n/a
Wilcannia Bridge	Barrier Highway, Wilcannia	This lift bridge was designed by J. A. McDonald for the NSW Government in 1894 and opened to traffic on 11 January 1896, forming a symbolic gateway to the town of Wilcannia, which at the time was inland Australia's third-largest port.  Also listed on the Central Darling LEP 2012.	2749	Intersecting

### 4.3 Literature review

#### McDougall and Vines, 2012, Wilcannia Wharf, Wilcannia: Conservation Management Plan

This Conservation Management Plan was prepared on behalf of the Wilcannia Tourist Board, partially funded by the NSW Heritage Grants Program and the Central Darling Shire Heritage Fund. The purpose of the report to compile a record of the Wilcannia Wharf and to assess the possibility of reconstructing the wharf, as reconstruction was seen as an integral part of the ongoing heritage program of the time.

The Conservation Management Plan comprises a brief historical context of Wilcannia and the wharf's importance to the town. It also contains a significance assessment and management principles to conserve the remaining fabric of the wharf. Attached to the report are a series of plans and comparisons with other wharf reconstructions on the Darling River (Baaka), particularly that at Bourke. The wharf is listed on the LEP (ID #1458) but is located outside of the study area.

#### McDougall and Vines, 2017, Wilcannia, NSW: Community Based Heritage Study

This study was commissioned by the Central Darling Shire Council in order to update an earlier study undertaken by Godden Mackay in 1996. It provides a survey of heritage values and items within the Wilcannia township and included additional primary research by Chris Elliot, a local historian of Wilcannia. A public meeting was also held in October 2016 at the Wilcannia Golf Club to present the aims to any interested members of the community.

The study presents a thematic study of Wilcannia, which identifies the themes of developing local and regional economies, building settlements, towns, and cities, governing and developing cultural life. The report also offers a street-by-street catalogue of heritage items. In addition to the local heritage items currently listed, the study identified a further 14 heritage items which it recommended for inclusion on the LEP (refer to **Table 4-6**). Of the items in **Table 4-6**, they have since been added to the LEP. None of these items are situated within the study area.

Table 4-6 Items recommended for inclusion on LEP

Item	Address	Distance from study area
Former Commercial Bank	25 Reid Street, Wilcannia	Greater than 50 metres
Wilcannia Community Development Employment Projects (CDEP) Building (former West Darling Transport)	39 Reid Street, Wilcannia	Greater than 50 metres
Row of shops	40 Reid Street, Wilcannia	Greater than 50 metres

Item	Address	Distance from study area
Portable steam engine	41-43 Reid Street, Wilcannia	Greater than 50 metres
Shop and house	54 Reid Street, Wilcannia	Greater than 50 metres
Wilcannia Auto Repairs	60 Reid Street, Wilcannia	Greater than 50 metres
Former Courthouse Hotel	65-67 Reid Street (corner Cleaton Street)	Greater than 50 metres
"Riverview" house	Behind 73 Reid Street, Wilcannia	Less than 50 metres
Sandstone houses	81-83 Reid Street, Wilcannia	Greater than 50 metres
Cottages	97-99 Reid Street, Wilcannia	Greater than 50 metres
House	26-30 Myers Street, Wilcannia	Greater than 50 metres
House	19-21 Hood Street, Wilcannia	Greater than 50 metres
Wilcannia Cemetery	Menindee Road, Wilcannia	Greater than 50 metres
Steam engines	6-8 Ross Street (add to existing Water Tower Listing), Wilcannia	Greater than 50 metres
Former brewery residence	19-23 Ross Street, Wilcannia (should be 19-23 Bonney Street, Wilcannia)	Greater than 50 metres

In summary, the following three listed heritage items have been found to be located within the study area:

- Wilcannia Bridge (LEP I15, local heritage significance)
- Wilcannia Conservation Area (LEP C1, local heritage significance)
- Paddle steamer *Moira* (NSW Maritime Register, 836) - Historical references indicate sunken fire damage steamer were previously hauled away. This item will not be considered further as a heritage item.

Further, it was found that there are no heritage items within the study area currently being 'considered' for new heritage listing.





Local heritage items    Major watercourses

General item

0 50 100 m



Figure 4-25: Heritage items identified from database searches and literature review



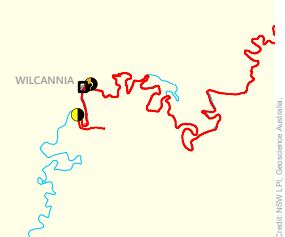
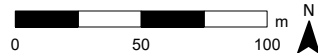
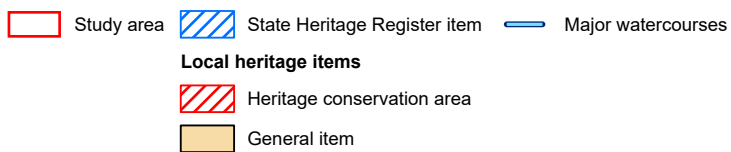
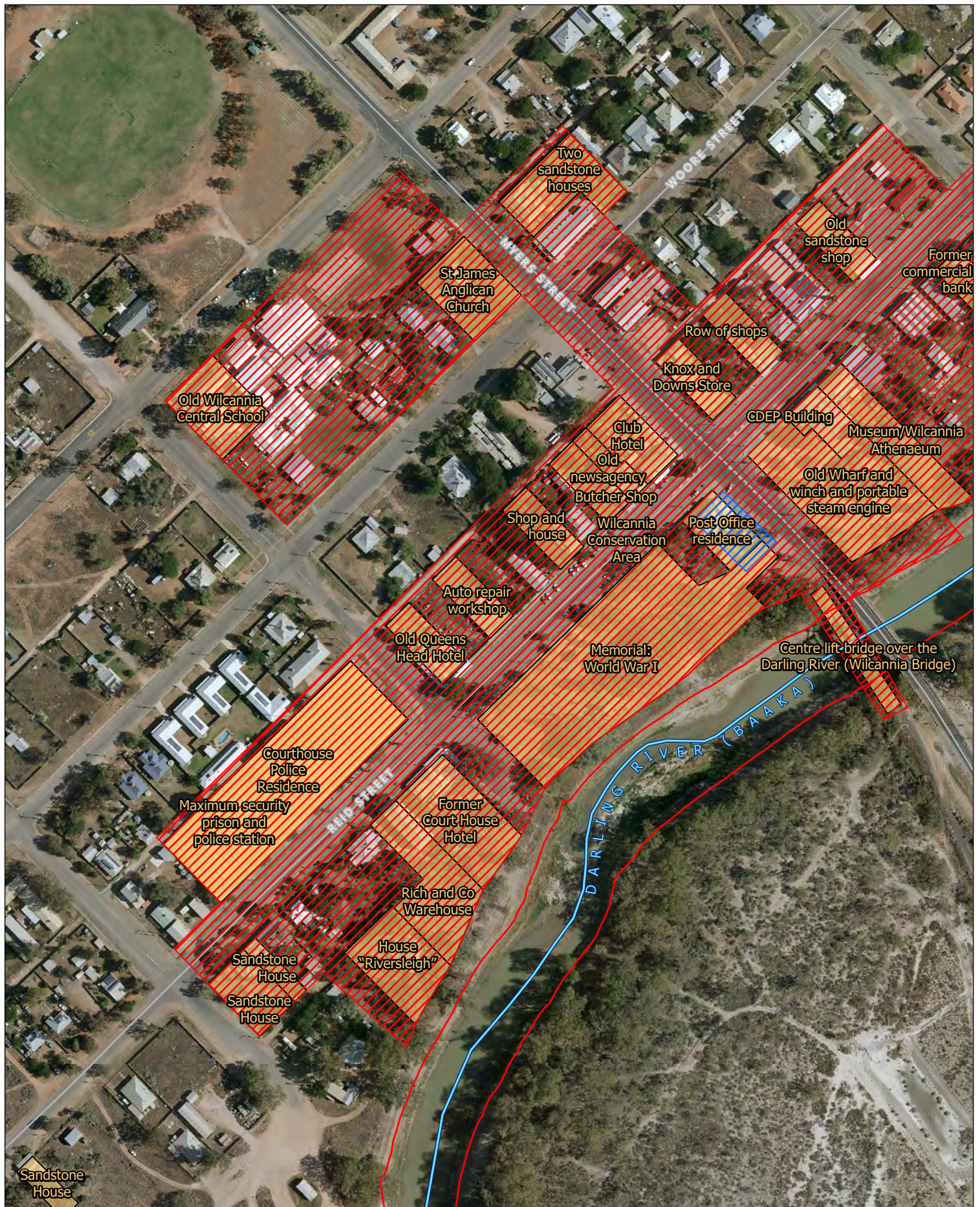


Figure 4-25: Heritage items identified from database searches and literature review



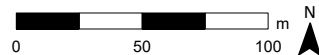
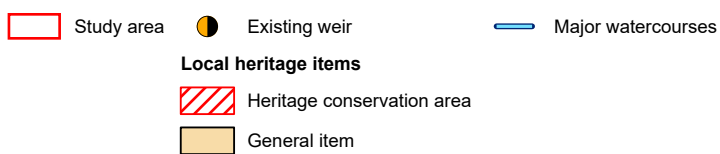


Figure 4-25: Heritage items identified from database searches and literature review

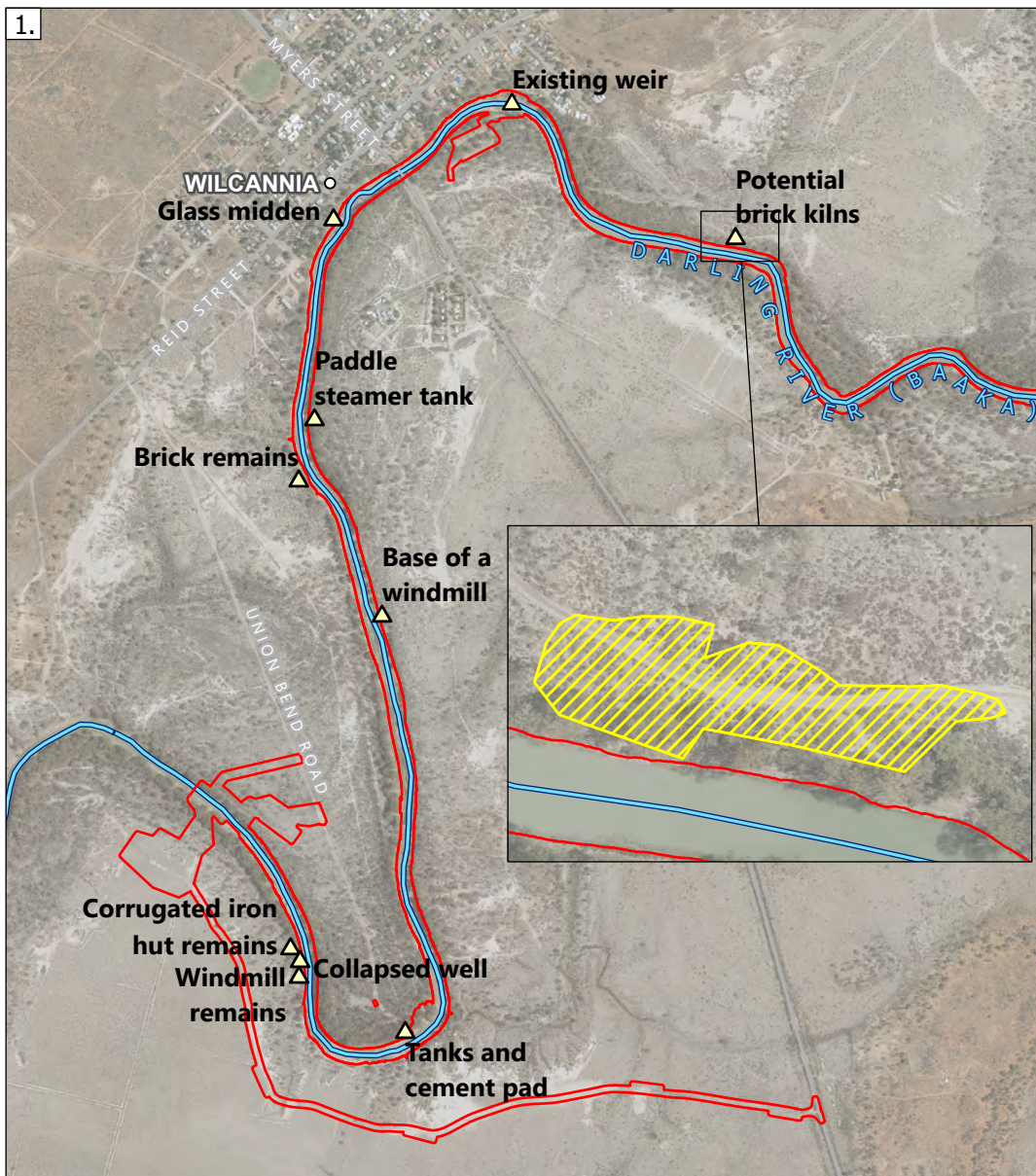


## 5. Field survey

A field survey was undertaken on 10-12 November 2020 by Jacobs staff Clare Leever (Archaeologist and Heritage Consultant) and Alexandra Seifertova (Graduate Archaeologist). Conducted prior to detailed background research, it was targeted to listed heritage items within the study area plus a 150 metre buffer) (refer to **Figure 5-1**). This survey area included the current weir site, the new weir site and associated access roads (shown in **Figure 5-1**).

Five new potential heritage items were recorded during the field survey, with an additional six potential heritage items recorded during the Aboriginal cultural heritage and aquatic ecology surveys for the proposal, provided by Doug Williams (Principal Archaeologist) and Jorja Vernon (Aquatic Ecologist) (refer to **Figure 5-1**).

While all of the field survey results are provided in this section, only four of these heritage items are situated within the study area and will be considered further in the assessment.



- Study area
- ▲ Potential heritage items
- Major watercourses
- Site extent - potential brick kilns

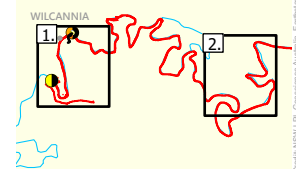
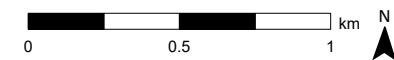
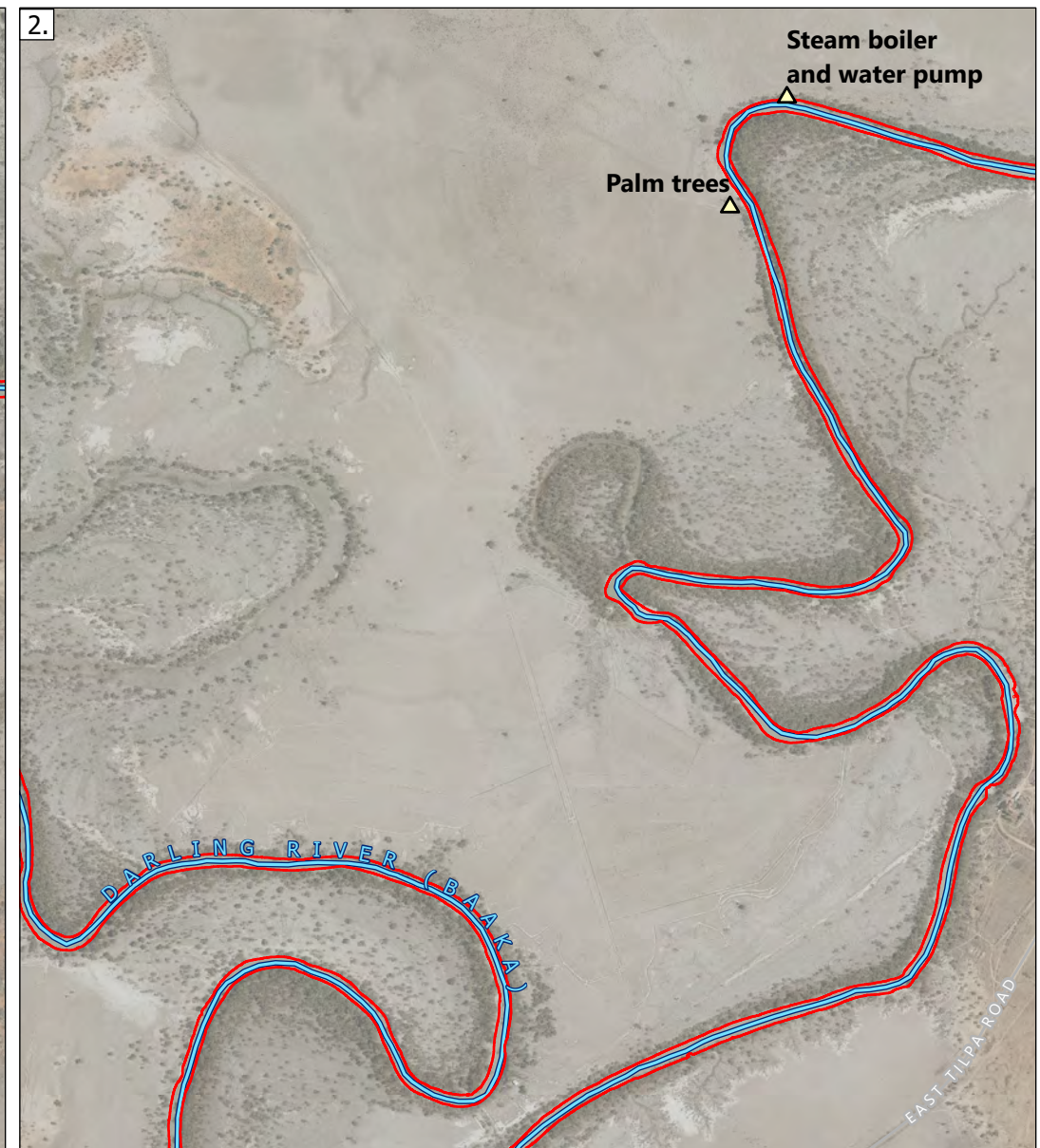


Figure 5-1: Survey results



## 5.1 Listed heritage in Wilcannia township within 150 metres of the study area

### 5.1.1 Wilcannia Bridge (LEP ID# I15)

Situated within the study area, Wilcannia Bridge is a riveted wrought iron truss bridge with cross-braced iron sides and a central vertical lift span (refer to **Figure 5-2**). It is supported by two pairs of riveted metal piers, fabricated from curved and shaped wrought iron plates riveted together, with elliptical frame cross ties. Superseded by a newer, pre-stressed concrete bridge which currently links the Barrier Highway and Myer Street, the original bridge has been retained and provides pedestrian access across the Darling River (Baaka) and between the township of Wilcannia and the Wilcannia Mission neighbourhood. The cabling of the central lift span has been removed, but the rest of the superstructure remains in situ. There is a timber beam approach with a timber deck and white-painted timber rails at either end, supported on a concrete or concrete-rendered plinth (refer to **Figure 5-3**). The lowest set of pier cross ties on each side currently exhibit signs of significant corrosion and degradation, with partial or full loss of plate metal in some sections (refer to **Figure 5-4**).



Figure 5-2 Wilcannia Bridge and central lift span; facing northeast from the remnants of the Rich and Co warehouse wharf (Jacobs 2020)



Figure 5-3 Timber approach on the Wilcannia township side of the bridge, remnant asphalt wearing surface; facing southeast (Jacobs 2020)



Figure 5-4 Lower pier cross ties with significant deterioration below the elliptical frame; facing southeast (Jacobs 2020)

#### 5.1.2 Memorial: World War 1 (LEP ID# I22)

Situated in the western side of Baker Park, the World War One (WW1) memorial is a grey, granite, obelisk which stands about four metres tall. The central obelisk sits upon three concrete tiers centrally placed on a circular concrete plinth, with access stairs on each cardinal point and the whole installation is fenced by a low metal mesh fence with concrete pillars. Veterans' names and inscriptions are both engraved and gilded, and the names of World War Two (WW2) veterans have been subsequently added along with a plaque for the war in Korea. It is



set in a level area of open lawn, with play equipment and street trees nearby, overlooking the river (refer to **Figure 5-5**).



Figure 5-5 War Memorial in Baker Park; facing northeast from the Cleaton Street cul-de-sac (Jacobs 2020)

### 5.1.3 Wilcannia Post Office and Post Master's Residence (SHR ID# 02033; LEP ID# I32)

The Post Office is a single-storey neo-Classical Victorian stone building with a three-bay arcaded loggia fronting Reid Street (refer to **Figure 5-6**). It shares a chimney with the residence and has a hipped roof with bracketed eave line and raised semi-circular pediment with its name and date of construction. The walls are coursed ashlar, sparrow-pecked Wilcannia sandstone and the side verandah has scalloped wooden fretwork.

The attached Post Office Residence is a two-storey Victorian 'Free Classical' building with the same coursed ashlar sandstone walls as the Post Office, and a hipped corrugated iron roof with two chimneys (refer to **Figure 5-7**). The verandah has cast iron columns and brackets, wooden fretwork, and a cast iron frieze panel with balustrade panels at first floor level. The verandah ceilings are insulated with tongue and groove wooden panelling. The windows at the front of the building are French windows, while those at the rear are double hung. The rear yard of the building also includes an intact stone building which appears to be for storage. It is constructed of faced, random coursed rock masonry (refer to **Figure 5-8**).



Figure 5-6 Wilcannia Post Office; facing southeast from Reid Street (Jacobs 2020)



Figure 5-7 Post office residence; facing east from Reid Street (Jacobs 2020)





Figure 5-8 Post office outbuilding; facing northwest from the riverbank (Jacobs 2020)

#### 5.1.4 Club Hotel (LEP ID# I16)

The club hotel is an L-shaped building, one storey-along much of its Myers Street façade and two-storey from its front corner along Reid Street. The historical two-storey building sections are of coursed, rusticated sandstone with quoining around the windows and doors (refer to **Figure 5-9**), while the extension along Myers Street (creating the L-shape) is of brick, painted with a community mural of the Darling River (Baaka) (refer to **Figure 5-10**). The chimneys of this section suggest that it is also historical, though likely post-dating the two-storey sandstone portion. Both building sections have hipped roofs of corrugated iron. The two-storey building is currently obscured by an unsympathetic, two-storey verandah in concrete blockwork, which has been subsequently infilled. A medium-sized fig tree has grown at the hotel's front entrance, and likely dates to the turn of the century.



Figure 5-9 Front corner of the Club hotel; facing southwest from the intersection of Reid Street and Myers Street/the Barrier Highway (Jacobs 2020)



Figure 5-10 Myers Street frontage of the Club Hotel with community mural; facing south from Myers Street (Jacobs 2020)

#### 5.1.5 Old Newsagency (LEP ID# I24)

The building is a single-storey, hip roofed, Victorian commercial building with two shop front windows (refer to **Figure 5-11**). Its frontage has the remains of cast iron lace frieze on the verandah awning framing and Corinthian column details, though at least three of the original cast iron verandah posts have been replaced by galvanised pipe. The side walls of the building are masonry with parapets. It is currently considerably dilapidated and has lost the verandah awning over the northern Reid Street footpath.





Figure 5-11 Old Newsagency, marked with red box; facing northwest from Reid Street (Jacobs 2020)

#### 5.1.6 Butcher Shop (LEP ID# I14)

The butcher shop is a small, timber-framed, corrugated iron-clad shop with a steep gable roof behind a parapet, above a bull-nosed awning supported by modern steel pipe columns (refer to **Figure 5-12**). The display front is a pair of four-paned windows and the entry is covered with a roller-shutter. It has a skillion roof addition on one side.



Figure 5-12 Butcher shop, marked with red box, facing northwest from Reid Street (Jacobs 2020)

#### 5.1.7 Old Queens Head Hotel (LEP ID# I25)

The old Queens Head Hotel is constructed in the Victorian Free Classical Style. It is a single-storey building in an L-shape with surrounding verandah. The rear section is rusticated stone with double hung, two-paned windows with security screens (refer to **Figure 5-13**). Its central corner/front entrance (at the intersection of Cleaton and Reid Streets) is smooth-faced render with sandstone coursing marks and a parapet which is used for signage (refer to **Figure 5-14**). Brick piers protrude above the parapet and it has a corrugated iron roof with brick chimneys. The verandah shows signs of recent/modern upgrades but retains its original profile.



Figure 5-13 The Old Queens Head Hotel, facing east from Cleaton Street (Jacobs 2020)



Figure 5-14 Front corner of the hotel, facing north from the Cleaton Street/Reid Street intersection (Jacobs 2020)

#### 5.1.8 Courthouse (LEP ID# I17), Maximum security prison and police station (LEP ID# I21), and Police residence (LEP ID# I31)

The courthouse is an expansive building with a two-storey central block and gable roof, with single-storey wings on each side. The ground floor has a verandah which extends across its Reid Street frontage. Constructed of rusticated sandstone blocks, the corners of the building are quoined, as are the window openings. The windows appear to be double hung sash windows. It is representative of the Victorian Free Regency style (refer to Figure 5-15).





Figure 5-15 Wilcannia courthouse and residence; facing north from Reid Street (Jacobs 2020)

The prison and police station is a two-storey, gable-roofed building constructed of random coursed sandstone. The façade is symmetrical with the front door flanked by sidelights and a fanlight, and an arch-headed window set in a recessed arch (refer to **Figure 5-16**), which are partially obscured by the later addition of the heavy front verandah. The central opening has paired sets of narrow, double hung windows on either side. At the rear of the police station is a pair of walled yards and a raised central guard post and gangway (refer to **Figure 5-17**).



Figure 5-16 The Wilcannia gaol and police station; facing northwest from Reid Street (Jacobs 2020)



Figure 5-17 Rear wall of the prison yard with guard tower and remains of the gangway; facing south from Reid Lane (Jacobs 2020)

The police residence is of a style known as Victorian Regional Regency and is a single-storey sandstone building with a spreading hip roof, rear wings and a surrounding veranda (refer to **Figure 5-18**). The verandah columns are timber, and the windows are double hung. It has quoined corners, a vermiculated ashlar finish and three chimneys with simple crowns (refer to **Figure 5-19**).



Figure 5-18 Police residence; facing northwest from Reid Street (Jacobs 2020)





Figure 5-19 Back of the police residence showing one of its rear wings; facing east from Reid Lane (Jacobs 2020)

#### 5.1.9 Rich and Co Warehouse (LEP ID# I33)

This building is a two-storey warehouse in the Free Classical style, with a symmetrical façade with parapet (refer to **Figure 5-20**). The first-floor windows and central entrance are arched, with large rectangular ground-floor windows with trimmed sandstone surrounds. The front wall is coursed rusticated sandstone with a smooth course above the foundations. The side and rear walls are coursed rubble. The current owners have undertaken considerable restorations to the property, which are still ongoing, including the careful replacement of the frontage windows for metal framed replicas, due to the ever-present threat of white ants. The rear of the warehouse retains the original ramped steps to the extensive basement level (refer to **Figure 5-21**), while the wall above shows signs of a previous pitched roof shed which abutted the building (refer to **Figure 5-22**). Previous modifications to the riverbank at the back of the warehouse are likely related to the former goods ramp and/or wharf used to offload and pack trading paddle steamers at the warehouse (refer to **Figure 5-23**).



Figure 5-20 Rich and Co warehouse, currently undergoing restoration; facing southwest from Reid Street (Jacobs 2020)



Figure 5-21 Ramped steps down into the basement level; facing south (Jacobs 2020)





Figure 5-22 Rear of the Rich and Co warehouse, basement access (orange arrow) and previous building shadow (red arrow); facing north from the rear of the property (Jacobs 2020)



Figure 5-23 Remains of modifications to the riverbank, likely a wharf and goods ramp for freight transport between the warehouse and trading paddle steamers; facing south (Jacobs 2020)

Along the part of the building's Reid Street frontage and down its southwestern side is an extent of sandstone flagged surface, guttering and kerbing which appears to be original to the location. Although patchy in some sections to the side of the building, it is otherwise in good condition (refer to **Figure 5-24**) and remarkably intact.





Figure 5-24 Sandstone flagged surface and guttering; facing southeast from Reid Street (Jacobs 2020)

The building interior is also substantially intact (including the original staircase) and undergoing careful restoration, across three floors (two above-ground and one basement level). It currently houses a large collection of moveable heritage items related to Wilcannia and the local area. Of particular note are a number of rowing sculls once used for regattas on the Darling (refer to **Figure 5-25** and **Figure 5-26**).

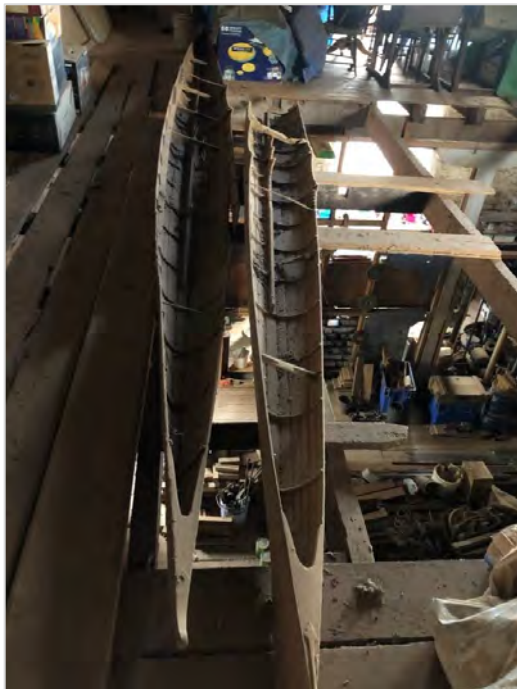


Figure 5-25 Single rowing sculls (Jacobs 2020)



Figure 5-26 Larger rowing scull (Jacobs 2020)



### 5.1.10 Knox and Downs Store (LEP ID# I20)

The Knox and Downs Store was destroyed in a fire some years previously. Currently proposed as the site of a new Cultural Centre, it survives primarily as the ruined exterior walls (refer to **Figure 5-27** and **Figure 5-28**), constructed of random coursed sandstone with quoining around the Myers Street windows and doors. The Reid Street frontage has the remains of an original bay window, which is constructed of dressed sandstone blocks. It is unknown if any of the building's basement floor survives. A small stone storehouse, which was previously connected to the main building, survives at the back of the block (adjacent Reid Lane). Constructed of random sandstone rubble with brick surrounds to its windows and doors its gable roof is clad in corrugated iron, with a small light/ventilation well in its centre (refer to **Figure 5-29**).



Figure 5-27 Reid Street frontage of the former Knox and Downs Store; facing northwest from Reid Street (Jacobs 2020)



Figure 5-28 Myers Street frontage of the former Knox and Downs Store; facing north from the intersection of Reid and Myers Streets (Jacobs 2020)



Figure 5-29 Stone storehouse or surviving portion of the former store; facing east from the intersection of Myers Street and Reid Lane (Jacobs 2020)

#### 5.1.11 Old Wharf and winch and portable steam engine (LEP ID# I45)

Originally a timber wharf, the section of the structure nearest the bank was damaged by fire prior to its heritage listing. Since this time, the jib and remainder of the wharf has collapsed. It is uncertain if this is due to further fire damage, or simply the passage of time. The remnants remain collapsed against a large river gum, noted in the heritage listing as being an integral part of its structure (refer to **Figure 5-30**). The larger timbers and metal components are intertwined with large fallen branches and other vegetation from the river gum (refer to **Figure 5-31**).



Figure 5-30 Remains of Wilcannia wharf; facing north from riverbank (Jacobs 2020)





Figure 5-31 Winch mechanism at the base of the river gum; facing northwest from riverbank (Jacobs 2020)

#### 5.1.12 Museum/Wilcannia Athenaeum (LEP ID# I23)

The Athenaeum is a single-storey sandstone building with a parapet and central semi-circular entablature with urns, in the Victorian Free Classical style (refer to **Figure 5-32**). The parapet has a deep cornice running through the middle of the stucco parapet front, and the smooth stuccoed panels have been used for signage. The remainder of the façade is composed of random coursed rusticated sandstone. The windows have smooth-faced sandstone quoins and the windows are double hung (currently obscured by security screens). Although not visible from street-level, the roof is hipped and clad in corrugated iron.



Figure 5-32 Wilcannia Athenaeum; facing southeast from Reid Street (Jacobs 2020)

### 5.1.13 Old Sandstone Shop (LEP ID# I27)

This item is a terraced row of four sandstone shops (refer to **Figure 5-33**). The walls are coursed rusticated sandstone with double hung windows. The verandah to the footpath is corrugated iron with an ogee curve and is a modern reinstatement, and an access ramps and stairs have been added to the doorways. The parapet above the verandah has recessed panels, architraves and dentillations. The roof is a gable extending to a skillion at the rear of the building. Victorian Regency in style, one of the four shopfronts currently operates as the St Mary Pharmacy.



Figure 5-33 Sandstone row terrace, currently local pharmacy; facing north from Reid Street (Jacobs 2020)

### 5.1.14 Shire Office Complex (LEP ID# I34)

The building is a Victorian Filigree building, two storeys with a hip roof of corrugated iron and three chimneys (which are rendered) (refer to **Figure 5-34**). Constructed in randomly coursed rusticated sandstone, it has an ornate two-storey verandah on two sides with detailed cast iron work, including the balustrade, frieze, brackets, and capital moulds. The verandah posts are chamfered timber, and the double hung windows are protected by sliding jalousies. It shows signs of extensive conservation and restoration works and is externally in good condition.



Figure 5-34 Central Darling Shire Council Offices; facing east from the intersection of Reid Street and Byrnes Street (Jacobs 2020)



### 5.1.15 Wilcannia Golf Club (LEP ID# I18)

The golf club is a modern single storey building constructed of concrete-framed masonry incorporating sections of the ruined former Resch's Brewery – random sandstone rubble walls of locally quarried sandstone (refer to **Figure 5-35**).



Figure 5-35 Wilcannia Golf Club with section of heritage stone wall immediately to left of entrance; facing southwest from Ross Street (Jacobs 2020)

### 5.1.16 Wilcannia District Hospital (LEP ID# I19)

The hospital building is a symmetrical, single storey building with a gable roof, constructed of random, coursed sandstone (refer to **Figure 5-36**). Although previously flanked by a pair of mature Moreton Bay Figs, one of these has since died/been felled (refer to **Figure 5-37**). Designed in the Victorian Vernacular style with some Inter War additions, the verandah posts have been replaced and previous dormer windows lost, presumably when the roof cladding was re-laid.



Figure 5-36 Wilcannia District Hospital; facing south from Ross Street (Jacobs 2020)



Figure 5-37 Wilcannia District Hospital, with mature fig tree stump; facing northwest from Ross Street (Jacobs 2020)

#### 5.1.17 Steam Engines and Old Wilcannia water tower (LEP ID# I54)

The water tower is a tall (more than ten metres) cast iron stand topped with a circular, riveted, iron plate water tank (refer to **Figure 5-38**). The top of the stand is decorated with cast iron brackets and circular motifs, while the remainder of the stand is made up of solid horizontal and vertical compression members and lighter diagonal tension members (refer to **Figure 5-39**). Its immediate surrounds currently form the grounds of Reconciliation Park, and the portable steam engines which were used to pump water from the river to the tank have been moved from the riverbank to the park grounds (refer to **Figure 5-40**).



Figure 5-38 Water tank and Reconciliation Park road, mallee scrub in background; facing east from Reconciliation Park (Jacobs 2020)





Figure 5-39 Cast-iron tank, riveted plate iron and decorative brackets; facing east from base of tank (Jacobs 2020)



Figure 5-40 Portable steam engines previously used in the operation of the town's water supply scheme; facing east from within Reconciliation Park (Jacobs 2020)

## 5.2 Existing Wilcannia Weir

The existing weir is located behind the hospital and is about 50 metres wide, creating an in-stream water storage weir pool (refer to **Figure 5-41**). Existing fabric includes wooden fencing, concrete sandbags, poured concrete walls and hewn sandstone rubble and boulders (refer to **Figure 5-42**). Showing signs of erosion on its northern bank (township side), it does not appear to currently retain its intended level of water, as water escapes around

this edge (refer to **Figure 5-43**). The main concrete element does not key into the earth of the riverbank. Given its age and importance to the Wilcannia township, it is considered to have heritage potential and will be assessed further in **Section 6**.



Figure 5-41 Current weir, looking southeast (Jacobs 2020)



Figure 5-42 Current weir, looking south (Jacobs 2020)





Figure 5-43 Current weir showing extensive bank erosion on the northern bank; facing northeast (Jacobs 2020)

### 5.3 The proposed new weir, community river place and construction laydown areas

The proposed new weir, community river place and construction laydown areas were surveyed through a combination of vehicle and pedestrian survey. There were no sites of potential historical heritage value observed (refer to **Figure 5-44**), with the exception of those related to continuing community practice (which are addressed in the *Wilcannia Weir Replacement - Aboriginal Cultural Heritage Assessment Report* (Jacobs 2022a). Oral histories relate at least one paddle steamer wreck, and a potential flood boat wreck which have been sighted in the area between the existing weir and new weir location, however these were not reidentified, and may be below the current water level.



Figure 5-44 Site of the proposed new weir (Jacobs 2020)



The proposed community river place is currently predominantly low scrub, with larger trees (concentrated towards the riverbank (refer to **Figure 5-45**). There were no signs of significant construction or activities in this area, though there are a number of water bores across other sites on the Union Bend peninsula (refer to **Figure 5-46**).



Figure 5-45 Proposed community river place; facing -southwest (Jacobs 2020)



Figure 5-46 Headworks of a water bore at Union Bend; facing southwest from a dirt access track (Jacobs 2020)



## 5.4 Proposed and existing access tracks

Three primary access tracks were surveyed during the site investigation: the Union Bend existing high voltage, overhead powerline and access road (refer to **Figure 5-47**), an existing riverfront access track to the west of the main track (refer to **Figure 5-48**) (both on the north side of the river), and a proposed construction access road from the new weir site (refer to **Figure 5-49**), through the property 'Yeoval' to link back to the Barrier Highway south of Wilcannia. All three roads traverse alluvial floodplains with grey cracking clays, known locally as 'black earth' country. Predominantly fine silt, they are prone to cracking and are treacherous when there has been recent rainfall, likely contributing to the lack of construction/development in the area. No potential sites of historical interest were identified within 100 metres of these tracks; other heritage sites beyond this which were recorded as a result of this inspection are listed in **Section 5.5**.



Figure 5-47 Existing Union Bend Road; facing northwest (Jacobs 2020)



Figure 5-48 Proposed weir site existing access track; facing northwest (Jacobs 2020)





Figure 5-49 New weir site proposed construction access road; facing southwest (Jacobs 2020)

## 5.5 Potential heritage items

### 5.5.1 Corrugated iron hut remains

Located about 550 metres southeast of the proposed new weir location, on the south bank of the river approximately 20 metres from the edge of the river channel and 200 metres east of the new weir proposed construction access route, this site consists of a scatter of corrugated iron pieces, broken glass, a ruined fence and the remains of a water tank, spread across an area of about 20 metres in diameter (refer to **Figure 5-50**). Preliminary assessment is that this represents a ruined hut/occupation site, potentially a fishing shack.



Figure 5-50 Corrugated iron sheeting and fence remains; facing northwest (Jacobs 2020)

### 5.5.2 Collapsed well

Located about 600 metres south-southwest of the new weir location, on the southern side of the river, approximately four metres inland from the top of the river channel and 250 metres east of the new weir construction access route, this site consists of the remains of a well across an area of about 1.5 metres in



diameter, corrugated iron sheeting which has collapsed inwards, and the remains of a metal ladder which protrudes from the ruins (refer to **Figure 5-51**).



Figure 5-51 Collapsed corrugated iron lining, top of access ladder still visible; facing west (Jacobs 2020)

### 5.5.3 Windmill remains

Located about 650 metres southeast of the proposed new weir location, on the southern side of the river, about 15 metres from the top of the river channel and 200 metres east of the new weir construction access track, this site consists of scattered pieces of corrugated iron, flat galvanised sheet metal, sections of windmill (most notably the tail frame), and a bed frame across an area of about 12 metres (refer to **Figure 5-52**). This site likely represents a water pumping operation from the river, potentially to the nearby well site (refer to **Section 5.5.2**, about 50 metres to the north).



Figure 5-52 Scattered sheets of corrugated iron, windmill pieces and cast iron frame; facing west (Jacobs 2020)

### 5.5.4 Corrugated iron tanks and rock and cement pad

Located on the southern tip of Union Bend peninsula (45 metres southeast of the termination of the Union Bend access road) and approximately 14 metres from the top of the northern riverbank, this site was reported by Principal Archaeologist, Doug Williams, as a result of the Aboriginal cultural heritage survey. It consists of



scattered brick, a bush rock and concrete slab (refer to **Figure 5-53**), and four small corrugated metal tanks which have filled with earth (refer to **Figure 5-54**). It extends across an area about 20 metres in length.



Figure 5-53 Bush rock and concrete slab with small corrugated iron tanks; facing north (Jacobs 2020)



Figure 5-54 Corrugated tanks; facing southeast (Jacobs 2020)

#### 5.5.5 Base of a windmill

Located on the eastern riverbank to the east of Union Bend peninsula (the Barrier Highway side), this site was recorded by Principal Archaeologist, Doug Williams. Although there are no site photos available, the site is recorded as four angled posts about 1200 millimetres apart in a square formation – interpreted as the base of a windmill and pump – located about six metres from the top of the riverbank.



#### 5.5.6 Brick remains, possibly Garland's woolscour

At the northern end of Union Bend peninsula (354 metres east of the Union Bend access road), on the western side of the river, this site consists of a dense scatter of fragmented brick (refer to **Figure 5-55** and **Figure 5-56**) with associated historical artefacts including glass, ceramic, metal and clay tobacco pipe (refer to **Figure 5-57**). About 15 metres from the top of the river channel, the riverbank adjacent to the brick scatter shows signs of modification which may represent the remnants of a goods ramp or informal wharf for passing river trade (refer to **Figure 5-58**). Local history information suggests that this may be the location of John Garland Snr's woolscour operations, a complex which included work sheds, outbuildings and two family houses. However, it may also represent the remains of a brick clamp kiln rather the site of a former building. The site's full extent and nature are uncertain, and it has the potential for archaeological relics and in situ deposits to be present.



Figure 5-55 Dense scatter of brick fragments with occasional historical artefacts; facing northeast (Jacobs 2020)



Figure 5-56 Dense brick scatter; facing southeast (Jacobs 2020)



Figure 5-57 Fragment of clay tobacco pipe found at the possible woolscour site (Jacobs 2020)





Figure 5-58 Riverbank immediately adjacent to brick scatter, possible remains of a goods ramp down to the river in foreground; facing northwest (Jacobs 2020)

#### 5.5.7 Paddle steamer tank

Located about 250 metres southwest of the St. Therese's Community School, Wilcannia, on the east bank of the river (about eight metres from the top of the riverbank), this site was recorded by Principal Archaeologist, Doug Williams. Mapped as a polygon 30 metres in diameter, it consists of a riveted cast iron plate tank (refer to **Figure 5-59** and **Figure 5-60**), most likely a ships tank, which is adjacent to a dirt access track. It is unclear if it has been salvaged from the river nearby or brought to the location overland. Some early accounts of rural woolscouring recount the use of cast iron shipping containers or ships tanks, often 123 centimetres square and cut in half, in the hot washing phase. It is possible that this tank relates to operations of this type.



Figure 5-59 Cast iron plate, riveted tank, likely a ships tank; facing north (Jacobs 2020)



Figure 5-60 Location of ships tank in relation to access track; facing north (Jacobs 2020)

#### 5.5.8 Historical glass midden

This site was reported by Principal Archaeologist, Doug Williams. Located immediately south of the Cleaton Street cul-de-sac within Wilcannia Township, this site consists of an extensive midden of broken historical glass across the northern riverbank at the site of the former Courthouse Hotel (refer to **Figure 5-61**). It most likely relates to the years of operation of the public house, rather than the former warehouse adjacent. Although no whole, or largely intact bottle glass was apparent (refer to **Figure 5-62**), given the site's open, public location, it is highly likely that any representative or collectible vessels have long been souvenired.



Figure 5-61 Riverbank adjacent to the Cleaton Street rock bank, behind the former Courthouse Hotel; facing southeast (Jacobs 2020)





Figure 5-62 Fragmented glass across riverbank slope; facing southwest (Jacobs 2020)

#### 5.5.9 Potential brick kilns

Located about 780 metres southeast of the current weir, on the northern bank of the river (with some material eroding down into the river channel and extending at least 70 metres north from the top of the riverbank) across an area of at least 240 metres x 70 metres, potentially extending further beneath vegetation and alluvial sediments. It consists of extensive mounds of fragmented brick (refer to **Figure 5-63**) interspersed with fragmented historical artefacts, partially obscured by low scrub (refer to **Figure 5-64**). There does not appear to be any defined spatial arrangement to the artefacts, and these may relate to temporary camping occupation or discard of rubbish (refer to **Figure 5-65**, **Figure 5-66** and **Figure 5-67**). The site is concentrated towards the top of the river channel, with bank erosion redepositing some brick material down the slope. A current dirt access road bisects the site, and brick fragments are clearly visible at the sides of the road where they have been redeposited in a windrow by earthmoving machinery (refer to **Figure 5-68**).

Local history suggests this may be the location of the town brickworks, but it is unclear what scale and extent the operations would have involved, and whether the mounds are the remains of kilns (such as clamp kilns) or of previous structures.



Figure 5-63 Mounds of fragmented brick (Jacobs 2020)



Figure 5-64 Fragmented historical artefacts across the mounds (Jacobs 2020)





Figure 5-65 Fragment of earthenware ceramic (Jacobs 2020)



Figure 5-66 Mid-nineteenth century trouser button amongst the brick (Jacobs 2020)





Figure 5-67 Brick mound eroding at the top of the riverbank; facing northeast from within the river channel (Jacobs 2020)



Figure 5-68 Brick fragments in the road windrow; facing southeast from the access road (Jacobs 2020)

#### 5.5.10 Steam boiler and water pump

This site was reported by Aquatic Ecologist, Jorja Vernon. Located about nine kilometres east of Wilcannia township on the northern bank of the river, across an area roughly 20 metres in diameter. It consists of two large, steam boilers (one orientated N-S, the other E-W) and the remains of a water pump mounted on a sandstone block plinth.



The boiler, oriented north - south, is laid on a partially collapsed sandstone block and rubble platform, with a scatter of sandstone and brick surrounding it (refer to **Figure 5-69**). Its southern end bears a maker's nameplate of 'J. Hooker Maker Kilkenny' (refer to **Figure 5-70**) likely referring to boilermaker James Hooker who had an Iron & Boiler works and later opened the Lion Foundry at Kilkenny, South Australia (now an inner north-western suburb of Adelaide). It is possible that the second boiler came from the same source. The second boiler is lying on bare earth, perpendicular to the first, about six metres away (refer to **Figure 5-71**). The area surrounding these contains multiple remnants of a steam, pumping operation with cogs, driveshafts, timber elements and other miscellaneous metal components.

Closer into the edge of the riverbank are the remains of a reciprocating pump which the boilers would have fed with steam. Mounted on a sandstone block plinth (refer to **Figure 5-72**) with pecking on its western face to allow clearance with the flywheel, it retains a piston and rod, cylinder, connecting rod, crank and flywheel, and parts of its suction pipe (refer to **Figure 5-73**).

Local oral history attributes this site to irrigation operations, potentially for adjacent market gardens which are no longer extant.



Figure 5-69 Sandstone platform with scattered brick; facing north (Jacobs 2020)



Figure 5-70 Southern end of the boiler with makers nameplate; facing north (Jacobs 2020)





Figure 5-71 Second steam boiler; facing north (Jacobs 2020)



Figure 5-72 Pumping mechanism and sandstone block platform; facing southwest (Jacobs 2020)



Figure 5-73 Reticulated piston and flywheel, remains of suction pipe in bottom right; facing east (Jacobs 2020)



**5.5.11 Palm trees**

This site was reported by Aquatic Ecologist, Jorja Vernon. There are no site photographs. It is located about nine kilometres east-southeast of the township of Wilcannia on the northern bank of the river, roughly 20 metres from the top of the river channel. It consists of a small grouping of palm trees, which local oral history suggests marks the location of a former building - a public house which was shut down for illegal trading on Sundays - with a police lookout, wood and wire ladder in a nearby river tree. Its potential for archaeological relics and remains are uncertain and would depend on site disturbance, building form and former fabric.

## 6. Significance assessment

The significance assessments for the one listed heritage item and one heritage conservation area in the study area are provided here. In addition, each potential heritage item identified during the field survey, and situated within the study area, has been assessed. Those heritage items or potential heritage items surveyed which are situated outside the study area, are not assessed further.

### 6.1 Wilcannia Bridge (LEP ID #I15)

Description of the Wilcannia Bridge is provided in **Section 5.1.1**. The significance assessment in **Table 6-1** has been amended from the SHI entry (SHI text marked in *italics*).

Table 6-1 Wilcannia Bridge (LEP ID #I15) significance assessment

Criterion	Assessment
(a) Historical significance	<p>The lift bridge was constructed in 1896 to allow easy road connection between Wilcannia and eastern towns such as Cobar and Hay. It was part of a bridge building program along the Darling to replace punts while still allowing the free passage of paddle steamer through the vertical lift span. Modelled after the Tocumwal bridge on the Murray, the Wilcannia Bridge simplified and expedited travel across the Darling River (Baaka) as well as to and from Wilcannia.</p> <p><i>This item is assessed as historically rare state-wide.</i></p> <p>It therefore <b>fulfils</b> this criterion.</p>
(b) Associative significance	<p>The Wilcannia lift bridge is associated with the engineer, Ernest McCartney de Burgh. At the time of the construction of the Wilcannia Bridge, de Burgh superintended the construction of many bridges along the Darling, including that at Wilcannia. He went on to become the chief engineer for harbours and water supply, and designed and constructed the Cordeaux, Avon, and Nepean Dams.</p> <p>It is considered that this association <b>fulfils</b> this criterion.</p>
(c) Aesthetic/technical significance	<p>The Wilcannia Bridge was based on the Tocumwal bridge constructed in 1895. It comprises a concrete and wooden deck with steel superstructure, two lattice truss spans and a central lift. It is considered to be of both technical and aesthetic heritage significance and <b>fulfils</b> this criterion.</p> <p><i>This item is assessed as aesthetically rare state-wide.</i></p>
(d) Social significance	<p>Outside of utility value, it is not certain that there is no demonstrated special social significance attached to the item. Preliminary community feedback indicates that in general terms, the bridge is a well-loved landmark and that restoring water flow beneath it is a key project driver.</p> <p><i>This item is assessed as socially representative locally.</i></p> <p>It therefore <b>does not</b> fulfil this criterion.</p>
(e) Research potential	<p>The item is a rare surviving example of the lift span bridge along the Darling River (Baaka) and therefore offers a unique opportunity to examine the construction and workings of the bridge, particularly of the lift mechanism.</p> <p><i>This item is assessed as scientifically rare state-wide.</i></p> <p>It therefore <b>fulfils</b> this criterion.</p>
(f) Rarity	<p>Although the lift span bridge was a common bridge type in the late 19<sup>th</sup> century, most have now been replaced. The Wilcannia Bridge is therefore rare at a regional level.</p> <p><i>This heritage item is rare state-wide.</i></p> <p>It therefore <b>fulfils</b> this criterion.</p>



Criterion	Assessment
(g) Representativeness	The Wilcannia Bridge is broadly representative of a late 19 <sup>th</sup> century lift span bridge along the Darling River (Baaka). <i>This heritage item is representative.</i>

### 6.1.1 Intactness and integrity

The bridge is in poor condition and has been closed to traffic for some years. It is currently used only for pedestrian traffic. Its intactness is somewhat compromised - the timber beams on each end of the bridge are in poor condition, as is the steel superstructure, particularly close to the water line. Lacing is noted at the base of the steel supports and rust is evident on all of the steel fabric.

### 6.1.2 Statement of significance

The following statement of significance has been reproduced from the Wilcannia Bridge SHI entry.

*The 1894 Wilcannia vertical lift span bridge is one of a set of moveable river bridges of the vertical lift span type. It has strong associations with the paddle steamer operations on the Darling River and reflects the importance of the river trade to the town. It heralded the introduction of road traffic and the demise of the river trade. It is of considerable technological interest and presents as a fine aesthetic structure on the river.*

## 6.2 Wilcannia Conservation Area (LEP ID #C1)

The Wilcannia Conservation Area (LEP ID #C1) was gazetted into the Central Darling Local Environmental Plan 2012 (Amendment No 3) on the 4 June 2021. There is limited information available about this heritage conservation area (HCA). Its heritage significance and has been assessed by the authors of this report, based on the history (refer to **Section 4.1.10**) and descriptions of heritage items (refer to **Section 5**) provided. The significance assessment is provided in **Table 6-3**.

Table 6-2 The Wilcannia Conservation Area (LEP ID #C1) assessment of significance

Criterion	Assessment
(a) Historical significance	The streetscape is a reflection of the townships character as a major town on the Darling River (Baaka), and as a major contributor to the wool industry from the 1860s. The construction of the wharf near the Mount Murchison Woolshed resulted in the township becoming a depot for wool from the surrounding area to be transported back down the Darling and Murray and then to major trading centres. It is considered to <b>fulfil</b> this criterion at a local level.
(b) Associative significance	The development of the Wilcannia streetscape can be linked to key individuals and a variety of communities who assisted in the town's growth and prosperity. It therefore <b>fulfils</b> this criterion.
(c) Aesthetic/technical significance	The Wilcannia Conservation Area contains several nineteenth century sandstone buildings attributed to NSW Government Architect James Barnett. The design and construction of these buildings is considered to be of both technical and aesthetic heritage significance and <b>fulfils</b> this criterion.

Criterion	Assessment
(d) Social significance	The development of Wilcannia is socially significant as one of the major wool exports on the Darling River (Baaka), with a continuous residential and working population since its early establishment. It therefore <b>fulfils</b> this criterion.
(e) Research potential	The heritage items within the HCA are representative of many sandstone and timber buildings built in Australia from the 1870s onwards. An investigation into their construction, and any refurbishment and repairs undertaken on these buildings could add knowledge of early building in regional NSW. It therefore <b>fulfils</b> this criterion.
(f) Rarity	The Wilcannia Conservation Area represents a rare example of the impact of the wool trade on the Darling River (Baaka) and its influence on settlement growth and the streetscape development. The HCA and the heritage items within it have remained relatively intact and unchanged, thus making it rare at a local level. It therefore <b>fulfils</b> this criterion.
(g) Representativeness	The Wilcannia Conservation Area is representative of a town and associated streetscape that developed as a result of the wool industry. It therefore <b>fulfils</b> this criterion.

### 6.2.1 Intactness and integrity

The streetscape is in moderate condition, with some heritage items requiring minor repairs and upkeep. The streetscape remains the main street in Wilcannia to this day. Many modern shops have retained the original building exteriors, just updating the interiors as required. Some buildings have retained their original use to the present day, for example, the Post Office. Overall, the intactness of the Wilcannia Conservation Area is good.

### 6.2.2 Statement of significance

The Wilcannia streetscape which makes up the Wilcannia Conservation Area has been an integral part of the town since its settlement. The Wilcannia Conservation Area contains several prominent nineteenth century sandstone buildings attributed to NSW Government Architect James Barnett. It is significant at a local level for its historical, associative, aesthetic/technical, social, research, rarity, and representativeness value to the township and community of Wilcannia.

## 6.3 The existing Wilcannia Weir

The existing Wilcannia Weir has not previously been assessed for its heritage significance against the Heritage NSW significance criteria (refer to **Table 3-1**). The authors of this assessment have assessed the heritage significance of the existing Wilcannia Weir against the Heritage NSW significance criteria, based on the history (refer to **Section 4.1.10**) and description (refer to **Section 5.2**) provided. The significance assessment is provided in **Table 6-3**.

Table 6-3 The existing Wilcannia Weir assessment of significance

Criterion	Assessment
(a) Historical significance	The existing Wilcannia Weir was constructed during a period of transition, with sheep and cattle pastoralism being augmented by irrigation agriculture. The weir is an integral part of the town since



Criterion	Assessment
	<p>its first construction. Historically the weir is an important piece of infrastructure across the Darling River at Wilcannia which aimed to provide reliable town water during times of drought or low river flow.</p> <p>Constructed between 1942 and 1946 the weir underwent major refurbishment in 1987/8 due to structural failure, including extensive scouring on the northern riverbank and bed areas. Its continued use and rehabilitation reflect its importance as a water management tool for the township over the past 80 years.</p> <p>It is considered to <b>fulfil this criterion at a local level.</b></p>
(b) Associative significance	<p>There are no known strong or special association with the life or works of a person, or group of persons, of importance.</p> <p>It <b>does not fulfil</b> this criterion.</p>
(c) Aesthetic/technical significance	<p>The existing Wilcannia Weir is located on a picturesque bend in the Darling River (Baaka) with its aesthetic setting enhanced by the upstream weir pool. It has aesthetic significance for its prominence as a local landmark, with established seating and picnic areas on the river's southern bank.</p> <p>Originally constructed of stepped timber crib work filled with stone on its downstream side (and anchored with timber piles), it had an impervious clay earth fill embankment core. It was later modified to include a line of steel sheet piling installed behind the original timber piles to control under-seepage and manage flood damage to the structure. The weir's initial construction condition was poor and withstood several episodes of damage and repair. By the end of the 1940s the weir was typical of the post-World War II weir engineering technologies, including sheet piling. It is therefore not considered to be of technical significance.</p> <p>It is considered to <b>fulfil aesthetic criterion at a local level.</b></p>
(d) Social significance	<p>The weir has contemporary social value as a place of recreation. It provides a place for the local community to fish, swim, walk, picnic, and celebrate spiritual and cultural traditions.</p> <p>The local Aboriginal community have used the weir as a fishing and swimming place since its construction. In addition, the rocks of the weir have been periodically moved and repositioned to make fish traps, the location and design of these traps changing to suit the water levels and conditions. For this reason the weir is also a recorded Aboriginal site and is detailed and assessed in the Aboriginal Cultural Heritage Assessment Report (ACHAR).</p> <p>Local oral histories exist of the men who worked to build the weir, quarrying local sandstone about eight kilometres away and transporting it to the weir site. A number of community members were involved in the construction and refurbishment of the weir (including Barkandji Elders such as Uncle Cyril Hunter) and consultation with the local community for the proposal has identified that the broader community retain strong positive associations with the weir and those people's involvement in its construction to this day.</p> <p>It is considered to <b>fulfil this criterion at a local level.</b></p>

Criterion	Assessment
(e) Research potential	<p>Although there appears to be little documentary evidence and engineering plans for the construction of the weir, given its history of flood damage, failure, refurbishment and reconstruction, the weir possesses minimal research potential into its original construction method and material.</p> <p><b>It does not fulfil this criterion.</b></p>
(f) Rarity	<p>The weir's design is typical of post-World War II era weir technologies. The weir's size also reflects a new focus in the 1940s of smaller scale weirs so water could be managed locally. This weir is not considered rare, and while a detailed comparative analysis has not been undertaken there are over 150 weirs listed on statutory heritage registers in NSW.</p> <p><b>It does not fulfil this criterion.</b></p>
(g) Representativeness	<p>The existing Wilcannia Weir is not considered a good example of a 1940s river weir due to reconstruction and additions early on from its initial poor construction, later upgrades in the 1980 and its current poor condition.</p> <p><b>It does not fulfil this criterion.</b></p>

### 6.3.1 Intactness and integrity

While the weir has been found to have historical, aesthetic and social values at a local level, it did not meet other criteria due to its commonality of technology type, historic alterations and current condition. The structure is not considered highly intact or of good integrity. There is significant erosion of the river channel and degradation of the weir structure on the northern abutment, reducing the weir's capacity to store water. It is likely that any surviving timber piles have some level of degradation, the steel sheet piles may be corroded in areas and some of the rock fill on the downstream face has washed away. Flood damage (crest breach) and scouring of the abutments resulted in major refurbishment works in 1987, which necessitated the installation of concrete elements, including a low-flow spillway, capping to the abutments and concrete wing walls.

### 6.3.2 Statement of significance

The existing Wilcannia Weir is of local heritage significance for its historical, aesthetic and social value to the township and community of Wilcannia. The existing Wilcannia Weir is an integral part of the town infrastructure since its construction in the 1940s to ensure reliable town water supplies during times of drought or low river flow. The weir is located on a picturesque bend in the Darling River (Baaka) with its aesthetic setting enhanced by the upstream weir pool. It is also a local landmark and a place of recreation for the whole community to fish, swim, walk, picnic, and a place of spiritual and cultural traditions evidence by the rock fish traps.

## 6.4 Historical glass midden on the northern riverbank

This potential heritage item was identified during field survey and has not previously been assessed for its heritage significance. It has been assessed by the authors of this assessment, based on the history (refer to **Section 4.1.4**) and description (refer to **Section 5.5.8**) provided. The significance assessment is provided in **Table 6-4**.



Table 6-4 Historical glass midden archaeological site assessment of significance

Identification of significance	NSW Heritage Criteria	Guiding questions as relevant to the criteria
Archaeological research potential	E	<p>The site likely contains primarily glass waste with some potential for other discarded refuse related to the operation and patronage of the Courthouse Hotel during its long license period (1879-c.1990). Upon inspection of the surface material present, it is comprised primarily of fragments of less than 10 centimetres.</p> <p>Given the site's public location, and considering local oral histories, it is likely that the site has been highly disturbed by bottle collectors and other community members. Such activity has the potential to have significantly impacted the integrity and preservation of an archaeological deposits or stratigraphy.</p> <p>Such general glass waste is fairly common throughout rural landscapes and although the only obvious site of this nature in town, it is highly likely that other similar refuse deposits exist throughout Wilcannia and its neighbours (though perhaps of a lesser scale).</p> <p>Historical glass is one of the most collectable forms of material culture, and its presence and loss from various site types across the state and the country have been well-documented. If the midden is as homogenous as it appears from its surface material, its excavation would likely provide little unique or additional data to the greater historical body of knowledge.</p> <p>The glass midden <b>does not fulfil</b> this criterion.</p>
Associations with individuals, events, or groups of historical importance	A, B and D	<p>The glass midden links to the NSW historic theme of 'Leisure', being those activities associated with recreation and relaxation. However, given its nature and fragmented material, it is unlikely to contain remains or relics which may illustrate a significant pattern in local history. The Courthouse Hotel was just one of up to 13 hotels within the town, and its operation is not known to have any strong associations with individuals, events, or groups of particular note.</p> <p>The site is not widely recognised and is not known to have any symbolic value to the local community. The material culture present appears to be fairly generic for the hotel's operating years a location, with no identifiable cultural material obvious from a surface inspection. The site is considered to be a standard hotel location, with no significant events tied to it.</p> <p>The glass midden <b>does not fulfil</b> these criteria.</p>
Aesthetic or technical significance	C	<p>Due to the disturbed and fragmented nature of the material culture, the glass midden is not considered to have any particular aesthetic values or distinctive characteristics. As a refuse dump, there is no potential for architectural, engineering, or unique technological style or layout. The glass refuse likely illustrates a pattern of changing technology and popular trends throughout time through the development of bottle glass and glass manufacturing technology, however this is not considered to be of sufficient prominence or precision to fulfil the threshold for local significance.</p> <p>The glass midden <b>does not fulfil</b> this criterion.</p>

Identification of significance	NSW Heritage Criteria	Guiding questions as relevant to the criteria
Ability to demonstrate the past through archaeological remains	A, C, F and G	<p>While the details are not known, there has been community collection and hunting for intact bottle examples which may have disturbed the deposit, and although legible, their interpretation potential is limited. The midden's potential to demonstrate continuity or change depends on the level of intactness or diagnostic features of glass remains present sub-surface, which is likely to have been highly disturbed by long-term bottle collection from the site.</p> <p>The glass midden <b>does not fulfil</b> this criterion.</p>

#### 6.4.1 Intactness and integrity

The surface material or the glass midden is highly fragmented mixed glass of various colours and forms. Though no intact vessels are apparent, oral history indicates long-term bottle collecting from the site, which is likely to have significantly disturbed the integrity of the archaeological deposit.

#### 6.4.2 Statement of significance

While there are archaeological remains present, the glass midden is not considered of a sufficient threshold to qualify as a relic under the Heritage Act.

### 6.5 Potential brick kilns

This potential heritage item was identified during field survey and has not previously been assessed for its heritage significance. It has been assessed by the authors of this assessment, based on the description (refer to **Section 5.5.9**) provided. The significance assessment is provided in **Table 6-5**.

Table 6-5 Potential brick kilns archaeological site assessment of significance

Identification of significance	NSW Heritage Criteria	Guiding questions as relevant to the criteria
Archaeological research potential	E	<p>No documentary evidence has been found to date which describes the site, its operation, the people involved, or its extent. Basic analysis of the historical artefacts suggests it post-dates the mid-nineteenth century, with more modern material indicating consistent or repeated use of the site throughout time. The site may yield important information related to the operation of a small-scale industry for local construction.</p> <p>The site <b>fulfils</b> this criterion at the local level.</p>
Associations with individuals, events, or groups of historical importance	A, B and D	<p>Local historical knowledge attributes this site to former brick kilns which supplied much of the brick building material used in the town. It links to the NSW historic theme of 'Industry', being a remnant of activities associated with the manufacture, production, and distribution of goods. Although the intactness and level of stratification of the site is currently unknown, its relationship to the construction of the town and manufacturing techniques has the potential to qualify the site as a relic.</p> <p>The site does not appear to be widely recognised and no significant symbolic values are currently known. The site may provide material expression of the construction phases of Wilcannia township with</p>



Identification of significance	NSW Heritage Criteria	Guiding questions as relevant to the criteria
		<p>relation to brick building material, of a differing time period or socio-economic level to the prominent sandstone structures.</p> <p>The site has no known associations with important persons or groups. There is no indicator of any significant events or discoveries at the site or in documentary records, rather it is a product of everyday life and development in Wilcannia and illustrates the self-sufficient nature of a town isolated from major manufacturing or metropolitan hubs.</p> <p>The site is considered to <b>fulfil</b> these criteria at a local level.</p>
Aesthetic or technical significance	C	<p>The site has no apparent aesthetic values or distinctive characteristics. The technology represented is likely to be rudimentary e.g. clamp kilns. Its potential to demonstrate technological change over time cannot be determined with the information currently available.</p> <p>It <b>does not fulfil</b> this criterion.</p>
Ability to demonstrate the past through archaeological remains	A, C, F and G	<p>No documentary evidence has been found to date which describes the site, its operation, the people involved, or its extent. The site may yield important information related to the operation of a small-scale industry for local construction. The archaeological remains may therefore provide information about the past that is not available from any other sources.</p> <p>The site is considered to <b>fulfil</b> these criteria at a local level.</p>

### 6.5.1 Intactness and integrity

The site's intactness has been impacted by erosion of the riverbank and the construction of a dirt access road through the site, with brick material apparent in the road windrow. However, it still has the potential to be intact enough to provide some information about the use and history of the site, not available from other sources.

### 6.5.2 Statement of significance

The possible brick kilns site is of local significance for its archaeological research potential, associations with the development of Wilcannia, and production of local materials for use in town construction. Despite disturbance through road construction and minor erosion, it is considered to maintain at least a moderate level of intactness. The site fulfils the threshold as a relic under the Heritage Act.

## 6.6 Summary of items of heritage significance within the study area

Following completion of the significance assessments it has been assessed that there are three heritage items, and one conservation area which fulfil one or more heritage criteria for local significance within the study area (see **Figure 6-1**):

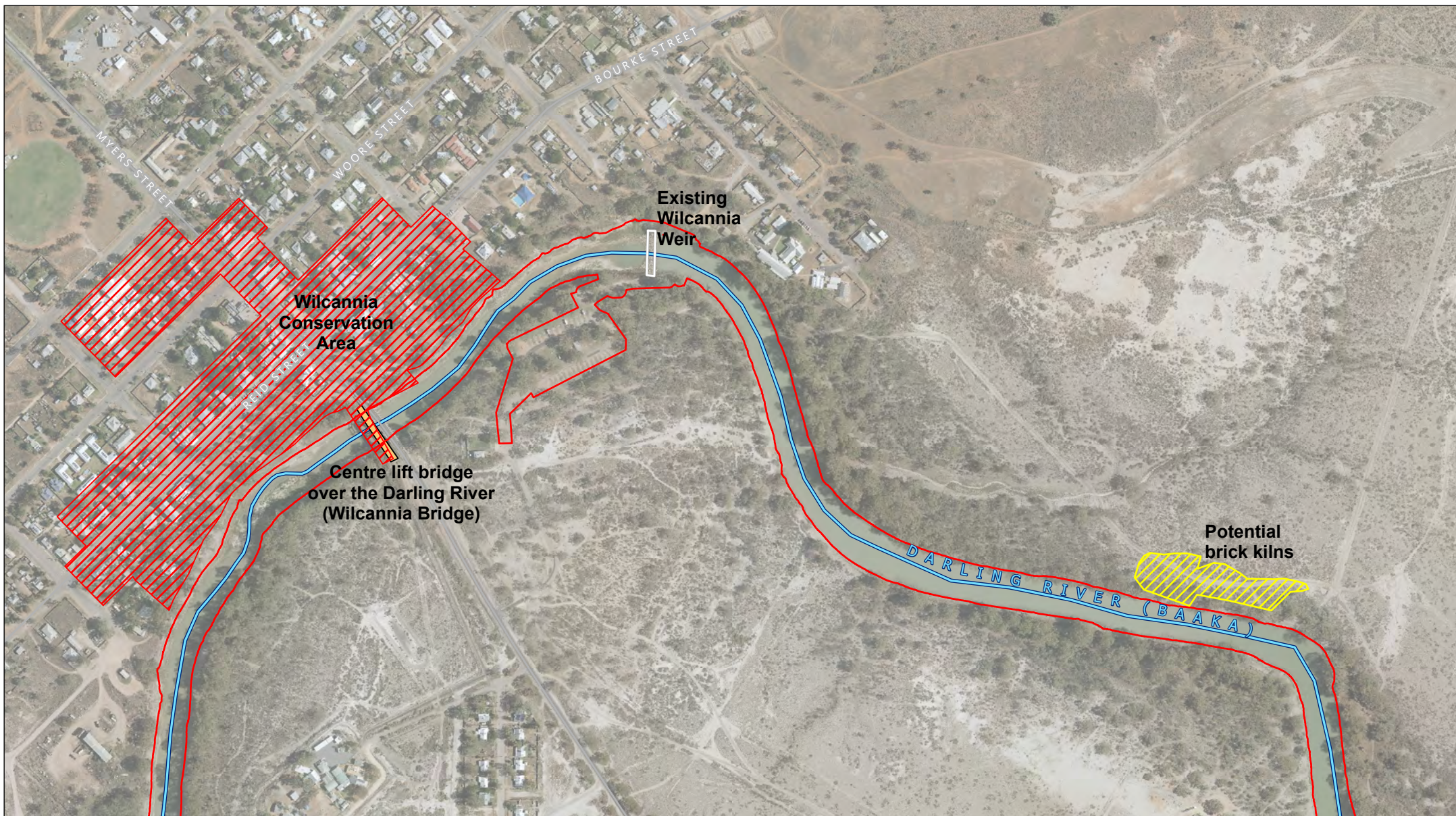
- Wilcannia Bridge (LEP ID #I15, local heritage significance)
- Wilcannia Conservation Area (LEP ID#C1, local heritage significance)
- The existing Wilcannia Weir (unlisted, local heritage significance)
- Potential brick kilns (unlisted, local heritage significance).

The assessment of potential impacts from the proposal is restricted to these four items.

## **6.7 Assessment of archaeological potential across the study area**

Wilcannia has a long settlement history with extensive heritage items relating to its heyday. With the river as its lifeblood, it is likely that there were other historical activities and structures, such as wharves, wrecks, and other works, along the river that have not been identified. However, given the amount of historical flooding that has occurred, it is possible that any such remains may have long since been washed away or buried within alluvial silt. It is therefore considered that there is low potential for unexpected finds to be impacted during the operation of the new weir.





- |   |                              |                      |
|---|------------------------------|----------------------|
| — Existing weir                               | <b>Local heritage items</b>  | — Major watercourses |
| ▭ Study area                                  | ▨ Heritage conservation area |                      |
| ▨ Area of identified archaeological potential | ▭ General item               |                      |

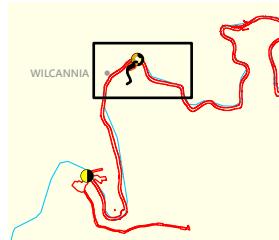
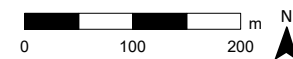


Figure 6-1: Heritage items with the potential to be impacted by the proposal



## 7. Impact assessment

### 7.1 Wilcannia Bridge (LEP ID # I15)

There is a potential for minor direct impacts to Wilcannia Bridge (LEP ID #I15) through the elevated water level and its effects to existing areas of corrosion and degradation. Detailed assessment of impacts is provided in **Table 7-1**.

Table 7-1 Assessment of impacts to Wilcannia Bridge (LEP ID #I15)

Proposed work	Direct (physical) impacts	Indirect (visual) impact	Assessment of impact
Construction of the new weir (including fishway and gates and increased weir pool)	<p>The site of the new weir and fishway is more than two kilometres downstream from the Wilcannia Bridge. Their construction would have no direct impact to the heritage item.</p> <p>Once operational, the existing location of the bridge will then be within the extended weir pool holding a higher level of water through this section of the river than the present conditions. Although the bridge is currently located within the river channel and this represents no change in state, the fluctuations in water level within the new weir pool has the potential to exacerbate existing corrosion issues on the bridge piers and cross braces. It would also complicate any attempts at stabilisation or remediation once the new weir is operational.</p>	The construction of the new weir and increased weir pool would not modify the visual context of the Wilcannia Bridge. There would be no visual impacts.	Minor direct impacts
Establishment of the community river place	The new community river place would be located more than two kilometres from Wilcannia Bridge. There will be no direct impacts.	The new community river place would not be visible from Wilcannia Bridge due to physical distance and intervening topography. There would be no indirect impacts.	Nil
Upgrade of an existing access track to the new weir from the Barrier Highway including widening of the track	The track to be upgraded is more than a kilometre from Wilcannia Bridge. There would be no direct impacts.	The upgrade represent modifications to an existing track which is not visible from the heritage item. There would be no indirect impacts.	Nil
A new unsealed access track to the new weir from Union Bend Road	The new track would be more than two kilometres from Wilcannia Bridge. There would be no direct impacts.	The new track would not be visible from the heritage item. There would be no indirect impacts.	Nil
Construction of a maintenance access	The maintenance access track would be more than two kilometres from Wilcannia	The construction of the access track would not be visible from the heritage	Nil



Proposed work	Direct (physical) impacts	Indirect (visual) impact	Assessment of impact
track alongside the fishway	Bridge. There would be no direct impacts to the heritage item from its construction.	item. There would be no indirect impacts.	
Clearing of an electricity easement from existing powerlines to the new weir	The easement to be cleared is more than two kilometres from Wilcannia Bridge. There would be no direct impacts to the heritage item from its construction.	The easement location is not visible from Wilcannia Bridge. There would be no indirect impacts from its clearing.	Nil
Minor modifications to an existing flow gauging station	The flow gauging station is an existing structure, physically removed from the heritage item. Its minor modification would not present a direct impact to Wilcannia Bridge.	These works are minor modifications to an existing structure, physically and visually removed from the heritage item. There would be no indirect impacts from their completion.	Nil
Partial removal and decommissioning of the existing weir	The existing weir is located 400 metres upstream from Wilcannia Bridge, with access for the demolition works provided by the caravan park on the southern bank. Its partial removal and decommissioning presents no direct impact to the heritage item.	The existing weir is not visible from Wilcannia Bridge and its removal would have no impact on the bridge's visual setting.  As per the Noise and Vibration Impact Assessment for the proposal (Jacobs 2022b), vibration impacts are predicted to be negligible during construction, with vibration levels falling within the setback criteria of 20 metres. As such there is little potential for indirect vibration impacts to Wilcannia Bridge.	Nil

## 7.2 Wilcannia Conservation Area (LEP ID #C1)

There is a potential for minor direct impacts to the Wilcannia Conservation Area (LEP ID#C1) through the elevated water level and its effects to existing areas of corrosion and degradation to Wilcannia Bridge (LEP ID #I15). Detailed assessment of impacts is provided in **Table 7-2**.

Table 7-2 Assessment of impacts to Wilcannia Conservation Area (LEP ID #C1)

Proposed work	Direct (physical) impacts	Indirect (visual) impact	Assessment of impact
Construction of the new weir (including fishway and gates and increased weir pool)	The site of the new weir and fishway is more than two kilometres downstream from the HCA. Their construction would have no direct impact to the heritage item. Once operational, the fluctuations in water level within the new weir pool has the	The construction of the new weir and increased weir pool would not modify the visual context of the HCA. There would be no visual impacts.	Minor direct impacts

Proposed work	Direct (physical) impacts	Indirect (visual) impact	Assessment of impact
	potential to exacerbate existing corrosion issues on the Wilcannia Bridge (LEP ID #115). This impact has been discussed in <b>Section 7.1</b> .		
Establishment of the community river place	The new community river place would be located more than two kilometres from the HCA. There will be no direct impacts.	The new community river place would not be visible from the HCA due to physical distance and intervening topography. There would be no indirect impacts.	Nil
Upgrade of the existing access track to the new weir from the Barrier Highway including widening of the track	The track to be upgraded is more than a kilometre from the HCA. There would be no direct impacts.	The upgrade represent modifications to an existing track which is not visible from the HCA. There would be no indirect impacts.	Nil
A new unsealed access track to the new weir from Union Bend Road	The new track would be more than two kilometres from the HCA. There would be no direct impacts.	The new track would not be visible from the HCA. There would be no indirect impacts.	Nil
Construction of a maintenance access track alongside the fishway	The maintenance access track would be more than two kilometres from the HCA. There would be no direct impacts to the heritage item from its construction.	The construction of the access track would not be visible from the HCA. There would be no indirect impacts.	Nil
Clearing of an electricity easement from existing powerlines to the new weir	The easement to be cleared is more than two kilometres from the HCA. There would be no direct impacts to the heritage item from its construction.	The easement location is not visible from the HCA. There would be no indirect impacts from its clearing.	Nil
Minor modifications to an existing flow gauging station	The flow gauging station is an existing structure, physically removed from the heritage item. Its minor modification would not present a direct impact to the HCA.	These works are minor modifications to an existing structure, physically and visually removed from the HCA. There would be no indirect impacts from their completion.	Nil
Partial removal and decommissioning of the existing weir	The existing weir is located 180 metres upstream from the northern boundary of the HCA. Its partial removal and decommissioning presents no direct impact to the HCA.	The existing weir is not visible from the HCA and its removal would have no impact on the HCA visual setting.	Nil

### 7.3 The existing Wilcannia Weir

The partial removal and decommissioning of the existing Wilcannia Weir and inundation of the Darling River (Baaka) between the new and existing weirs would be of major direct and indirect impact to the existing weir as a



heritage item. Given that its primary value relates to historical and social significance there is potential for these impacts to be mitigated through appropriate mitigation measures. These will be explored in **Section 8**. Detailed assessment of impacts is provided in **Table 7-3**.

Table 7-3 Assessment of impacts to the existing Wilcannia Weir

Proposed work	Direct (physical) impacts	Indirect (visual) impact	Assessment of impact
Construction of the new weir (including fishway and gates and increased weir pool)	<p>The site of the new weir and fishway is more than two kilometres from the existing weir. Their construction would have no direct impact to the heritage item.</p> <p>However, during the operation of the new weir, inundation of the existing weir (in remnant form) would occur. This would have a minor direct impact on any original weir elements remaining after its partial removal. The current condition of those elements (eg timber and steel piling) have continually been exposed to water inundation and drying events in the past. Inundation from the new weir pool would not present significant heritage degradation of the remnant weir.</p>	<p>The construction of the new weir would not have a visual impact on the existing weir given its distance away from it. However, during the operation of the new weir, inundation of the existing weir (in remnant form) would occur. This would remove views to the remnant weir structure itself. Visual impacts from partial demolition and inundation are addressed below in the table.</p>	Nil
Establishment of the community river place	<p>The new community river place would be located more than two kilometres from the existing weir. There would be no direct impacts.</p>	<p>The new community river place would not be visible from the existing weir. There would be no indirect impacts.</p>	Nil
Upgrade of the existing access track to the new weir from the Barrier Highway including widening of the track	<p>The track to be upgraded is more than a kilometre from the existing weir. There would be no direct impacts.</p>	<p>The upgrade represent modifications to an existing track which is not visible from the heritage item. There would be no indirect impacts.</p>	Nil
A new unsealed access track to the new weir from Union Bend Road	<p>The new track would be more than two kilometres from the existing weir. There would be no direct impacts.</p>	<p>The new track would not be visible from the heritage item. There would be no indirect impacts.</p>	Nil
Construction of a maintenance access track along the fishway	<p>The maintenance access track would be more than two kilometres from the existing weir. There would be no direct impacts to the heritage item from its construction.</p>	<p>The construction of the access track would not be visible from the heritage item. There would be no indirect impacts.</p>	Nil
Clearing of an electricity easement from existing powerlines to the new weir	<p>The easement to be cleared is more than two kilometres from the existing weir. There would be no direct impacts to the heritage item from its construction.</p>	<p>The easement location is not visible from Wilcannia Bridge. There would be no indirect impacts from its clearing.</p>	Nil

Proposed work	Direct (physical) impacts	Indirect (visual) impact	Assessment of impact
Minor modifications to an existing flow gauging station	The flow gauging station is an existing structure, physically removed from the heritage item. Its minor modification would not present a direct impact to the existing weir.	These works are minor modifications to an existing structure, physically and visually removed from the heritage item. There would be no indirect impacts from their completion.	Nil
Partial removal and decommissioning of the existing weir	<p>The partial removal and decommissioning of the existing weir represents a major direct impact to the heritage item. In addition, weir elements that are retained and stabilised in situ, would be inundated by the new weir pool.</p> <p>The weir was not found to be of engineering or technical merit during significance assessment. The weir's past modifications, current condition, commonality, and lack of integrity contributed to these heritage values not being met.</p> <p>Instead, key heritage values at a local level are historical, aesthetic, and social. It is considered these values can be mitigated in order to provide a new weir and the long-term water security of the town.</p>	The partial removal and decommissioning of the existing weir would have a major indirect impact to the visual context of its current location.	Major direct and indirect impacts

## 7.4 Potential brick kilns

The proposal would have no direct or indirect impacts on the potential brick kilns site as it situated at the top of the riverbank where the increased weir pool is not expected to reach (even at full supply level). Detailed assessment of impacts is provided in **Table 7-4**.

Table 7-4 Assessment of impacts to the potential brick kilns

Proposed work	Direct (physical) impacts	Indirect (visual) impact	Assessment of impact
Construction and operation of the new weir (including fishway and gates and increased weir pool)	<p>The site of the new weir and fishway is more than two kilometres from the heritage item. Their construction would have no direct impact to the heritage item.</p> <p>The operation of the new weir would result in an increased weir pool and is expected to raise the water level adjacent to the heritage item. However, this weir pool would be located entirely within the existing incised river channel. It is assessed that the modification to the water level caused by the increased weir pool would not directly impact the heritage item, with no contact</p>	The site of the new weir is more than two kilometres from the heritage item. Its construction would have no indirect impact on the site.	Nil



Proposed work	Direct (physical) impacts	Indirect (visual) impact	Assessment of impact
	except for the submersion of some displaced material which has eroded from the top of the riverbank.		
Establishment of the community river place	The new community river place would be located more than two kilometres from the heritage item. There would be no direct impacts.	The new community river place would not be visible from the heritage item. There would be no indirect impacts.	Nil
Upgrade to an existing access track to the new weir from the Barrier Highway including widening of the track	The track to be upgraded is more than a kilometre from the heritage item. There would be no direct impacts.	The upgrade represent modifications to an existing roadway which is not visible from the heritage item. There would be no indirect impacts.	Nil
A new unsealed access track to the new weir from Union Bend Road	The new track is more than two kilometres from the heritage item. There would be no direct impacts.	The new track would not be visible from the heritage item. There would be no indirect impacts.	Nil
Construction of a maintenance access track alongside the fishway	The maintenance access track would be more than two kilometres from the heritage item. There would be no direct impacts to the heritage item from its construction.	The construction of the access track would not be visible from the heritage item. There would be no indirect impacts.	Nil
Clearing of an electricity easement from existing powerlines to the new weir	The easement to be cleared is more than two kilometres from the heritage item. There would be no direct impacts to the site from its construction.	The easement location is not visible from the heritage item. There would be no indirect impacts from its clearing.	Nil
Minor modifications to an existing flow gauging station	The flow gauging station is an existing structure, physically removed from the heritage item. Its minor modification would not present a direct impact to the site.	These works are minor modifications to an existing structure, physically and visually removed from the heritage item. There would be no indirect impacts from their completion.	Nil
Partial removal and decommissioning of the existing weir	The heritage item is located about 750 metres upstream from the existing weir. Given this distance, and the fact that any required access would be via the southern riverbank, there would be no direct impacts to the site from the partial removal and decommissioning of the existing weir.	The existing weir is not visible from the heritage item due to a north-south bend in the river. Its' removal would have no indirect (visual) impact on the heritage item.	Nil

## 7.5 Summary of heritage impacts

The summary of heritage impacts include:

- Wilcannia Bridge (LEP listed, I15, local heritage significance)
  - The site of the new weir and fishway, more than two kilometres downstream of the bridge, will result in fluctuations in water levels once operational. This has the potential to exacerbate existing corrosion issues on the bridge piers. This is considered a minor physical impact
- Wilcannia Conservation Area (LEP listed, C1, local heritage significance)
  - As above, the site of the new weir and fishway, more than two kilometres downstream of the conservation area, will result in fluctuations in water levels once operational. This has the potential to exacerbate existing corrosion issues on Wilcannia Bridge (LEP ID #I15) which is located within the conservation area. This is considered a minor physical impact
- The existing Wilcannia Weir (unlisted, local heritage significance)
  - The partial removal and decommissioning would have a major direct and indirect impact on the item
- The Potential Brick Kilns Site (unlisted, local heritage significance)
  - No direct or indirect impacts are anticipated for this item.

The guideline *Statements of Heritage Impact* (Heritage Office and Department of Urban Affairs and Planning, 2002) require a number of questions to be answered. **Table 7-5** provides an assessment of the proposal against these questions.

Table 7-5 Summary of assessment of impacts for the proposal

Question/Aspect	Assessment
The following aspects of the proposal respect or enhance the heritage significance of the item(s) or conservation area for the following reasons	<ul style="list-style-type: none"> <li>▪ The new weir structure works is located away from any known or potential heritage items.</li> <li>▪ While the existing Wilcannia Weir (assessed as being of local significance) would be partially removed and decommissioned to allow water flow and fish passage as part of the proposal, opportunities exist to mitigate key heritage values identified. The proposal provides a new site for recreation and community utilisation, where interpretive material may be presented which provides a record of the existing Wilcannia Weir and its history. Development of the interpretation plan will occur during the detailed design and pre-construction phases, in consultation with the local community and Heritage NSW.</li> </ul>
The following aspects of the proposal could detrimentally impact on heritage significance. The reasons are explained as well as the measures to be taken to minimise impacts.	<ul style="list-style-type: none"> <li>▪ While major direct impacts are anticipated for the existing weir it is proposed that certain elements of the weir remain in situ. Of the 43-metre wide existing weir structure, about 16 metres would be removed via excavation of its central section. The remaining remnant structure would be established prior to inundation by:               <ul style="list-style-type: none"> <li>▪ Removal of the 1980s concrete capping</li> <li>▪ Removal of sheet piles where practical to ensure the remaining structure cannot retain water</li> <li>▪ Retention of the existing earth and rockfill embankment with original timber in the abutment areas</li> <li>▪ Rehabilitation of the disturbed areas.</li> </ul> </li> <li>▪ Impacted heritage values of the existing weir (historical, aesthetic, social) are considered acceptable because the new weir would</li> </ul>



Question/Aspect	Assessment
	<p>provide long-term water security for the town and the existing weir is no longer fit for purpose due to its poor condition. These impacts will also be mitigated, as described above.</p> <ul style="list-style-type: none"> <li>▪ The construction of the new weir and extended weir pool would raise the water level around Wilcannia Bridge (LEP ID #115). Given current corrosion concerns, the new water level may accelerate existing damage and submerging more of the substructure, complicating any plans for stabilisation or remediation. This impact would be managed through the completion of any requisite repair works prior to commissioning of the new weir and inundation of the extended weir pool. The repair work would be carried out by Central Darling Shire Council and does not form part of the proposal.</li> </ul>
<p>The following sympathetic solutions have been considered and discounted</p>	<ul style="list-style-type: none"> <li>▪ To 'do nothing' is not a viable option for the continued operation of the existing Wilcannia Weir. It is inconsistent with the primary objective of the proposal, which is to help secure existing and future water supply for the township of Wilcannia. It is also inconsistent with the other objectives of the proposal, which are to enhance cultural connection to the river, improve water management of the weir pool, increase tourism opportunities and investment, provide better recreational amenity to walk, swim, picnic and fish and improve native fish migration.</li> <li>▪ Repairing and/or upgrading of the existing Wilcannia Weir would also not meet the water security and other objectives of the proposal. The existing weir is nearing the end of its effective design life and if it were to be upgraded to meet the town's future water demand it would be necessary to install a new line of steel sheet piling and a fishway. As a result, the cost of upgrading the existing weir would be similar to that of constructing a new weir and fishway. Without a cost advantage, the option of upgrading the existing weir would have few benefits relative to developing a new weir and fishway.</li> <li>▪ Opportunities to retain the existing weir completely in situ while still constructing the new weir were also examined as part of the preliminary assessments for the proposal. However, it was determined that this would not be feasible as the general operating conditions of the increased weir pool would be approximately the full supply level of the existing weir and it would not be visible. Furthermore, if the weir was to be fully retained, it would continue to serve as a blockage to fish passage, which is not acceptable from an ecological point of view. Healthier native fish populations is a benefit of the new weir which is strongly supported by the local community.</li> <li>▪ Further discussion on the options considered in developing the proposal is provided in Section 2.2 of the environmental impact statement for the proposal.</li> </ul>

## 8. Mitigation and management measures

The following measures have been formulated to eliminate, minimise or manage heritage impacts as currently assessed.

### Measure NAH1 – stabilisation and remediation work to Wilcannia Bridge (LEP ID #I15)

A community proposal has been put forward to undertake cathodic protection and repair of the Wilcannia Bridge substructure. Water Infrastructure NSW has confirmed that Central Darling Shire Council has sought separate funding from the Department of Planning and Environment to undertake these works, with confirmation in December 2020 that there is a commitment to fund these works and complete prior to the commissioning of the new weir. The following measures are proposed:

- In order to preserve the heritage fabric of Wilcannia Bridge (LEP ID #I15), the stabilisation of the existing corrosion damage and remediation works will be undertaken prior to the commissioning of the new weir as per the community proposal
- Water Infrastructure NSW will continue to liaise with the Department of Planning and Environment and Central Darling Shire Council regarding the timing of the proposed remediation to ensure, if possible, that works are completed prior to the commissioning of the new weir.

### Measure NAH2 – archival recording

The proposal includes the partial removal and decommissioning of the existing Wilcannia Weir, which has been assessed as being of local heritage significance. The following measures are proposed:

- 3D scan the existing weir to create a reality textured model
- Prior to and during its partial removal and decommissioning, a full archival recording of the existing weir will be undertaken by an appropriately experienced heritage professional in accordance with *Photographic Recording of Heritage Items Using Film or Digital Capture* (Heritage Council of NSW 2006) and *How to Prepare Archival Records of Heritage Items* (Heritage Council of NSW 1998), at a minimum
- The accompanying report to the archival recording will include the collection of oral histories related to the weir from the local community.

### Measure NAH3 – heritage interpretation

The existing Wilcannia Weir has been assessed as being of local significance for its historical and aesthetic values, but predominantly for its social value. It is deeply entwined in the history of Wilcannia since its initial conception, and contemporary oral histories related to its construction and operation are known to survive within the community. As the proposal involves its partial removal, opportunities for interpretation will be explored in consultation with the local community, including the following measures:

- A heritage interpretation plan for the item will be prepared to provide a framework for its interpretation, set out its key interpretive themes and identify appropriate communication strategies
- Opportunities for interpretation which will be considered during the development of the heritage interpretation plan include:
  - Adaptive reuse of some of the weir fabric e.g. the sandstone rock fill, in the new community river place
  - Interpretive signage commemorating the history and location of the existing weir at a suitable location.



**Measure NAH4 – management of unexpected heritage finds and archaeological deposits**

While the potential for unexpected finds is low, the following measures will be implemented as part of the proposal:

- An unexpected finds procedure will be developed for inclusion in the construction environmental management plan to provide a consistent method for managing any unexpected heritage or archaeological items (including unexpected human remains) for the duration of the demolition and construction phases of the proposal
- Any human skeletal remains discovered during construction will be managed in accordance with relevant legislation and guidelines including the *Public Health Regulation 2012* (NSW), *Heritage Act 1977* (NSW), *Work Health and Safety Act 2011* (NSW), *NSW Government Health Procedures – Exhumation of Human Remains* (NSW Health 2013), and *Skeletal Remains – Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977* (NSW Heritage Office 1998).

**Measure NAH5 – heritage awareness training**

- Historical heritage awareness training will be undertaken by all site workers prior to commencement of demolition or construction works. This training will promote an understanding of potential heritage items in the area and the requirements of the unexpected finds procedure.

**Measure NAH6 – salvaging of weir rocks**

- In consultation with the local community, salvage and re-use weir rocks in landscape remediation works including at the community river place and new and existing weir sites.

## 9. Conclusion

This assessment has involved a review of historical sources, primary research, a review of previous heritage assessments and studies undertaken in the Wilcannia area, and a field survey. It has included an assessment of the significance of those heritage items which directly intersect with the study area.

It is concluded that:

- The existing Wilcannia Weir (assessed as being of local significance) would be impacted (major) during the partial demolition and decommissioning works, and well as operational phases of the proposal
- No listed heritage items will be impacted during the *construction phase* of the proposal
- The Wilcannia Bridge (LEP ID #I15) which is located within the Wilcannia Conservation Area (LEP ID #C1), would be impacted (minor) during the *operational phase* of the proposal
- The potential for archaeological deposits within the study area, in proximity to the new weir site, access roads, or existing weir site, is low.

Mitigation and management measures have been proposed to reduce the impacts of the proposal on historic heritage and these should be adopted as part of the proposal's planning approval.



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#### **Personal communications**

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