

## CHAPTER 11 HERITAGE

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## 11 HERITAGE

*This chapter provides an overview of the historic heritage impact assessment and its key findings. It also describes measures to manage, maintain and enhance Rasp Mine heritage values. In addition, this chapter addresses the potential for Aboriginal Heritage to be impacted by the Project.*

The heritage assessment and chapter were completed by ERM. BHOP have made some small amendments to this chapter to update the chapter with the recent State Heritage Listing of the BHP Chimney ruins of first offices, the application by BHCC for the City of Broken Hill to be listed as a Heritage Town and corrections to items listed on the Local Environment Plan.

### 11.1 INTRODUCTION

The Rasp Mine is a historically significant site as reflected by the number of heritage items located within the Project Area. This chapter sets out the key findings of the heritage assessment, further details are provided in the *Rasp Mine Historic Heritage Assessment Report (2007)* presented as Annexure K.

Given the extensive mining history of the Project Area, no Aboriginal archaeology has been identified at the site. This assessment has therefore been tailored accordingly.

### 11.2 METHODOLOGY

Preparation of the heritage assessment included the following:

- a review of site specific background information and the legislative and regulatory framework relevant to the Project;
- a review of the Broken Hill LEP 1996 and database searches of the State Heritage Inventory, National Heritage List, Commonwealth Heritage List, Register of National Estate, National Trust Register and Industrial Archaeology List to identify heritage listed items within the Project Area;
- a site inspection, conducted by a heritage specialist to gain a spatial awareness of the site and better understanding of the Project and the location of existing heritage items; and
- analysis of the Project design to identify potential heritage impacts.

### 11.3 EXISTING ENVIRONMENT

#### 11.3.1 Historical heritage

##### *Historical context of site*

The historical development of the Rasp Mine is discussed in detail in *Section 1.3* and *Annexure K*. In summary, mining and related activities have been carried out in Broken Hill and in the Project Area since the 1880s. It is the birthplace of BHP Pty Ltd (now BHP Billiton) a mining company which helped shape Australia's mining, industrial and immigration policy.

A substantial amount of the mining infrastructure from various mining phases is retained *in situ*. This remnant mining infrastructure is predominately located along the Line of Lode which extends to the north and south of the Project Area. This has contributed to Broken Hill's industrial heritage and tourism significance.

*Heritage listed items within the Project Area*

There are number of heritage items within the City of Broken Hill which are identified on statutory and / or non-statutory listings and reflect the mining heritage of the City. A number of these items are located within the Project Area. A review of the LEP and searches of the databases identified in *Section 11.2* found:

- no items or places within the Project Area are recorded on the State Heritage Inventory, the National Heritage List or the Commonwealth Heritage List;
- The BHP Chimney ruins of first offices is listed on the State Heritage Register (recently listed 23 April, 2010) and is required to be maintained under the *Heritage Regulation 2005*, the item has been roofed and fenced by BHCC;
- Schedule 1 of the Broken Hill LEP 1996 identifies 61 individual heritage items on CML7 and within the surface area of BHOP, refer *Table 11.1* and 11.2, and *Figure 11.1*;
- the Line of Lode and the Kintore Shaft are listed on the Register of National Estate. This listing carries no statutory authority, however it is considered to be a guide to the significance of particular items;
- No. 4 and No. 7 Shaft Winding Houses and poppet heads (headframes) are classified items on the NSW National Trust Register. This Register has no legal status, but is recognised as an authoritative statement on the significance of particular items. These items are also recorded as heritage items in the Broken Hill LEP; and
- the NSW National Trust Industrial Archaeology Sites List (which does not have any legal status) identifies the following items within the Project Area as significant for the industrial history of NSW:
  - Broken Hill South Mine;
  - Kintore Shaft Group (No. 4 and No. 7 Shaft Winding Houses and Headframes, as listed on the LEP);
  - BHP Chimney ruins of first offices; and
  - North Broken Hill Ltd mine remains.

Of relevance for this assessment is the heritage significance of the Line of Lode in general, the former mines within the Project Area, as recognised by the NSW National Trust, and the 61 items listed in the LEP which are in the Project Area. These 61 items are identified in *Table 11.1* and their locations are shown on *Figure 11.1*. Photographs and descriptions, along with an outline of their historical use (where known) are included in *Annexure K*. (Note some errors were identified in the identification of items in the assessment report, 203 Central Mine Assay Office and 318 Concentration Mill Foundations, were incorrectly identified as being located on the BHOP surface area of CML7 and item 282 Mullock Bin which is located on Block 7 and within the surface area of BHOP was missed.) An additional six items (Items 297 and 299 – 303) identified as having local heritage values are also indicated on *Figure 11.1*. These have been included on the figure but are not addressed further as they are unlikely to be exposed to potential impacts.

The underground office building, located within the Project Area adjacent to South Road (refer *Figure 11.1*) is not formally identified as a heritage item.

*Moveable Heritage*

Moveable heritage refers to items or objects of heritage value which are not fixed to a particular site or place, though may have a strong association with that place or site which when broken can diminish the value of both. There are several moveable heritage items within the Project Area, including machinery, furniture, maps and signs.

*Broken Hill a Heritage Town Listing*

In 2009 BHCC applied to the Commonwealth Department of Environment, Water, Heritage (DEWHA) and the Arts for the City of Broken Hill to be listed on the National Heritage List as an historic town for its role in mining and mineral processing in Australia. The application is for the whole of the City and will include CML7 and the Project Area. DEWHA officers conducted a survey of the Project site and assessed the heritage values of site structures and anecdotally considered the values as significant.

BHOP supports this application and is in on-going discussions with DEWHA to provide information on its approach to managing heritage on the Project site and to gain agreement on the values of the heritage items and the conservation management requirements.

A determination by DEWHA will be made in 2010.

**Table 11-1 List of heritage items within CML7 on the Broken Hill LEP**

Inventory No (BHCC LEP)	Location	Description
175	Menindee Road	Browne's Shaft
176	Menindee Road	Thompson Shaft
177	South Road	No 7 Winding House
178	South Road	No 7 Shaft
179	South Road	No 4 Winding house, motor and shaft
180	South Road	No 4 Headframe
187	South Road	Block 10 Reservoirs
188	South Road	BHP Concentration Mill Site
275	Mine Lease 8	Broken Hill South Mill
276	Mine Lease 8	General Store Office
277	Mine Lease 7, 8	No 2 Control Substation
278	Mine Lease 7, 8	Water Tower
279	Mine Lease 7	Reagent Shed
280	Mine Lease 7	Filter House
281	Mine Lease 7	Pump House
282	Mine Lease 7	Mullock Bin
283	Mine Lease 7	Electrical Workshop
284	Mine Lease 8	Mechanical Workshop (Old General
285	Mine Lease 8	Changehouse
286	Mine Lease 8	Riggers Shop
287	Mine Lease 8	Compressor Room (Old Power House)
288	Mine Lease 8	Carpenter's Paint Shop (Old Winderhouse)
289	Mine Lease 8	Pump House & Cooling Water Reservoir

Inventory No (BHCC LEP)	Location	Description
290	Mine Lease 8	Two Water Tanks
291	Mine Lease 8	Yardman's Office
292	Mine Lease 8	Pattern Store (Carpenter's Shop)
293	Mine Lease 8	Saw Mill & Extension
294	Mine Lease 8	Coal Bins
295	Mine Lease 8	Weighbridge Foundations
296	Mine Lease 8	Sand Plant
297	Mine Lease 8	Number 6 Shaft Vent Fan
299	Mine Lease 8	Two Water Tanks and A Stone Foundation
300	Mine Lease 8	Square Concrete Foundation
301	Mine Lease 8	Tank stand
302	Mine Lease 9	Fire & Ambulance Station
303	Mine Lease 9	Brick Pier Foundations
304	Mine Lease 12	Stone Wall
305	Mine Lease 12	Building Foundation
306	Mine Lease 12	Four Concrete Piers
307	Mine Lease 12	Headframe
308	Mine Lease 12	Timber Chute Race
309	Mine Lease 12	Delprat Headframe & Shaft
310	Mine Lease 12	Delprat Changehouse
311	Mine Lease 12	Delprat General Offices
312	Mine Lease 12	Delprat Winderhouse
313	Mine Lease 12	Delprat Winder Foundations
314	Mine Lease 12	Three Water Tanks
315	Mine Lease 12	Slag Dump, Foundations & Timber Piles
316	Mine Lease 12	Stone Wall & Concrete Footings
317	Mine Lease 12	South Smelter Walls & Stack
319	Mine Lease 12	Loading Platform
320	Mine Lease 13	BHP North Slag Dump
322	Mine Lease 15	British Flats Proprietary Square
323	Mine Lease 16	Thompsons General Offices
324	Mine Lease 16	Thompsons Changehouse
325	Mine Lease 16	Thompsons Winderhouse
326	Mine Lease 16	Thompsons Ambulance Station
327	Mine Lease 16	Thompsons Headframe, Bracehousing & Conveyor
328	Mine Lease 16	Thompsons Crusher House
329	Mine Lease 16	Thompsons Conveyor, Storage Bin & Loading Hooper

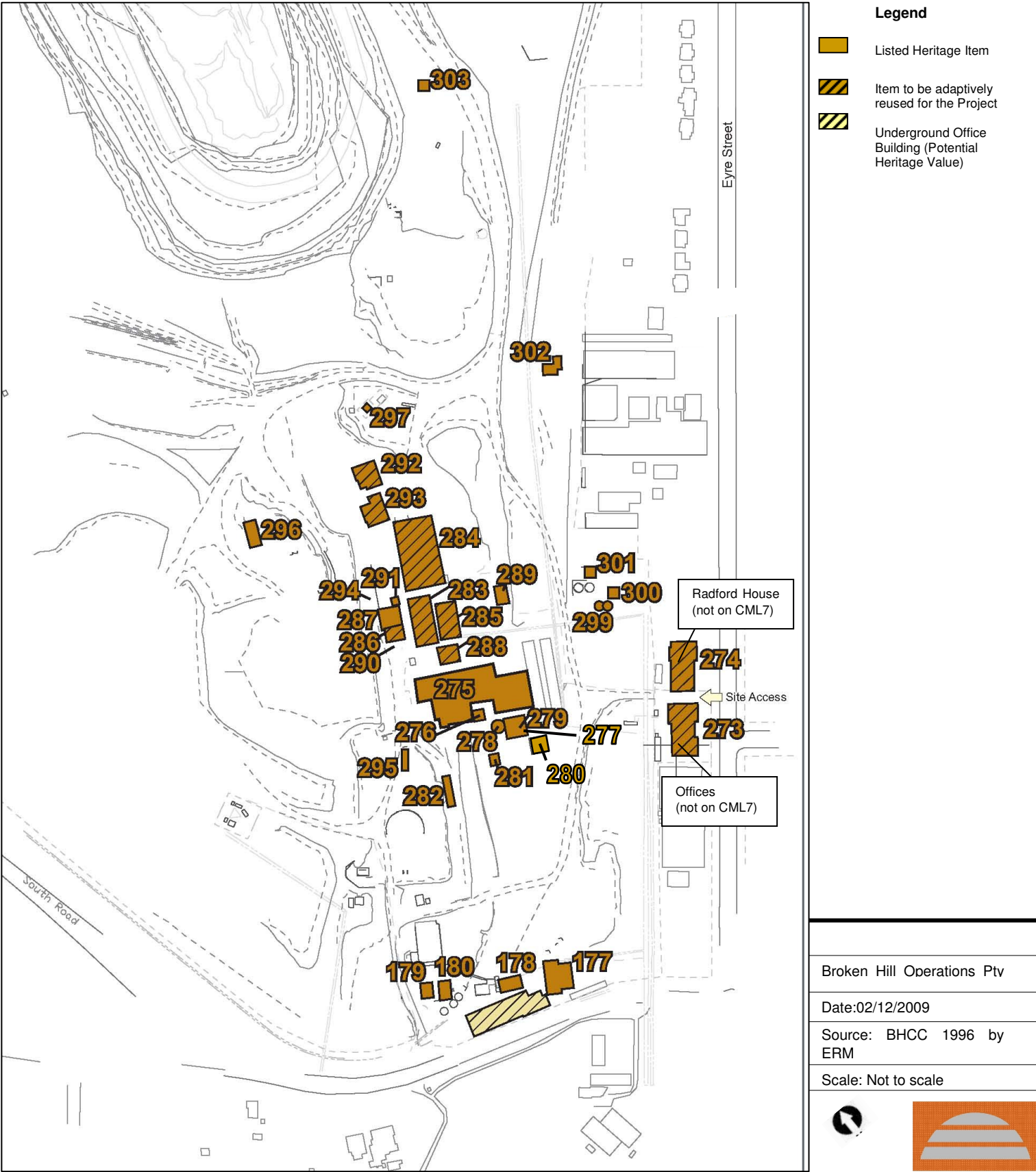


Figure 11-1 Location of heritage items - CML7





Figure 11-2 Location of heritage items - processing plant area





*Heritage significance*

Austral Archaeology (2000) assigned the Line of Lode, inclusive of the South and Central Mines, a high level of cultural heritage significance. This was due to the pre-eminence of Broken Hill in general and the Line of Lode specifically in the history and development of mining in Australia. The South and Central Mines form part of the south-western portion of the Project Area (where operations for the Project are to be focussed) therefore the significance statement is considered representative of the significance of heritage items within the Project Area.

**11.3.2 Aboriginal heritage**

Due to the location of the study area at the centre of Broken Hill and the early historical development of the City, very few archaeological investigations or assessments are available for the area. The majority of archaeological studies that have been undertaken have been on the edges or beyond the city proper. Much of the focus of archaeological/cultural heritage investigation and management in the region has been the Mutawintji and Menindee Lakes National Parks.

As a consequence there is limited data available to assess the local archaeological context and make interpretive statements about the nature and timing of Aboriginal settlement patterns. The archaeological understanding obtained for areas such as Mutawintji and Menindee Lakes are not comparable due to the distance and difference of these environments.

Local archaeologists Martin (1995) and Witter (1994) have both noted that ethnographic sources and oral tradition indicate that the general Broken Hill area and Broken Hill in particular is known to be linked to several important Dreamings, including the Bronzewing Pigeon and Kuluwirru stories. There is also oral history suggesting that the area was used as a gathering place for social and ceremonial exchange for groups from South West Queensland, Western NSW, and Western South Australia.

**11.4 IMPACT ASSESSMENT****11.4.1 Historical heritage***Overview*

The strategy outlined in the preliminary closure concept is for the development of a mining-related cultural tourism venture. To achieve this aim the Project has been planned to respect or enhance recognised heritage values and leave the site with as much as possible of its history intact. Therefore heritage values are not expected to be affected by the Project.

*New infrastructure*

Design of the proposed processing plant layout has been sensitive to the importance of existing heritage items. The processing infrastructure is not expected to adversely impact heritage items as it will be located within the large vacant area to the south of the old mill building. This general area has historically been used as a mill area.

The new mining equipment and infrastructure will add a modern layer of processing technology to the site. As the historical buildings will be retained, new and old buildings will co-exist. This will add value by demonstrating temporal technological advances in the mining industry.

*Use of heritage buildings*

The proposed uses for heritage listed items are outlined in *Table 11.2*. Ten buildings are to be adaptively re-used. These are highlighted, and their locations are shown on *Figure 11.1*. Three of these buildings will be renovated and used for administrative office purposes and five will be

repaired and used for storage. The electrical workshop is to be used as maintenance offices and fixed plant workshop. The changehouse is to be refitted as a crib room, training room, first aid centre and underground office.

**Table 11-2 Proposed use for heritage items**

Item	Proposed use
Underground Offices	To be renovated and used as office space.
Item 273, General Offices	To be renovated and continue existing use as offices.
Item 274, Radford House	To be renovated and used for administrative purposes.
Item 283, Electrical Workshop	Maintenance offices and fixed plant workshop.
Item 284, Mechanical Workshop	Mobile plant and maintenance store i.e. re-use for intended purpose. Some plant to be removed due to conflicting space requirements. Other plant to be repaired and remain in building.
Item 285, Change House	Crib room, training room, first aid centre and underground offices. Buildings will need complete fit out to absorb change. This building has been substantially altered by previous owners. Current plans include addition of false walls, ceilings and possibly floors that can be removed after current useful life has ended, enabling building to be returned to current state if desired.
Item 286, Riggers House	Emergency services storage.
Item 288, Carpenter's paint shop	Undertake minor structural repairs and use for storage.
Item 292, Pattern Store	Clean up and use for storage.
Item 293, Sawmill Extension	Undertake some structural work and use for storage.

There are no changes proposed to any of the other items listed in *Table 11.1* and it is intended to retain these items in stasis.

Heritage values of buildings could be diminished by the introduction of intrusive elements and removal of original features. However, no major changes are planned and adaptive re-use will avoid adverse impacts to heritage values. The underground offices, general offices, electrical workshop and mechanical workshop will be used for purposes similar to their original use, enhancing recognised heritage values. Where changes to internal fabric are required these will be undertaken so that they can be removed at a later date for example addition of false floors, walls and ceilings and demountable offices within buildings.

The two buildings which will undergo the most extensive internal change, (the changehouse and underground offices) have already been substantially altered from their original state.

There are a number of heritage listed items in the vicinity of the operations that will not be used for the Project. The potential for these buildings to fall into a state of disrepair can be avoided by implementing and undertaking programmed assessments, and required repairs (refer *Section 11.5*).

*Moveable heritage*

Items that will not be reused for the Project will be retained in-situ where possible and measures for their preservation will be outlined in the heritage management plan. This includes machinery, furniture, maps and original signage (excluding outdated safety signs). There are substantial amounts of redundant original plant and equipment within the old mill, sand plant and number 4 winding house that cannot feasibly be re-used. BHOP have no plans at present to use these buildings and the machinery and remnant fabric will be retained in-situ to avoid potential impacts to heritage values associated with their relocation.

Items that are required to be moved to avoid adverse impacts will be recorded and handed over to a local mining history organisation.

**11.4.2 Aboriginal heritage**

The extensive land disturbance resulting from more than a century of intense mining, processing and surface work, is clearly evident and no trace of undisturbed land was observed during the studies undertaken by ERM in 2001. While the evidence of the surrounding area suggests it is possible that indigenous archaeology did exist in the Project Area, the long history of mining has all but removed what was the original 'broken hill'.

The land use history and the field surveys conducted in 2001 (ERM 2001), which involved on-site consultation with local indigenous groups, indicated that it is extremely unlikely that no indigenous archaeology still exists within the study area.

Therefore the proposed decline development and resource assessment will not impact any Indigenous archaeological values within the Project Area.

**11.5 MANAGEMENT AND MONITORING MEASURES**

The following measures will mitigate potential impacts to heritage values arising from the Project and maintain the cultural and industrial heritage significance of the Rasp Mine. These measures will be included in a conservation management plan to be prepared for the Project Area:

- a photographic recording of the buildings identified in *Table 11.1* will be undertaken, to provide a lasting record of the site prior to the new development;
- programmes for each building to be re-used outlining measures to maintain its structural stability and identify requirements for retention, renovations, permitted re-use and ongoing maintenance;
- preservation requirements for buildings not to be reused;
- a programme to continue to preserve buildings not to be reused will be included in the heritage management plan;
- prior to commencement of construction works, heritage items to be re-used will be inspected to determine the structural stability of each building and identify the works that need to be undertaken for retention, renovations, adaptive re-use and ongoing maintenance;
- two years after the commencement of construction works for the Project, all items identified in *Table 11.1* to be retained in stasis will be inspected to determine structural stability and identify required maintenance;

- items of moveable heritage that will not be disturbed or damaged for construction or operations, are to be retained and conserved in-situ. Items that are required to be moved to avoid adverse impacts will be fully recorded and handed over to a local mining history organisation;
- an inventory of movable items (furniture, plans, equipment etc) will be undertaken as part of the conservation management plan; and
- procedures for opportune finds will be implemented to allow for their identification and preservation.

While it is unlikely that there is any Indigenous archaeology on the Project Area, works would immediately cease upon the discovery of any indigenous items. The Broken Hill Local Aboriginal Land Council and DECCW would be contacted for advice.

### **11.6 CONCLUSIONS**

The Rasp Mine is a historically significant site as reflected by the number of heritage items located within the Project Area. The Project has been planned to enable the development of a tourist facility following cessation of mining. No existing buildings, infrastructure or plant, including heritage items, will be demolished as part of this development. Some heritage listed buildings will be adaptively re-used for the Project, however major changes are not proposed for these buildings and there are no plans to change their external appearance by way of structural alterations or extensions. The Project respects or enhances known heritage values and will have minimal adverse impacts on these values.

The long history of mining has all but removed the Line of Lode and what was the original 'broken hill'. However, there are some residual gossans at No 7 Shaft, Kintore Pit, Block 14, Thompson Shaft and Browne Shaft and a gossan lag in a fluvial channel to the east of the main Line of Lode. The land use history and previous field surveys undertaken by ERM indicate that no indigenous archaeology exists within the Project Area.