

Heritage Standard

Moonta Mines State Heritage Area



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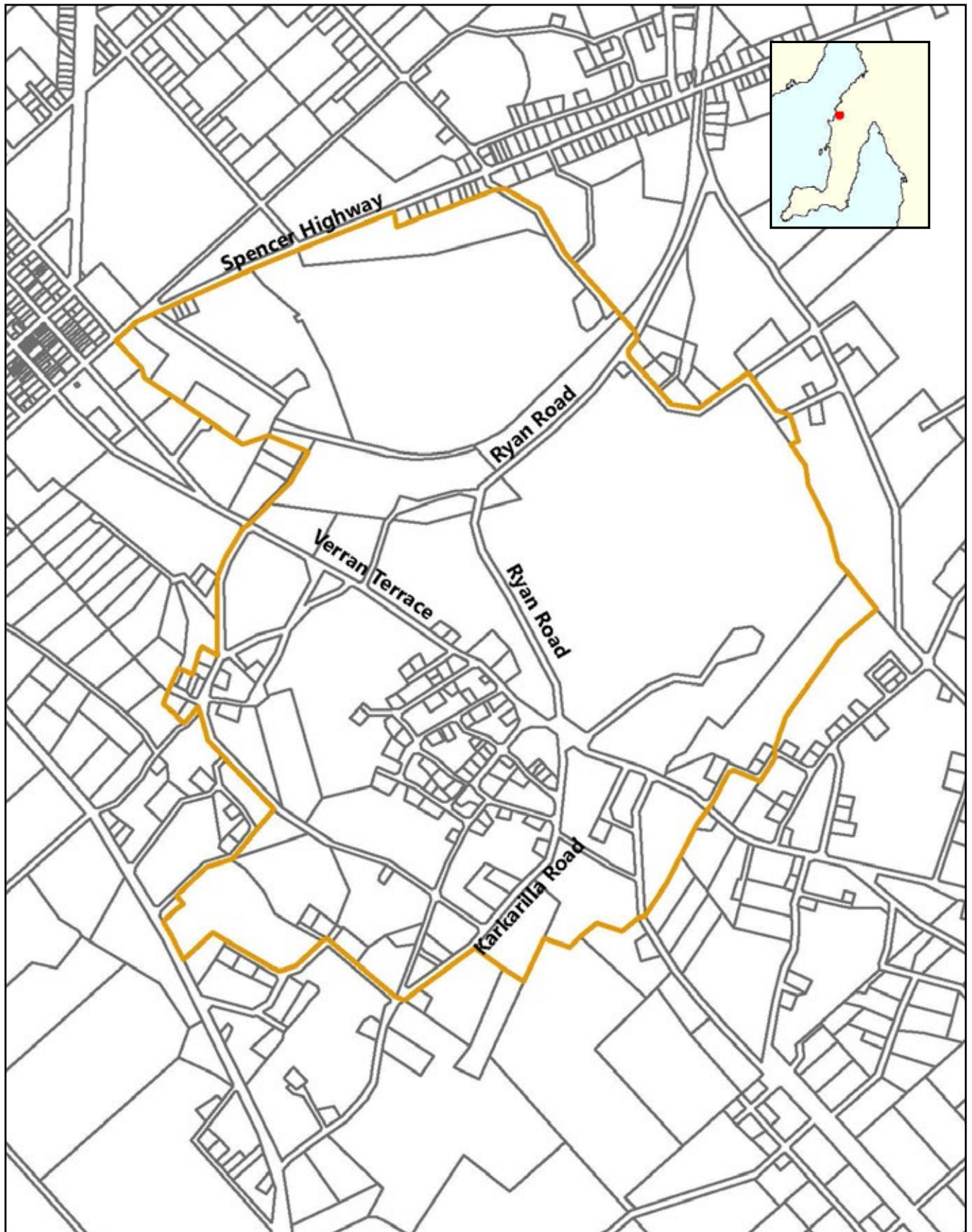
COVER IMAGE: Elder's line of lode looking south, State Library of South Australia, SLSA B 3483, circa 1898.

THIS PAGE: Moonta Mines: Panoramic view of maintenance shops, fully extended about 1890. State Library of South Australia, SLSA B 12603, 1908





Moonta Mines State Heritage Area



1. Background

1.1. Moonta Mines State Heritage Area

South Australia's State Heritage Areas represent significant aspects of the State's rich natural and cultural heritage. Moonta Mines was designated as a State Heritage Area under the *Heritage Places Act 1993* in 1984. The designation ensures that future development of properties and open spaces within Moonta Mines State Heritage Area is managed in a way that maintains the Area's heritage value.

1.2. Purpose of Heritage Standards

The Moonta Mines State Heritage Area includes State Heritage Places listed in the State Heritage Register. If Proposed development involves a State Heritage Place which is independently listed in the State Heritage Register, the policy of the Planning and Design Code's State Heritage Place Overlay will take precedence over that of the State Heritage Area Overlay.

Proposals to undertake development within a State Heritage Area may be referred by the Relevant Authority to the *Minister responsible for administering the Heritage Places Act 1993*, for consideration of impact on the heritage values of the State Heritage Area.

The Relevant Authority decides if a referral is required. The State Heritage Area Overlay 'Procedural Matters (PM) Referrals', identifies the types of development in a State Heritage Area that require referral.

Officers within Heritage South Australia (Heritage SA) in the Department for Environment and Water are the Minister's delegate for advice on referred development applications. Generally, Heritage SA can support the proposal and direct conditions of approval, or direct refusal if heritage values are unacceptably compromised. The Heritage Standard forms a key part of Heritage SA's assessment of the heritage impact of referred development proposals.

The Heritage Standard is presented in three parts:

- 1. Background** -the historical development of Moonta Mines and principles that underpin the State Heritage Area listing
- 2. Statement of Significance** – the South Australian Heritage Register listing and the context and description of the heritage values
- 3. Heritage Standards for Development** - Principles and Acceptable Standards for development

1.3. History – Moonta Mines

The Nharangga (also spelt Narungga)¹ people are the traditional owners of the Yorke Peninsula extending as far north as Port Broughton and east to the Hummock ranges. Nharangga people modified their environment burning selected areas to create lightly forested expanses, suitable for hunting, within a broader landscape of thick mallee scrub.² They also netted for fish along the coast, collected shellfish and crabs and dove for abalone and crayfish.

Before the arrival of colonists, European explorers as well as sealers and whalers had visited the traditional lands and water of the Nharangga. After 1836 when colonists arrived to settle in South Australia, Yorke Peninsula's dense vegetation and apparent lack of water delayed the arrival of pastoralism until 1846. While the best hunting country and water sources were the first to be appropriated by the newcomers, the vegetation and geography of the Peninsula, including access to the resources of the sea, allowed the Nharangga people to maintain their traditional lifestyle.³

Pastoral activities including clearing and stocking impacted life on the peninsula from 1846 and increased into the 1850s. As copper deposits were discovered in the late 1850s and early 1860s and mines and mining towns developed in the north of Nharangga Country further stress was put on the traditional patterns of the Nharangga way of life. Some Nharangga worked on pastoral properties, in the towns, and the mines including Moonta and Kadina while many continued to live a more traditional life.⁴

1 Different spellings have been adopted by the Nharangga Aboriginal Progress Association Inc (NAPA) and the Narungga Nation Native Title Claim when referring to people, language, culture or Country. The NAPA website (<https://www.napainc.com.au/>) explains that their preferred spelling, "Nharangga", was adopted during community language recovery workshops to best replicate the sound spoken traditionally.

2 Skye Krichauff, 'Yorke Peninsula: Rethinking Narungga responses to Europeans and colonialism' in Peggy Brock and Tom Gara, *Colonialism and its Aftermath: a history of Aboriginal South Australia*, Wakefield Press, Mile End SA, 2017. 177

3 Skye Krichauff, 'Yorke Peninsula'. 177, 189

4 Skye Krichauff, 'Yorke Peninsula'. 184



The Moonta Mine shewing Elder's Shaft, circa 1862, William Wyatt, artwork, State Library of South Australia, SLSA B 12593.

Point Pearce Mission Station was established in 1868, south of Moonta. Environmental destruction and restrictive government regulation in the early twentieth century made it increasingly difficult for Nharangga people to live independently of the Mission. Many Nharangga people today have close associations with Point Pearce.⁵ The Narungga Nation Native Title claim was lodged in 2013 and covers the whole of the Yorke Peninsula and offshore waters and islands.⁶

Copper mining in Cornwall

The county of Cornwall in England once possessed rich mineral resources including tin and copper. From the Bronze Age, tin mining was a dominant industry in Cornwall and the exhaustion of surface deposits beginning in the sixteenth century resulted in the development of deep mining technology. Copper mining supplanted tin mining in Cornwall in the eighteenth century and high global demand resulted in the rapid emergence of an industrialised mining landscape, characterised by 'deep underground mines, engine houses, foundries, new towns, smallholdings, ports and harbours, and their ancillary industries.'⁷

Mining in Cornwall traditionally employed a unique mining team structure. This included a mine captain and teams of tutworkers and tribute workers. Tutworkers (piece workers) sunk shafts and were paid by linear measure and tribute workers were paid a percentage of the ore value for its extraction. Miners engaged in tutwork sunk shafts, excavated levels and were paid a low but reliable rate per fathom, while teams of tribute workers bid for the right to mine lodes made accessible by tutwork and were paid according to the value of ore mined. This system promised flexibility and independence for miners with little risk to investors and played an important role in the success of Cornish mining.⁸

The development of the steam engine occurred in Cornwall and was driven by the mining industry's need to efficiently dewater deep mines, allowing work to occur below groundwater level.⁹ The high-pressure 'Cornish' engine and boiler, developed by Cornishman Richard Trevithick from James Watt's engine, reached its zenith c.1850, revolutionising the mining industry at a time when the first wave of intensive copper mining was occurring in South Australia.

5 Skye Krichauff, 'Yorke Peninsula'. 184-190

6 Swanbury Penglase, *Australian Cornish Mining Sites: Moonta. Conservation Management Plan*, for regional Council of Goyder, 2020. 21

7 Swanbury Penglase, *Australian Cornish Mining Sites: Moonta*.16

8 Masao Yamanaka, 'Tribute System and Cost Book Principle: South Australian Copper Mining Business in the Mid-Nineteenth Century', *Otemon Economic studies*, 18, 1985. 8-9

9 G. J. Drew and J. E. Connell, 'Cornish Beam Engines', in *South Australian Mines (Special Publication 9)*, Department of Mines and Energy of South Australia, Adelaide SA, 1993. 13-15



Miners at Moonta Mines, circa 1894, State Library of South Australia, SLSA B 12593.

Cornish engineers developed two main varieties of the Cornish engine, the beam pumping engine and the rotative engine. The beam pumping engine featured a reciprocating see-saw motion of the bob powered subterranean pumping apparatus known as *pitwork*. The beam rotative engine, translated the motion of the bob into rotary motion, allowing the engine to drive machinery including crusher rolls, dressing machinery and winches.¹⁰ Tall masonry engine houses and the tapered cylindrical chimneys were defining characteristics of the Cornish mining landscape that were transposed into South Australia.

A major economic depression in the 1840s and the decline of Cornish copper mining in the 1850s coincided with the discovery and exploitation of copper in places such as South Australia, Chile and the United States. This provided impetus for Cornish miners and their families to emigrate in large numbers.¹¹ They took with them hard-rock mining expertise as well as their vernacular building traditions, social and cultural customs, religious beliefs and identity.¹²

¹⁰ G. J. Drew and J. E. Connell, 'Cornish Beam Engines'. 21-27, 37-51

¹¹ Jim Faull, 'The Cornish Miner in South Australia', in Jonathan Shelby (ed), *South Australia's Mining Heritage (Special Publication No. 7)*, Dept. of Mines and Energy South Australia, Adelaide SA, 1987. 139

¹² G. J. Drew and J. E. Connell, 'Cornish Beam Engines'. 13-51



Hughes' Pumping House, circa 1884, State Library of South Australia, SLSA B 10510.

Establishment of Moonta Mines

Copper was discovered at Kapunda in 1842 and Burra in 1845. Burra Burra Mine rapidly emerged as the largest mine in Australia, a title it held for a decade from 1845, and reputedly saved the colony from bankruptcy.¹³

The value of exported copper surpassed that of wool and wheat combined, and large numbers of experienced Cornish copper miners and their families were deliberately recruited to South Australia through agents in Cornwall.¹⁴

In 1854, pastoralist and retired sea captain Walter Watson Hughes leased the Wallaroo pastoral station on northern Yorke Peninsula with his brother-in-law John Duncan. An amateur minerologist, Hughes noticed that mallee roots on Wallaroo burned with green flames,¹⁵ and understanding its significance, taught shepherds to recognise the colours of copper ore.¹⁶

On 17 December 1859, shepherd James Boor discovered copper ore on Hughes' property west of present-day Kadina. In January the following year, Hughes secured an 80-acre mineral lease under the *Waste Lands Act 1857* and established the Wallaroo Mining Company (WMC). Subsequently on 13 May 1861, shepherd Patrick Ryan discovered copper ore near a wombat burrow on Hughes' property in an area known as Tiparra (near present-day Moonta). After defeating rival claimants, Hughes established the Tiparra Mining Company, later the Moonta Mining Company (MMC), separate from WMC and in partnership with Edward Stirling, John Taylor, Robert Barr Smith and Thomas Elder. MMC commenced mining at Moonta in 1861.¹⁷

Immediately profitable, Moonta Mines was the first Australian mining company to pay £1 million in dividends, and Moonta Mines cemented Australia's international reputation as a major exporter of copper.¹⁸ The Wallaroo Smelting Works opened in 1861¹⁹ and most Moonta ore was smelted there prior to export.²⁰ The region encompassing Moonta Mines, the Wallaroo Mine west of Kadina and the Wallaroo Smelter emerged as the largest industrial area in the colony of South Australia and is often referred to as the 'Copper Triangle.'

13 Swanbury Penglase, *Australian Cornish Mining Sites: Moonta*. 21, 45

14 Jim Faull, 'The Cornish Miner in South Australia'. 141

15 Oswald Pryor, *Australia's Little Cornwall*, Rigby, Adelaide SA, 1973. 26

16 Swanbury Penglase, *Australian Cornish Mining Sites: Moonta*. 18

17 Swanbury Penglase, *Australian Cornish Mining Sites: Moonta*. p.19

18 Swanbury Penglase, *Australian Cornish Mining Sites: Moonta*. pp. 21, 13

19 D. A. Cumming and G. J. Drew, 'Copper smelting in South Australia: the first fifty years' in Jonathan Shelby (ed), *South Australia's Mining Heritage (Special Publication No. 7)*, Department of Mines and Energy South Australia/Australian Institute of Mining and Metallurgy, Adelaide SA, 1987. p. 134

20 J. F. Drexel, *Mining in South Australia: A Pictorial History (Special Publication No. 3)*, Department of Mines and Energy of South Australia, Adelaide SA, 1982. p. 52



Richman's Engine House, circa 1884, State Library of South Australia, SLSA B 10513.

The opening of Moonta Mines triggered a 'rush' of Cornish miners from Burra and Wallaroo. Like Burra, mining at Moonta initially followed traditional Cornish practice with little adaptation, and positions of responsibility were mostly held by Cornishmen.²¹

Cornish engines and acquired a further two second-hand.²² The engines were unloaded at Port Wallaroo and then installed in large stone engine houses built to standardised Cornish designs.²³

Management, innovation and reform

Henry Richard Hancock was appointed Mine Captain at Moonta Mines in 1864 after a short period working as Mine Captain for the adjacent Yelta Mine and stayed in the role until 1898. He played an influential role in the development of the mine and is especially remembered for his technical innovations and welfare reforms. An enthusiast for technology, Hancock replaced horses with steam power and barrows with tramways. He introduced wire cables instead of rope, steel skips, mechanical drills powered by compressed air and built a railway to carry ore to the Wallaroo Smelting Works. Under Hancock's regime, Moonta reputedly possessed 'the best-equipped engineering shops' in South Australia. Hancock developed the 'Hancock Jig', a mechanical sieve which improved ore processing efficiency. The Jig was patented under Hancock's name in 1895 and was subsequently used in mines across the world.²⁴

As a prominent community leader and informed by his Wesleyan Methodist faith, Hancock took a serious and active interest in the welfare of his workers. Hancock introduced a minimum weekly wage against opposition from the company directors and required all employees to join the medical club at a low weekly rate. He encouraged the establishment of sports and social clubs, introduced compulsory night school for boys, served on numerous boards and helped to found organisations including a school of mines, a library and the Point Pearce Mission.²⁵

Through Hancock's leadership, Moonta Mines survived the world-wide copper 'crash' of 1866.²⁶ In 1883, Hancock instituted a significant drive to recruit miners and their families from Cornwall. His initiative resulted in 'the last collective, large-scale movement of population from Cornwall to South Australia' and led to the Copper Triangle becoming home to the greatest concentration of Cornish miners in Australia.²⁷ The region has since become known as 'Australia's Little Cornwall.'

Following the 'Great Strike' of 1874, local trade unionists began calling for the abolition of the Cornish system of tribute and tutwork, believing that the Cornish system had become a mechanism through which mine management kept wages artificially low. Discontent led to numerous reforms in the late nineteenth century and culminated in the complete abolition of the tribute and tutwork system at Moonta Mines by 1910.²⁸

21 Swanbury Penglase, *Australian Cornish Mining Sites: Burra*. 45; G. J. Drew and J. E. Connell, 'Cornish Beam Engines'. p. 75

22 G. J. Drew and J. E. Connell, 'Cornish Beam Engines'. pp. 139-153

23 Swanbury Penglase, *Australian Cornish Mining Sites: Burra*. p. 26

24 Swanbury Penglase, *Australian Cornish Mining Sites: Moonta*, 13. pp. 19-22

25 Swanbury Penglase, *Australian Cornish Mining Sites: Moonta*. 22

26 Philip Payton, 'Making Moonta: The Invention of 'Australia's Little Cornwall'' in *Journal of Australasian Mining History*, Vol. 4, September 2006, 2006. p. 60

27 Philip Payton, *Pictorial History of Australia's Little Cornwall*, Mile End SA: Wakefield Press, Mile End SA, 2020. pp. 16, 18

28 Swanbury Penglase, *Australian Cornish Mining Sites: Moonta*. p. 24

Moonta Mines settlement

By 1875 the greater Moonta district, with a population of 12,000, was the largest urban area outside Adelaide. The settlement of Moonta Mines was characterised by an informal village pattern built around several local Methodist churches. Unlike Burra, mining families at Moonta Mines were allowed to build houses on the mining leases amongst the mine workings. Settlements and mining sites developed nearby including East Moonta, Hamley and Yelta. Meanwhile the government town of Moonta, surveyed in March 1863 to the west of Moonta Mines provided an alternative away from the mine site.²⁹ The government town became a commercial centre and grew rapidly however many Cornish miners continued to live at Moonta Mines close to the mine and rent free. The houses erected on the mine site were usually built by the miners and evolved over time from temporary dwellings to more substantial dwellings. As they were built on the lease homeowners were lease holders not landowners.



Miner's Cottage, Moonta Mines, circa 1900, State Library of South Australia, SLSA B 12612.

Decline and closure of Moonta Mines

Low copper prices in the 1870s caused widespread unemployment and MMC experienced its first losses,³⁰ leading to the amalgamation of WMC and MMC in 1889. The resulting Wallaroo and Moonta Mining and Smelting Company Limited (WMMSC) emerged as the largest mining company in Australia. Moonta Mines produced ore worth £5.4 million prior to amalgamation and a further £5.3 million afterwards.³¹



Mining Operations in South Australia, Moonta Mines circa 1910, State Library of South Australia, PRG 280/1/19/282.

In the twentieth century the Wallaroo Mines surpassed Moonta in ore production while Moonta Mines entered a phase of gradual decline and the focus of mining enterprise moved from underground workings to above ground processing of waste product tailings and slimes.³²

The First World War temporarily increased demand for copper, however, a fall in world copper prices after the war led WMMSC to enter into voluntary liquidation in 1923. While the town of Moonta was able to flourish as an agricultural and commercial service centre, Moonta Mines went into decline and its population dispersed. Many of the mining structures were demolished and materials sold off leaving only traces of the size and extent of the operation. In the 1930s, the State and Commonwealth governments subsidised mining at Moonta Mines providing local employment during the Depression, and waste product leaching continued until 1943.³³ No ore of economic grade is known to remain at Moonta Mines.³⁴

Rising car ownership and road improvements after the Second World War brought more visitors to country South Australia and tourism contributed to an emerging awareness of the cultural heritage significance of Moonta Mines. The Moonta Branch of the National Trust of South Australia was established in 1964 and played an important role in preservation by stabilising ruins and acquiring leases over mining sites. Moonta Mines was designated a State Heritage Area on 10 May 1984 and with Burra, was entered in the National Heritage List on 9 May 2017.³⁵

29 Swanbury Penglase, *Australian Cornish Mining Sites: Moonta*. p. 31

30 Philip Payton, *Pictorial History of Australia's Little Cornwall*. p. 18

31 G. J. Drew and J. E. Connell, *Cornish Beam Engines*. p. 137

32 Tailings and slimes were coarse and fine waste products respectively – Swanbury Penglase, *Australian Cornish Mining Sites: Moonta*. p. 37

33 Swanbury Penglase, *Australian Cornish Mining Sites: Moonta*. pp. 37-38

34 J. F. Drexel, *Mining in South Australia*. p. 53

35 Swanbury Penglase, *Australian Cornish Mining Sites: Burra*. p. 47



Manager's residence, Moonta Mines circa 1916, State Library of South Australia, B 12604. Moonta Mines Model School can be seen in the background.

1.4. Reference documents

Cumming, D. A., and G. J. Drew, 'Copper smelting in South Australia: the first fifty years' in Jonathan Shelby (ed), *South Australia's Mining Heritage (Special Publication No. 7)*, Department of Mines and Energy South Australia/ Australian Institute of Mining and Metallurgy, Adelaide SA, 1987.

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1.5. Reference documents

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State Heritage Branch, Department of Environment and Planning, *Moonta Mines State Heritage Area Draft Management Plan*, 1985

Wallaroo and Moonta Mining and Smelting company, *The Wallaroo and Moonta Mines: their history, nature and methods, together with an account of the concentrating and smelting operations*, 1914.

Weidenhofer Architects, *Yorke Peninsula Heritage Survey*, 1997

2. Heritage Value

2.1. Statement of Significance Moonta Mines State Heritage Area

Moonta Mines State Heritage Area is of heritage value for the following reasons:

The Moonta Mines State Heritage Area encompasses the site of one of the largest commercial mining enterprises in colonial South Australia which generated vast wealth and wages from the sale of copper ore. The opening of the copper mines at Moonta led to a rapid influx of skilled miners and other artisans from Cornwall and the area became known as 'Australia's Little Cornwall.' For a time exports of copper surpassed those of wheat, and the town of Moonta and the mines area contained the largest urban population outside Adelaide. Considerable remnants of the mining venture remain, illustrating many aspects of copper mining and processing.

(as entered on the South Australian Heritage Register, 10 May 1984)

2.2. What is of heritage significance?

Moonta Mines survives as a collection of residences, community buildings and industrial remains. Set within regenerated scrub, it remains a valuable example of the 19th Century Cornish mining system adopted here at a larger scale. Improvements made to mining and ore processing technology, and to labour organisation and relations, resulted in the Cornish system being adopted in sites across Australia. Moonta Mines reflects the impact of a dramatic influx of Cornish miners, engineers and tradespeople on the development of South Australia's mining industry. The importation of Welsh smelting technology and labour skills consolidated the mining system's profitability and success and together positioned South Australia at the forefront of mining in the second half of the nineteenth century.

Future development should seek to protect the heritage character of the Area dating primarily from 1862-1923, characterised as a disparate collection of remnant mining operations and its associated settlement.

Features within the State Heritage Area which contribute to the heritage value of the State Heritage Area:

- a. Above ground ruins and remnants of former mining and processing structures from 1862-1923, including engine and boiler houses, chimneys, mine offices, mine workshops, sorting plant, and other infrastructure sites.



Moonta Mines above ground ruins, Stable and Yards, DEW 2022



Moonta Mines mining Elder's Lode Floor DEW 2022

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- b.** Above and below ground mining infrastructure from 1862-1923 including shafts, underground tanks, water reservoir, powder magazine, cementation and precipitation works, railway line and station.



Moonta Mines mining infrastructure, railway DEW 2022



Moonta Mines mining Elder's Lode Floor DEW 2022

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- c.** The flat, open landscape with regenerated mallee scrub, remnant low-lying mining fabric and now sparse township development.



Moonta Mines, low lying outlook, DEW 2022

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- d.** Organic/ informal road layout demonstrates the unstructured nature of early settlement on mining leases.



Moonta Mines, road network, DEW 2022

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- e. Unsealed roads and absence of modern street amenities such as parking bays, kerbs, guttering, street signs and repetitive lighting, reinforce the functional and vernacular character of the settlement.



Moonta Mines, informal street amenities, DEW 2022

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- f. Nineteenth century civic buildings including Moonta Railway Station, School, Sunday School, Uniting Church and Hall illustrate early life and development of Moonta Mines community and town.



Moonta Mines, former Methodist Church, DEW 2005

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- g. Extant vernacular miners' cottages and residences reflect building traditions from Cornwall and adaptation to the local environment over time.



Moonta Mines, miner's cottage, DEW 2022

Architectural features of heritage value include:

- Extensive use of locally sourced stone. Walls are typically dressed or random rubble coursed stone, primarily limestone with some of sandstone/bluestone. Cottages either initially limewashed or now rendered.



Moonta Mines, rubble stone walls DEW 2024

- Quoins are generally face or rendered brick, with stone quoins to some larger structures. Locally made bricks vary from red to light sand in colour.



Moonta Mines, Hughes Pump House, stone quoins. DEW 2024



Moonta Mines, Model School, brick quoins with banding. DEW 202

-
- Steeply pitched gable end or hip form corrugated steel sheet roofs, noting that many were originally clad in timber planks/shingles, or flattened tin shingles.,
 - Repeated roof forms.



Moonta Mines, cottage, double gable end, DEW 2022



Moonta Mines, cottage, double hipped roofs, DEW 2016

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- Lean-to additions to rear sections of dwellings.



Moonta Mines, cottage, lean to addition, DEW 2022

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- Timber framed, open verandahs with a straight or concave corrugated profile steel sheet roof, often integral with the main roof.



Moonta Mines, cottage, timber framed verandah, DEW 2022

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- Vertically proportioned timber doors and window openings, multi-paned casement or sash windows.



*Moonta Mines, vertical proportioned openings.
DEW 2022*

-
- Freestanding outbuildings of traditional building form with a gable or single pitched roof. Walls are masonry or framed and clad in corrugated steel sheet or timber boarding.



*Moonta Mines, stone outbuilding with skillion roof,
DEW 2022*

-
- Open, low fencing maintaining views through allotments, reinforcing the sense of the, dispersed informal mining settlement pattern.



Moonta Mines, open fencing, DEW 2022

3. Heritage Standards for Development (Moonta Mines State Heritage Area)

3.1. Purpose of Heritage Standards for Development

Heritage Standards form a key part of Heritage SA's assessment of the heritage impact of referred development proposals by:

- providing a basis for assessment of heritage impact of development by Heritage SA Heritage Officers.
- including heritage principles and location specific detail on how development can be undertaken to ensure heritage values are protected.
- proposing a minimum acceptable standard for development related solutions within the State Heritage Area.

Any future development within a State Heritage Area is regulated by the *Planning, Development and Infrastructure Act 2016*, (PDI Act) assessed against the Planning and Design Code (the Code):

- Each State Heritage Area is mapped as illustrated in the South Australian Property and Planning Atlas (SAPPA). A State Heritage Area includes both private properties and public spaces (including streets and reserves).
- The Code prescribes planning policy requirements for the assessment of development within a State Heritage Area through the State Heritage Area Overlay.

Any work (development) within a State Heritage Area is defined through the PDI Act as: (*Part 1(3) (e) Interpretation*):

“...—the demolition, removal, conversion, alteration or painting of, or addition to, the place, or any other work that could materially affect the heritage value of the place”.

Work relates to changes to the exterior of a property within a State Heritage Area and could include repairs, additions, or new construction. Repairs are typically considered 'work' where they are significant in scope or have a large effect on heritage value. Exemptions to the definition of Development within a State Heritage Area are scheduled in the *Planning, Development and Infrastructure (General) Regulations 2017 – Schedule 5*.

It is the role of the Relevant Authority (typically the Local Council) to confirm if proposed work within a State Heritage Area is considered 'development' and therefore requires a development application (DA). In the first instance, contact

your local council to ask if what you are proposing is considered development.

Proposals to undertake development within a State Heritage Area may be referred by the Relevant Authority to the *Minister responsible for administering the Heritage Places Act 1993*, for consideration of impact on the heritage values of the State Heritage Area.

The Relevant Authority decides if a referral is required. The State Heritage Area Overlay 'Procedural Matters (PM) Referrals', identifies the types of development in a State Heritage Area that typically require referral.

Officers within Heritage South Australia (Heritage SA) in the Department for Environment and Water are the Minister's delegate for advice on referred development applications. Generally, Heritage SA can support the proposal and direct conditions of approval, or direct refusal if heritage values are unacceptably compromised.

Proposed development to the exterior and interior of a State Heritage Place, within in a State Heritage Area, is separately prescribed by the State Heritage Place Overlay, of the Planning and Design Code and is assessed in addition to the State Heritage Area assessment.

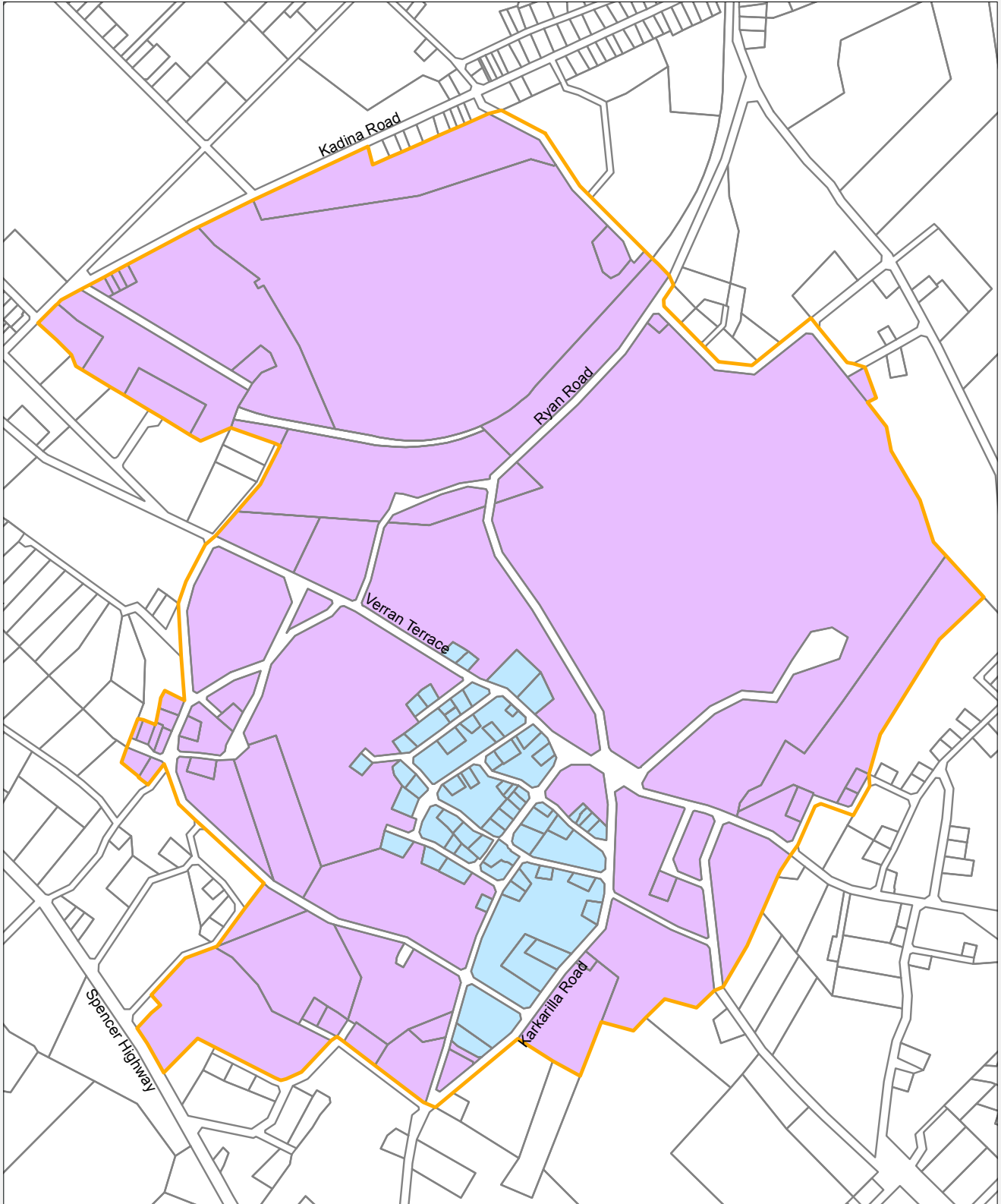
The Moonta Mines State Heritage Area is a place of historic and archaeological significance, demonstrating mining history in South Australia. Any future development is to conserve the character of the Area and uphold its heritage values through:


- maintaining evidence of original patterns of land use and division
- reinforcement of the mining village character
- retention of significant views across the historic mining sites and landscape
- retention and conservation of the buildings, structures and ruins of heritage value
- adaptation of existing buildings and structures to ensure their long-term conservation and viability.
- maintaining unity of built form, with new buildings compatible in design and form to existing buildings of heritage value
- retention of the town's landscape character

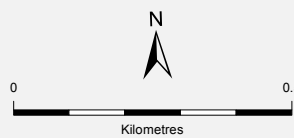
Note: this Heritage Standard is valid for all development proposals submitted on or after the date of publication. Development prior to this date will have been assessed under different provisions and therefore cannot be used as a precedent for future development.

Heritage South Australia

Moonta Mines State Heritage Area



-  State Heritage Area
-  Moonta Mines Residential Precinct
-  Moonta Mines Heritage Sites Precinct



Produced by Department for Environment and Water
 Heritage South Australia
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 Datum Geocentric Datum of Australia, 2020

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3.2. Land use

(refer: State Heritage Area Overlay – Alterations and Additions PO 2.2)

Moonta Mines retains clear evidence of its previous land use as a mine site, with a small cluster of residences on randomly established allotments at the centre of an industrial mining landscape.

Principles	Acceptable Standard
<p>3.2.1. Land use</p> <p>Land use in Moonta Mines reflects its development history, with the Cornish model of organic residential settlement around the mine site and churches. Current land use remains residential, with mine site infrastructure and ruins surrounding the early subdivision pattern.</p> <p>Development is to have regard to the following:</p>	
<p>a. Land use planning</p>	<p>Development within the Moonta Mines Heritage Sites Precinct is restricted to conservation, interpretation and the sensitive adaptation of existing buildings and structures supporting tourism use.</p> <p>The Moonta Mines Residential Precinct is retained as a private residential community.</p> <p>Any future use of the existing church complex does not impact on the external setting of the heritage place.</p> <p>Adaptive reuse of existing buildings is accepted however, the external appearance of an existing heritage building will be retained and reflect its heritage value.</p>

3.3. New buildings

(refer: State Heritage Area Overlay - Built Form PO1.1 to 1.5)

New buildings within the State Heritage Area will not adversely impact on identified heritage values of the Moonta Mines State Heritage Area.

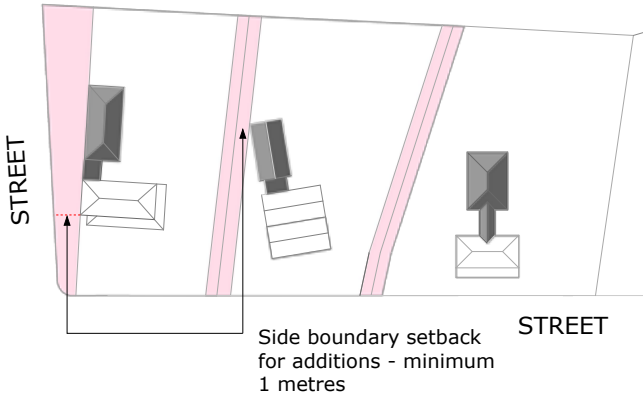
Principles	Acceptable Standard
<p>3.3.1. Siting of new buildings</p> <p>Moonta Mines is open in spatial character, with most residential buildings set well within their allotment boundaries and facing street frontages.</p> <p>New buildings are to have regard to the following:</p> <p>a) Street and side boundary setbacks</p> <p>Streetscape continuity is largely undefined. Dwellings follow a random street pattern with variable setbacks, with open space between buildings.</p> <p>Future development is to maintain the historic allotment layout characteristic of the Moonta Mines State Heritage Area, referencing existing adjacent development.</p>	<p>Dwellings: New development replacing an existing dwelling is sited so front and side setbacks match the existing setbacks on the allotment. If not replacing an existing development, new dwelling setbacks are to reflect those of adjacent dwellings, maintaining established setback patterns in the streetscape.</p> <p>Non-residential buildings: Development is to adopt site setbacks common to existing surrounding buildings of heritage value.</p> 
<p>b) Ancillary development</p>	<ul style="list-style-type: none"> refer 3.5 Ancillary development
<p>3.3.2. Form and design of new buildings</p> <p>The form, scale and architectural features of existing buildings within Moonta Mines State Heritage Area associated with the period 1862-1923 are of heritage value, and show the development of the settlement around the mine site.</p> <p>New buildings are to have regard to the following:</p> <p>a. Scale</p> <p>The prevailing scale of historic cottages is single storey, with small footprints. Community and company buildings are larger in scale, reflecting their landmark importance.</p>	<p>Dwellings: Residential development is single storey in scale with simple rectangular footprints. For larger footprint developments, a grouped arrangement of elements to be used to reduce built form scale. Wall, eaves and ridge heights are to match those in the vicinity.</p> <p>Non-residential buildings: The scale and bulk of new buildings will not visually dominate existing structures of heritage value.</p>

Principles	Acceptable Standard
<p>b. Roof form and pitch</p> <p>Existing roof styles in Moonta Mines are gable, hip and skillion in form, with a mix of roof pitches and often no eaves.</p>	<p>Dwellings: Roof forms and eaves profiles are to match traditional styles characteristic of the Moonta Mines area. New roof forms to reflect the incremental extension of historic houses - adopting a grouping of smaller, steeply pitched gables or hipped roofs to reduce building mass.</p> <p>Non-residential buildings: New development to reflect existing surrounding roof forms/ pitch, and not dominate existing buildings of heritage value.</p>
<p>c. Façade proportions</p> <p>Buildings are consistent in style, featuring horizontally proportioned façades punctuated by vertically proportioned doors and window openings. Large, chimneys, some buttressed, are common to many buildings.</p>	<p>Dwellings: Façades to repeat the proportions of existing street facing façades of heritage value in the vicinity, including window and door openings.</p> <p>Non-residential: Façades to repeat the proportions of existing street facing façades in the vicinity, including window and door openings.</p>
<p>d. Verandahs and lean-tos</p> <p>Front verandahs and rear lean-tos are a common feature to a majority of buildings of heritage value.</p>	<p>Verandahs and lean-tos are to be modest in scale and simple in design. Where removed or altered, verandahs are to be reinstated to reflect common form and detailing in the vicinity.</p>
<p>e. Ancillary development</p>	<p>Refer 3.5 Ancillary development</p>
<p>3.3.3. Materials, finishes and colours</p> <p>The architectural features of 1862-1923 Moonta Mines are of heritage value, illustrating the success and subsequent decline of the copper mining industry, and the transfer of Cornish mining technology, construction techniques and culture.</p> <p>Early dwellings in Moonta Mines are constructed of wattle and pug, or pug and limestone (loose paddock calcrete), often limewashed, with some brick detailing to quoins and openings. Original roofs, clad in wooden planks or shingle palings, are covered over in corrugated, galvanised steel. More substantial community & company buildings are constructed primarily from brick and limestone.</p>	<p>New development is to have regard to Accepted Materials, Finishes and Colours as scheduled in: Alterations and additions 3.4.3 Materials, finishes and colours, incorporating those common to the era of heritage value of the State Heritage Area.</p>

3.4. Alterations and additions

(refer: State Heritage Area Overlay - PO 2.1-2.2)

Additions and alterations to existing buildings within Moonta Mines State Heritage Area are not to visually dominate existing buildings or the surrounding landscape of heritage value. Any addition or alteration is to complement established buildings, while maintaining a clearly legible pattern of nineteenth and early twentieth century development.

Principles	Acceptable Standard
<p>3.4.1. Site and location of additions</p> <p>Development is to maintain the open, unplanned nature of the 1862-1923 Moonta Mines State Heritage Area. Key views/vistas are to be retained.</p> <p>Development is to have regard to the following:</p> <p>a. Street and side boundary setbacks</p> <p>Additions and alterations repeat site setbacks common to existing surrounding development of heritage value.</p>	<p>Dwellings: Additions are to be located to the rear of existing dwellings and not exceed existing building width.</p> <p>Additions are to be located a minimum of 1.5 metres from side boundaries, except if matching the side set back of the existing dwelling.</p> <p>Non-Residential Development: Development is to repeat the site setbacks common to existing surrounding development. Additions are to be located so they do not dominate or visually detract from existing buildings.</p> 

Principles

Acceptable Standard

3.4.2. Design of additions

The form, scale and architectural features of existing buildings relating to the period 1863-1923 in the Moonta Mines State Heritage Area demonstrate the development of the town, local construction techniques and the social history of the settlement.

Development **is to have regard to** the following:

a. Scale

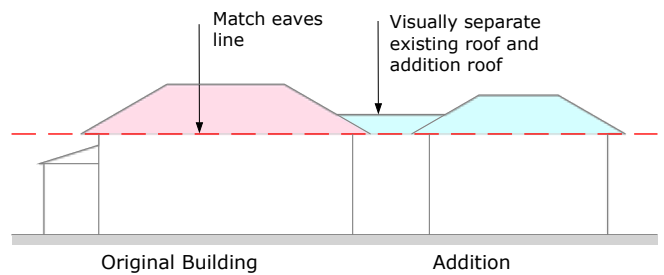
The Moonta Mines Residential Precinct is predominantly single storey in scale. Community buildings, such as schools and churches, are larger, of landmark importance.

Dwellings: Where seen from the street and/or surrounding public realm, additions are to be designed so that the original scale of the dwelling is still obvious.

Additions to existing development to match eaves height of existing building.

A break in roof line between original building and addition is required.

To maintain understanding of the existing built form scale of original dwellings, large additions are to be designed as a group of smaller, interconnected buildings.



Elevation- example of roof treatment to maintain form and scale of original dwelling.

Non-residential buildings: The scale of additions is to not visually dominate the established development.

Principles

b. Roof form and pitch

Roof form and pitch of existing heritage buildings illustrate Moonta Mines' connection to Cornish and Welsh building traditions, including short span, steep gable and simple hipped roofs. Verandahs and chimneys contribute to heritage value.

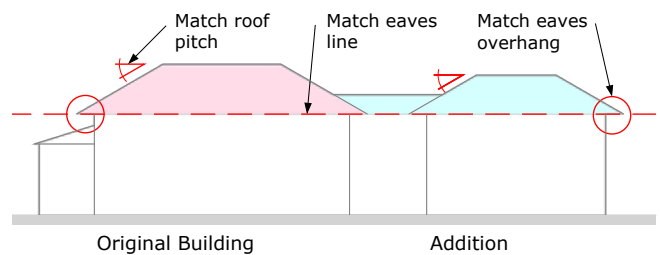
Acceptable Standard

Dwellings: Where visible from the street and surrounding public areas, the roof form, ridge height and roof pitch of additions to complement the existing building of heritage value. Eaves and gable projections to match existing.

Lean-to additions to be set out below the gutter line of existing roofs.

New chimneys are to complement the form, scale and composition of existing dwelling.

Existing chimneys are to remain and not be removed when roof cladding is updated.



Side elevation – existing dwelling and addition (one option)

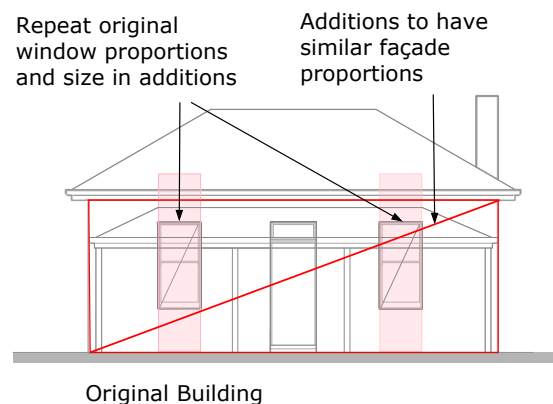
Non-residential development: Roof form, ridge height and roof pitch of additions to complement the existing building of heritage value.

c. Façade proportions

Horizontal proportions of façades of established buildings, divided by vertically proportioned door and window openings, are common throughout the State Heritage Area.

Dwellings: Where visible from the public realm, additions to dwellings are to complement the proportions of façades of the existing building.

Plate glass walls and 'patio' doors are not acceptable where visible from the public realm.



Typical proportions of façade and openings

Non-residential development: Façade proportions of additions will complement façades of existing development of heritage value.

Principles	Acceptable Standard	
<p>d. Alterations to original building features</p> <p>The overall consistency in architectural features of buildings associated with the 1862-1923 period in Moonta Mines are of heritage value.</p>	<p>Refer [3.10 Conservation Works] for further details.</p> <p>Dwellings: Face brick and stone external walls are to be retained and not painted or rendered.</p> <p>Façade features to any street, such as windows and doors, are to be retained in their original configuration and material.</p> <p>The original detailing of front and side verandahs is to be retained. Front verandahs are to remain unenclosed.</p> <p>Where original façade features have been removed/ altered and evidence of these features is not clear, reinstatement is acceptable using architectural detailing copied from nearby dwellings/buildings of similar style/era.</p> <p>Non-residential development: Face brick and stone external walls are to be retained and not painted or rendered.</p>	
<p>3.4.3. Materials, finishes and colours</p> <p>Architectural features of existing 1863-1923 era buildings and outbuildings within the Moonta Mines State Heritage Area are of heritage value, demonstrating Cornish construction practices and way of life.</p>		
<p>The design of alterations and additions is to have regard to the following:</p>	<p>Acceptable</p>	<p>Not supported (where visible from the street/ public realm)</p>
<p>a. Roofing and rainwater goods (new work)</p>	<ul style="list-style-type: none"> • deep profile, corrugated, galvanised or 'Colorbond' steel sheeting • galvanised or Colorbond ogee or half round profile gutters • metal round galvanised or 'Colorbond' downpipes • scribed roof cappings 	<ul style="list-style-type: none"> • metal sheeting profiles other than corrugated • 'Zincalume' finish • PVC gutters or downpipes • roof tiles • quad, square or 'D' profile gutters

The design of alterations and additions is to have regard to the following:	Acceptable	Not supported (where visible from the street/public realm)
b. Exterior walls (new work)	<ul style="list-style-type: none"> • face stone with stone, brick or rendered quoins • deep profile corrugated metal sheet, galvanised or ‘Colorbond’ metal sheet in stone/ mid grey tones • natural/limewashed (white or stone colour) render • horizontal weatherboard cladding – painted 	<ul style="list-style-type: none"> • square profile steel sheeting • ‘Zincalume’ metal sheeting • face concrete block • fibre cement sheeting • cement render • stone veneer facing • stone construction which does not complement existing stonework in streetscape • unpainted/ exposed timber • vertical weatherboard
c. Proposed external doors and windows in view of the street	<ul style="list-style-type: none"> • simple, panel timber doors • timber or aluminium/ steel, framed flywire screen doors to complement main door • timber framed vertically proportioned windows, (double-hung sash or casement) • timber shutters 	<ul style="list-style-type: none"> • sliding doors/windows • decorative aluminium screen/security doors • aluminium framed windows • horizontally proportioned and/ or large windows • roller window security shutters
d. Exterior painting Note: the painting of unpainted external surfaces of existing buildings is not supported.	<ul style="list-style-type: none"> • exterior painting using compatible paint colour schemes is encouraged 	
e. Verandahs	<ul style="list-style-type: none"> • simple, dressed, timber posts • simple timber or iron brackets where evidence of existing original or appropriate to new building style • flagstone, timber board, natural ground verandah floors 	<ul style="list-style-type: none"> • decorative elements such as turned posts, verandah tiles, finials or lacework unless supported by historical evidence
f. Fencing	<ul style="list-style-type: none"> • refer 3.5.2 Fences and Gates 	
g. Ancillary development	<ul style="list-style-type: none"> • Refer 3.5 Ancillary development 	

3.5. Ancillary development

(refer: State Heritage Area Overlay - PO3.1-3.4) – garages, carports, sheds, verandahs, solar panels, signage, fences

Ancillary development in the Moonta Mines State Heritage Area includes: carports, garages and sheds; studios, offices and dependent accommodation; fences and gates; signage; solar panels, rainwater tanks and other ancillary services. While such development is of a secondary nature, it may still have an adverse impact on the heritage value of the State Heritage Area if not managed appropriately.

Principles	Acceptable Standard
<p>3.5.1. Outbuildings (carports, garages and sheds, studios, offices and dependent accommodation).</p> <p>Outbuildings contribute to the built form heritage values of Moonta Mines.</p> <p>Existing outbuildings in Moonta Mines from the period 1862-1923 are typically small, freestanding buildings, with short-span, steeply pitched, gabled, hipped or low-pitch skillion roof forms. Materials used include stone, or galvanised corrugated steel wall and roof cladding.</p> <p>Development is to have regard to the following:</p>	
<p>a. Outbuildings (garages, carports, sheds, studios, offices, ancillary accommodation and outbuildings supporting business)</p> <p>Detached outbuildings located to the rear of buildings continue the established historic pattern of development in Moonta Mines.</p>	<p>Where visible from the public realm, the permanent installation of shipping containers as dwellings, additions or ancillary structures is not supported within the State Heritage Area. Support may be granted for temporary use of shipping containers during construction of new development.</p> <p>Attached outbuildings:</p> <p>New attached outbuildings are to:</p> <ul style="list-style-type: none"> • be open structures with no walls or doors, sited a minimum of 1 metre behind principal front wall of dwelling (e.g. carport) • be structures with street facing doors and/or side walls, (only supported if existing building postdates 1923), located a minimum of 4 metres behind principal front wall of dwelling (eg: garage) • be a minimum of 1 metre from any side boundary • be a minimum of 1 metre from rear boundary • have no part of structure (eaves or fascia) closer than 450mm to any boundary

Principles

continued

Acceptable Standard

- have eaves height to match front verandah, or if no verandah, eaves no higher than the primary building eaves
- have a roof pitch to match front verandah, using similar details, and if no verandah, have roof pitch to complement main roof
- have posts that are 120x120 mm minimum in dimension
- have simple roof form separate from main roof

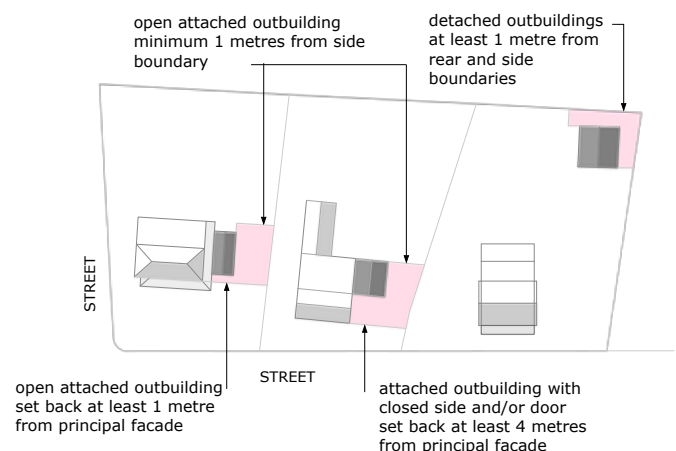
Detached outbuildings:

New detached outbuildings are single storey, rectilinear in floor plan and:

- located behind the line of rear wall of primary building
- not visually dominate the site or streetscape, or existing building of heritage value
- are constructed using stone, brick, rendered masonry, vertical horizontal lightweight weather board profile cladding, corrugated steel sheeting
- are roofed with corrugated steel sheeting
- have roof form and pitch to complement primary building on allotment

Single width garage doors are supported when in view of the street, double width doors supported only where not visible from the street.

New outbuildings are to have regard to *Accepted Materials, Finishes and Colours* as scheduled in 3.4.3

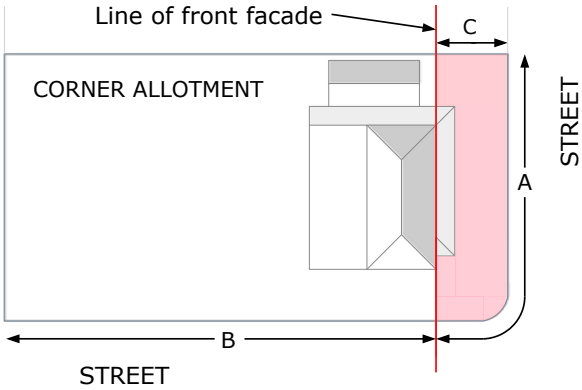


b. Pergolas and garden structures

Garden structures to be located to the rear of properties, away from street view.

Pergolas to be located to the rear or side of existing buildings, to avoid adversely impacting on views from the public realm.

Principles	Acceptable Standard	
<p>3.5.2. Fences and gates</p> <p>Early fencing styles contribute to the heritage character of the Moonta Mines State Heritage Area. Low, open, minimal fencing reinforces the rural landscape nature of the area.</p> <p>Original fences include simple timber stick and post, timber-framed picket, timber post and rail or wire fencing. Timber paling, corrugated steel sheet and stone wall fencing is less typical.</p>	<p>New fencing to match palette of materials typical to locality. Fencing style to reflect informality of traditional post and wire, post and rail and open timber picket fencing, reinforcing Moonta Mines’ rural setting.</p> <p>Reconstruction of damaged or demolished stone walls using traditional materials and methods is appropriate.</p>	
a. Fences and gates (replacement or new)	Location	Accepted
	<p>Where new fence required</p> <p>b. Boundary A shown below</p>	<p>Open fence:</p> <ul style="list-style-type: none"> • no fencing • low stone walls • simple timber picket • post and wire • post and rail <p>Solid fence:</p> <ul style="list-style-type: none"> • vertical timber paling • hedge • corrugated metal sheeting, with post and rail <ul style="list-style-type: none"> • open fence no higher than 1.2m • solid fence no higher than 1m • on corner allotments taper from front to side fence height, level with principal front façade of building
	<p>c. Boundary B shown below</p>	<ul style="list-style-type: none"> • no higher than 1.8m

Principles	Acceptable Standard	
	<p>d. Boundary C as shown below, and other adjoining property boundaries</p>	<ul style="list-style-type: none"> • open fence no higher than 1.2m street end • solid stone fence no higher than 1m street end • where there is height change to side fence section taper from front boundary to level with front façade of house. • no higher than 1.8m
		
	<p>(1) Public buildings</p>	<p>Unfenced, or reinstatement of historic fencing, based on evidence.</p>
	<p>(2) Former mine sites</p>	<ul style="list-style-type: none"> • unfenced • security / safety fencing (e.g. around mine shafts) • open in style and consistent across site

Principles	Acceptable Standard
<p>3.5.3. Signage</p> <p>A distinguishing feature of Moonta Mines is an absence of signage, including street signs.</p>	<p>All signs in the Moonta State Heritage Area require development approval.</p> <p>Signage to be minimal, small and of a low profile within the landscape.</p>
<p>a. Advertising signage</p>	<p>Signage is of a scale that complements the heritage values of Moonta Mines, does not conceal or obstruct historic detailing and does not project beyond building silhouettes.</p> <p>Permanent LED screen, flashing or backlit illuminated signs are not supported.</p> <p>Community buildings: signs to be small and free-standing structures.</p>
<p>b. Directional & interpretive signage – within the Moonta Mines Heritage Sites Precinct</p>	<p>Interpretive signage to be located to avoid cluttering the landscape. External, free-standing signs are acceptable where visual impact on setting and views is minimal.</p>
<p>3.5.4. Skylights</p> <p>Roof forms are significant to the heritage values of the State Heritage Area</p>	<p>Dormer windows are not supported in the Moonta Mines State Heritage Area where visible from the public realm.</p> <p>New or replacement skylights are to be low profile and located out of view of the public realm. Skylights on street façades are not acceptable.</p>
<p>3.5.5. Solar panels</p>	
<p>a. Solar panels</p> <p>Solar panels provide environmental benefits. Adverse visual impact is negated if panels are placed out of view of public streets/areas.</p>	<p>Solar panels are to be:</p> <ul style="list-style-type: none"> • located on roof planes not visible from public realm and sited below the ridge • located on outbuildings that are not visible from the streetscape • installed so componentry including cabling, conduits, batteries and inverters is not visible from the public realm • mounted flush with roof plane • black framed • arranged in a symmetrical group (not staggered) with a margin of visible roof edge around the group <p>If no other mounting location is possible, side roof-mounted solar panels must be:</p> <ul style="list-style-type: none"> • located at least 4 metres behind the front of the roof • located as far as practical on the lower part of the roof

Principles	Acceptable Standard
<p>3.5.6. Rainwater tanks</p>	<p>Corrugated metal tanks are to be used within view of the street within the State Heritage Area.</p> <p>Plastic rainwater tanks are to be located out of view of streetscapes or screened from public view with vegetation and are corrugated in profile.</p>
<p>3.5.7. Plant and ancillary equipment</p>	<p>Installations such as hot water units and water pumps are located to the rear of properties to avoid negatively impacting the streetscape and concealed by vegetation or small sheds of traditional corrugated steel, timber clad or masonry or walls.</p> <p>Air conditioners are not located on the principal façade and external air handling (condenser) units are screened from view of the public realm. Roof-mounted evaporative units are located on rear planes of roofs and coloured to match roof sheeting.</p> <p>Antennae and satellite dishes to be located out of view of the public realm.</p> <p>Infrastructure for new technology (such as electric car charging) is supported in principle. The size, appearance and location of supporting infrastructure will be negotiated on a case-by-case basis to minimise any negative impacts on the State Heritage Area.</p>

3.6. Land division

(refer: State Heritage Area Overlay - PO4.1)

Land division refers to boundary adjustments and sub-division of allotments within the State Heritage Area.

Principles	Acceptable Standard
<p>3.6.1. Land division characteristics</p> <p>The historic land division defining the Moonta Mines Residential Precinct illustrates the Cornish village settlement pattern, unusually located on the mining lease of Moonta Mine.</p> <p>Development is to have regard to the following:</p>	
<p>a. Land division</p> <p>The established pattern of allotment size and orientation is to be maintained.</p>	<p>Any division of land or adjustment of boundaries should only reinstate or maintain the historic land division layouts of the 1862-1923 Moonta Mines area.</p> <p>Subdivision and amalgamation of land is inappropriate unless it supports the conservation of historic sites and structures.</p> <p>Existing public reserves, roads, laneways are to be preserved.</p> <p>Boundary adjustments to remedy boundary anomalies are acceptable where they are of a minor nature.</p>

3.7. Landscape context and streetscape amenity

(refer: State Heritage Area Overlay - PO5.1)

The landscape character of Moonta Mines is a key part of its heritage value.

Low site topography maintains visibility of above-ground relics, dominated by the tailings heaps and pumphouse ruins, set within a landscape of regenerated scrubland. Appreciation of the historic layout of the settlement and mine sites is to be maintained.

Principles	Acceptable Standard
<p>3.7.1. Landscape character</p> <p>The landscape character of the Moonta Mines State Heritage Area illustrates the historic development of mining activities along north/south-oriented mineral lodes. An informal road network linking remnant dwellings and community buildings, surrounded by the ruins of an industrial landscape, visually dominated by tailings heaps, still defines the unique setting.</p> <p>The public realm is distinguished by the absence of street amenities such as parking bays, kerbs and guttering. Maintaining minimal infrastructure on public land reinforces the character of a historic rural settlement.</p> <p>Development is to have regard to the following:</p>	
<p>a. Views and vistas</p>	<p>Visual setting, views and vistas of Moonta Mines including remnant mines and village buildings, set within the ruins of an industrial, revegetated landscape, surrounded by agricultural land.</p>
<p>b. Historic routes</p>	<p>Established historic routes through the area are to be protected.</p> <p>Future walking/cycling/rail routes to be developed independent of historic movement patterns to avoid traversing fragile remnant fabric.</p>
<p>c. Street typology</p>	<p>Unstructured street typology pattern is to be retained, illustrating a haphazard pattern of roadways originating from the unplanned village layout. Straightening historically winding streets or formalising with concrete kerbing is not acceptable.</p> <p>Unsealed road surfaces and footpaths are to be retained in preference to paving over with hard (bitumen) surfacing.</p>
<ul style="list-style-type: none"> • Unsealed roads • Wide unsealed footpaths • Minimal infrastructure • Open landscape 	<p>Actions involving the replacement or upgrade of public realm kerbing, footpaths, street trees, street furniture, lighting, and works on roads, including closed roads and reserves by a local council are typically not defined as development in the PDI Act 2016.</p> <p>These actions are not exempt from the definition of development in a State Heritage Area where works materially affect the heritage values and are not listed in Schedule 5 of the PDI Regulations. As such works vary in scope, early discussion between Heritage South Australia and the Copper Coast Council is required. Where they are likely to have a significant or large-scale impact on heritage values, development approval is required.</p>

3.8. Demolition

(refer: State Heritage Area Overlay - PO6.1)

Demolition of buildings structures, public realm elements and other features of identified heritage value associated with the period 1861-1923 is not acceptable.

Principles	Acceptable Standard
<p>3.8.1. Demolition</p> <p>The form, scale and architectural features of existing buildings, structures and landscape features of the 1861-1923 era are of heritage value. Considerable remnants of the mining venture remain. Surviving fabric provides tangible evidence of aspects of copper mining and processing.</p> <p>Development is to have regard to the following:</p>	
<p>a. Demolition of buildings</p>	<p>Demolition of buildings or structures erected before 1923 is not supported, unless:</p> <ul style="list-style-type: none"> the portion of any building or other feature is determined to not contribute to the heritage value of the State Heritage Area, or the structural condition of the building represents an unacceptable risk to public or private safety and results from actions and unforeseen events beyond the control of the owner and is irredeemably beyond repair. <p>Replacement buildings must have due regard to the Principles and Acceptable Standards of 3.3 New Buildings.</p>
<p>b. Demolition of structures, outbuildings and building additions</p>	<p>Demolition of structures, building lean-tos, building additions, garages and sheds and other ancillary buildings within the State Heritage Area erected after 1923 is not supported, unless removal does not adversely impact on the heritage values of the State Heritage Area.</p> <p>Any replacement buildings/structures must have due regard to the Principles and Acceptable Standards of 3.4 Alterations and additions and 3.5 Ancillary development.</p>
<p>c. Demolition of public realm infrastructure</p>	<p>Demolition and replacement of public realm infrastructure is acceptable where heritage values are not compromised.</p>
<p>d. Demolition of mining remains</p>	<p>Demolition of ruins / remains of mining activities is not acceptable.</p>

3.9. Conservation works

(refer: State Heritage Area Overlay - PO7.1)

Conservation work to repair dilapidated building fabric is considered development where the works may materially affect the heritage values of the State Heritage Area. Getting the right advice is important, to save time, cost and to ensure the ongoing management of buildings.

Principles	Acceptable Standard
<p>3.9.1. Conservation approach</p> <p>Significant building fabric of existing buildings and structures of heritage value within the Moonta Mines Heritage Area is to be conserved and maintained.</p> <p>Correct repair methods ensure the ongoing preservation of built fabric. The aim is to only repair as much as needed, avoiding conjectural reinstatement. Conservation works are to respect the historic layering of individual buildings, structures, and ruins.</p> <p>The ruins contained within the Moonta Mines State Heritage Area are to be retained and conserved.</p>	
<ul style="list-style-type: none"> • Roof, guttering and verandah repairs • Chimney repairs – stabilisation, repointing • Structural stabilisation • External wall repairs and repointing/ rendering • External timber repair • Rising / falling damp repair • Removal of paint finishes from external masonry surfaces and original timber/metal surfaces • Repairs to historic fences • Repair/stabilisation of ruins and underground workings 	<p>Seek the advice of a Heritage South Australia heritage officer before undertaking conservation repairs to dilapidated building fabric.</p> <p>Works that are considered to materially affect the heritage values of the State Heritage Area require development approval.</p> <p>The Relevant Authority (Copper Coast Council), in conjunction with Heritage South Australia, can provide advice confirming if works are likely to materially affect the heritage values of the State Heritage Area.</p>



Group of Cornish and Australian born descendants working at Moonta Mines, State Library of South Australia, SLSA B 12593, circa 1894.





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