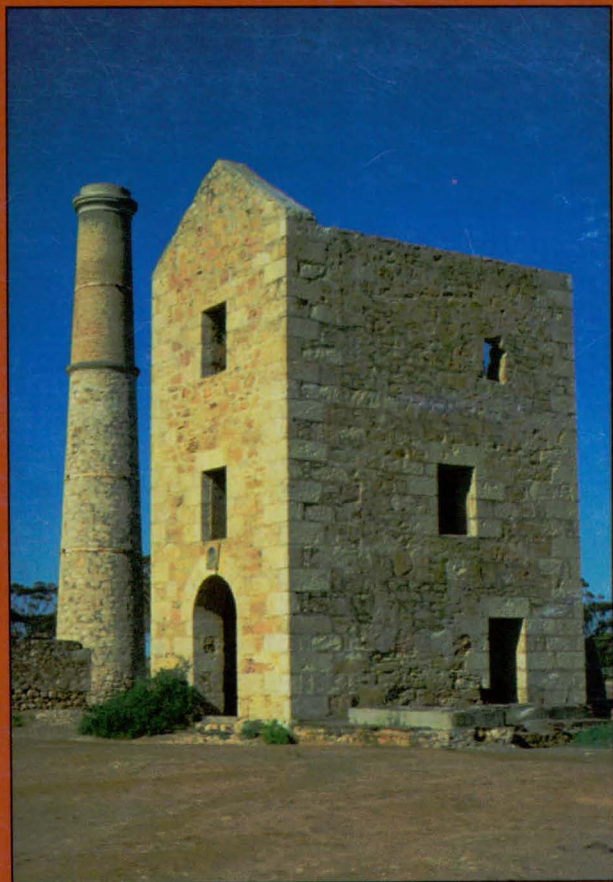


# DISCOVERING HISTORIC MOONTA

South Australia



DISTRICT COUNCIL OF THE COPPER COAST

Layout and Design by G.J. Drew

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FRONT COVER: Hughes Enginehouse, Moonta Mine.  
This famous landmark was erected in 1865 and contained a 60-inch Cornish pumping engine which operated until 1923. PIRSA 039633

BACK COVER: Miner's Cottage, Moonta Mines.  
This cottage was built of local limestone in about 1870 and is now a National Trust museum depicting the typical home of a Cornish miner.  
PIRSA 039634

**DISCOVERING  
HISTORIC MOONTA  
South Australia**

**G.J.DREW**

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# DISCOVERING HISTORIC MOONTA

## INTRODUCTION

The discovery of copper ore near Kadina in 1859 was followed by a second discovery in 1861 about 15 kilometres to the south. These discoveries led to the formation of the Moonta and Wallaroo mining companies which eventually amalgamated in 1890.

The Moonta Mine developed rapidly and, in 1863, the town of Moonta was established. The Corporation of Moonta was proclaimed in 1872 and, by 1875, the district had a population of about 12,000 making it the largest centre outside Adelaide.

The closure of the mine in 1923 led to a rapid decline in population, particularly in the mines area where many houses were left to ruin or were demolished. Moonta, however, survived as an agricultural and service centre. Since the 1970s, there has been a resurgence in trade due to the needs of the tourism industry.

The mine attracted a large population of Cornish miners and the Cornish influence was very strong. Today, Moonta has a rich Cornish heritage which has resulted in the area being named Australia's Little Cornwall.



*Moonta Mine, c.1900*

*In the foreground is the residential area of Moonta Mines with Hughes Enginehouse in the distance. Note the distinctive stake fences to keep out feral goats. PIRSA N011239*

# MOONTA MINE

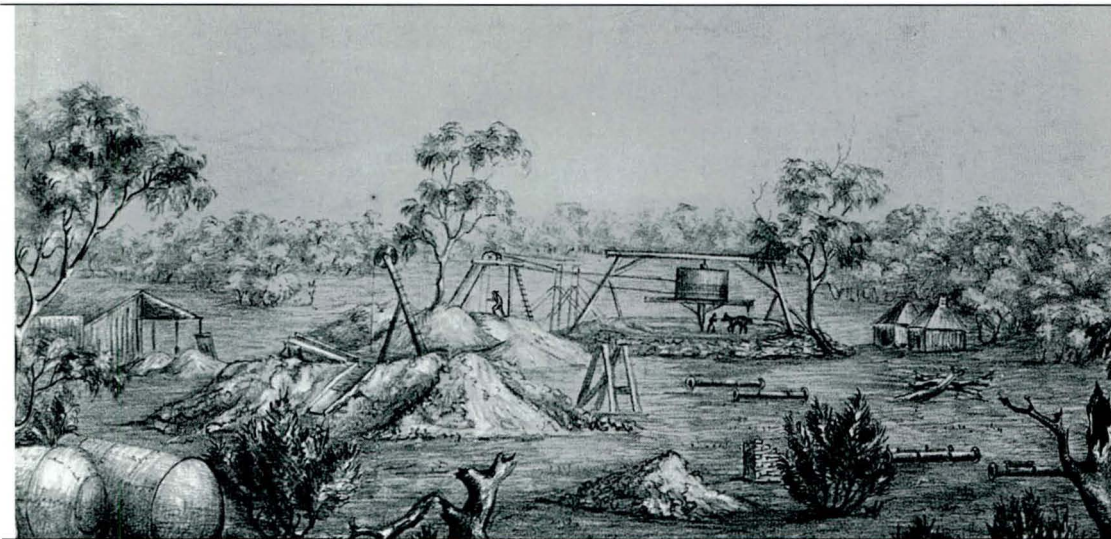
## HISTORY

### *Discovery*

In May 1861, a shepherd, Patrick Ryan, discovered traces of copper in earth burrowed out of a wombat hole on the pastoral lease of W.W Hughes. The discovery was made in a patch of dense scrub known by aboriginals as Moonta-Moontera. Ryan confided his secret to the owner of the Port Wakefield Hotel who attempted to register a mining claim but did not have the exact location. As a result, a syndicate was formed to survey the site and secure the leases.

Simultaneously, Hughes heard of the discovery, surveyed the site and dispatched William Horn to Adelaide to register the survey plan ahead of the rival syndicate who had a 17-hour head start. The plan was received by Hughes' agent, John Taylor, the following morning. Taylor and the rival syndicate were present when the Lands Department office opened at ten o'clock but Taylor received first attention and was subsequently able to secure mining leases over the discovery area.

Hughes formed the Tipara Mining Association (later the Moonta Mining Co.) and began operations in late 1861 causing a rush of miners from the Burra and Wallaroo mines. The discovery also created a rush for leases in the vicinity and numerous companies were formed including Karkarilla (later Hamley), Yelta, Paramatta and Poona. However, none of these smaller mines proved as rich or successful as the Moonta Mine.



*Elders Shaft, Moonta Mine by W. Wyatt, 1863.  
In the centre is a horse whim used for haulage. Hughes Enginehouse (Locality 43) was erected at this shaft in 1865. PIRSA 039635*

## *1862-1900*

The mine was rich from the outset, with nearly 5000 tons of ore worth £67,350 produced in the first year of operation, on which a dividend of £10 per share was paid on the 3200 shares. As a result, no further capital was required to finance the mining operations.

The mine was managed by Captain James Warmington and, later, by his brother William until the dismissal of the latter in 1864, when Captain H.R. Hancock was appointed chief captain, a position he held until his retirement in 1898. Under Hancock, the mine developed rapidly and, by 1865, about 1200 men and boys were employed. Hughes 60-inch pumping engine was erected at a new vertical shaft on Elders Lode in 1865 and operated until closure of the mine in 1923, the longest serving Cornish beam engine in Australia.

By 1870, more than 5000 people were dependent on the mine, which was producing annually more than 20,000 tons of dressed ore, averaging about 20% copper. Two additional Cornish engines had been erected along the line of the main lode, Prankerds winding engine and Richmans Engine, which was used principally to power crushing and dressing machinery.

A fourth beam engine, Hancocks, was erected near Bowers Lode in 1874 to power a crushing and concentrating plant. Captain Hancock was responsible for the development of ore treatment methods at Moonta, introducing the famous Hancock mechanical jig and improved buddles, which were erected at three treatment plants, Hancocks and Richmans, powered by beam engines, and Ryans, powered by a horizontal engine. Hancock also introduced wire rope and skips in place of chain and kibbles and, later, mechanical drills powered by compressed air.

By 1876, Moonta was the first mining company in Australia to pay £1 million in dividends. At that time, employment reached a peak of nearly 1700 men and boys, but depressed copper prices in the late 1870s brought widespread unemployment. Little development was carried out in the 1880s, when low copper prices resulted in the company's first losses.

When the Moonta and Wallaroo companies amalgamated in 1890, ore worth £5.6 million had been raised from the Moonta Mine.

## *1900 - Closure*

After 1900, the lodes became unproductive at depth and work extraction of ore above the 300 fathom (549 metre) level. Hancocks Engine was dismantled and Prankerds winding engine was replaced by a modern horizontal steam winding engine at Taylors Shaft, where a new headframe and sorting plant were erected. In contrast, the Wallaroo Mine was developed and modernised with great urgency and surpassed Moonta as the larger ore producer.

In 1901, the cementation (leaching) process was established for the extraction of copper from the large tailings (waste) heaps which had accumulated at the three concentration plants.

After the First World War, activity and prosperity was further curtailed due to a sharp drop in copper prices and limited ore reserves. In 1923, the company went into voluntary liquidation after 2000 workers at Moonta and Wallaroo refused to accept a drastic cut in wages.

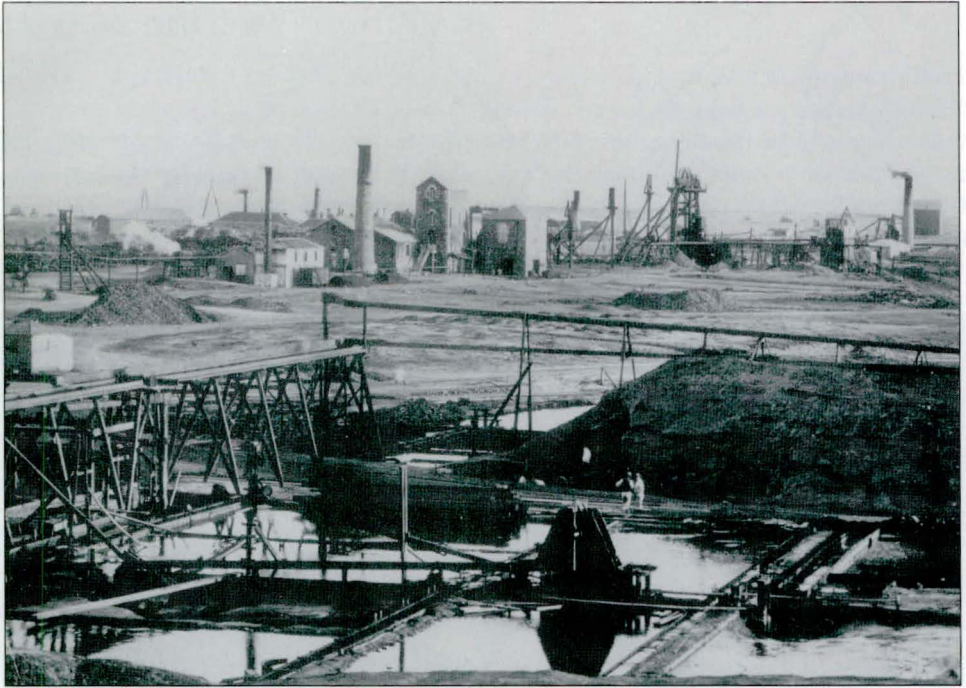
Small scale mining and prospecting continued until the late 1930s; some high grade ore pillars were mined at shallow depths. Leaching of tailings dumps continued until 1943. In the 1930s, the Commonwealth and State governments subsidised mining at Moonta and a new headframe was erected at Smith Shaft. A flotation mill was installed in 1933 and operations continued until 1938. Although a financial loss, the scheme employed up to 70 men during the depression years.

Exploratory drilling by the South Australian Government from 1909 until 1949 discovered further mineralisation, and, since 1960, exploration companies have located many zones of copper mineralisation, several of which have proved economic. A small orebody near the Poona Mine was mined by open cut between 1988 and 1992, and Wheal Hughes, just north of Moonta was worked by open cut and underground methods between 1990 and 1994. These two mines produced a total of 18,000 tonnes of copper from 376,000 tonnes of ore.

### *Facing Page*

*Upper: Moonta Mine looking south from Richmans Tailings Heap, 1898.  
In the foreground are settling pits for slimes from Richmans concentration plant.  
In the background are from left to right, Prankerds Enginehouse, Taylors Shaft  
and Hughes Enginehouse. PIRSA 039636*

*Lower: Moonta Mine looking south along the main lode, c.1915.  
In the foreground is Richmans Enginehouse and concentration plant.  
PIRSA 039637*



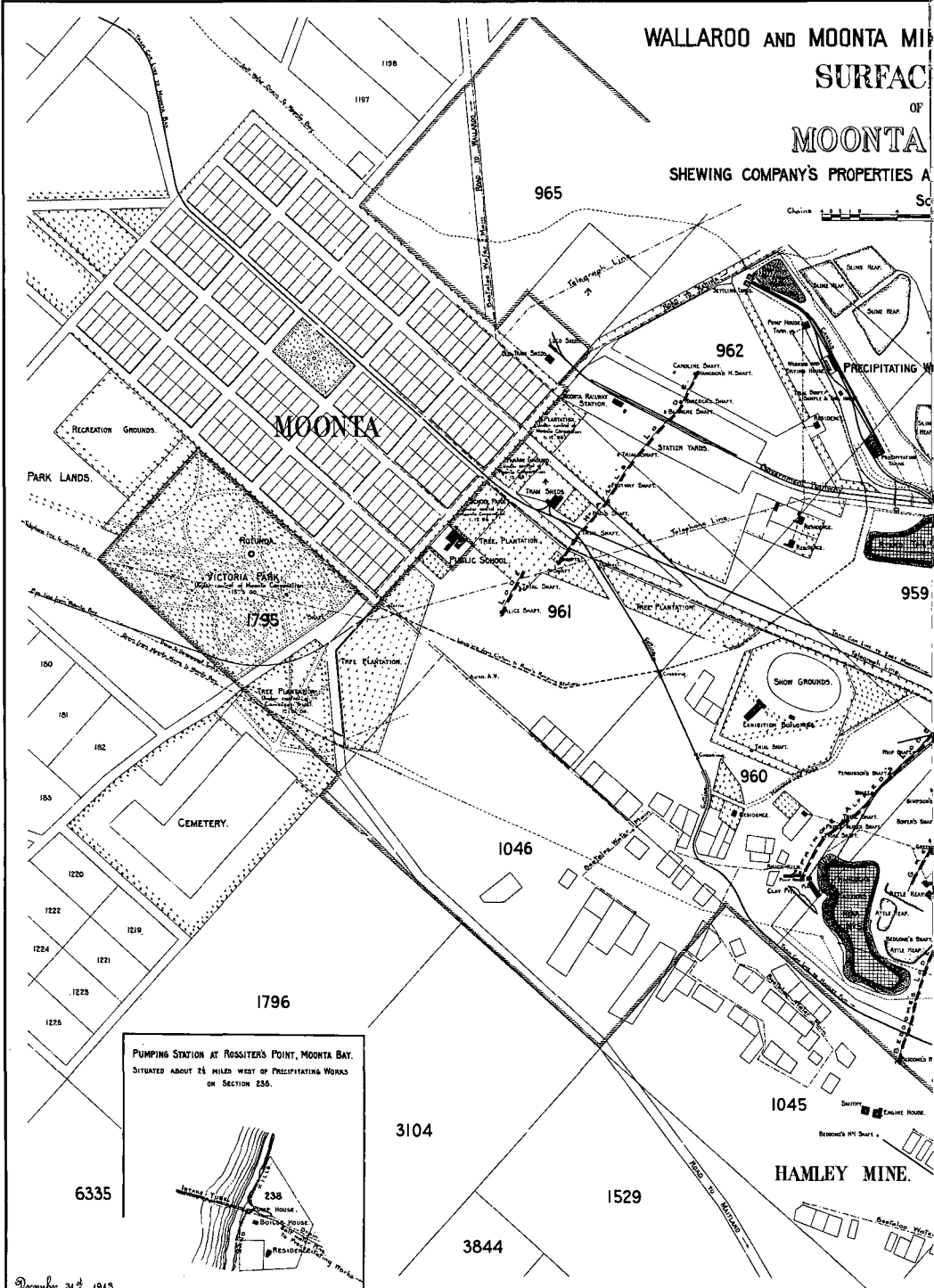
WALLAROO AND MOONTA MINE

SURFACE

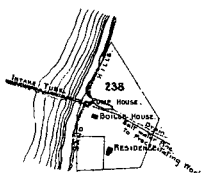
OF  
MOONTA

SHEWING COMPANY'S PROPERTIES A

Scale 1:10000



PUMPING STATION AT ROSSITER'S POINT, MOONTA BAY.  
SITUATED ABOUT 2 1/2 MILES WEST OF PRECIPITATING WORKS  
ON SECTION 236.



December 31st 1915

NING AND SMELTING COY., LTD.

# PLAN

## THE MINES.

ND SECTIONS SUBURBAN TO MOONTA.

ale  
0 10 20 Chains.

963

DPKS.

958

1152

1061

1497

1002

YELTA MINE.

1001

957

1064

930

956

955

1521

1520

933

954

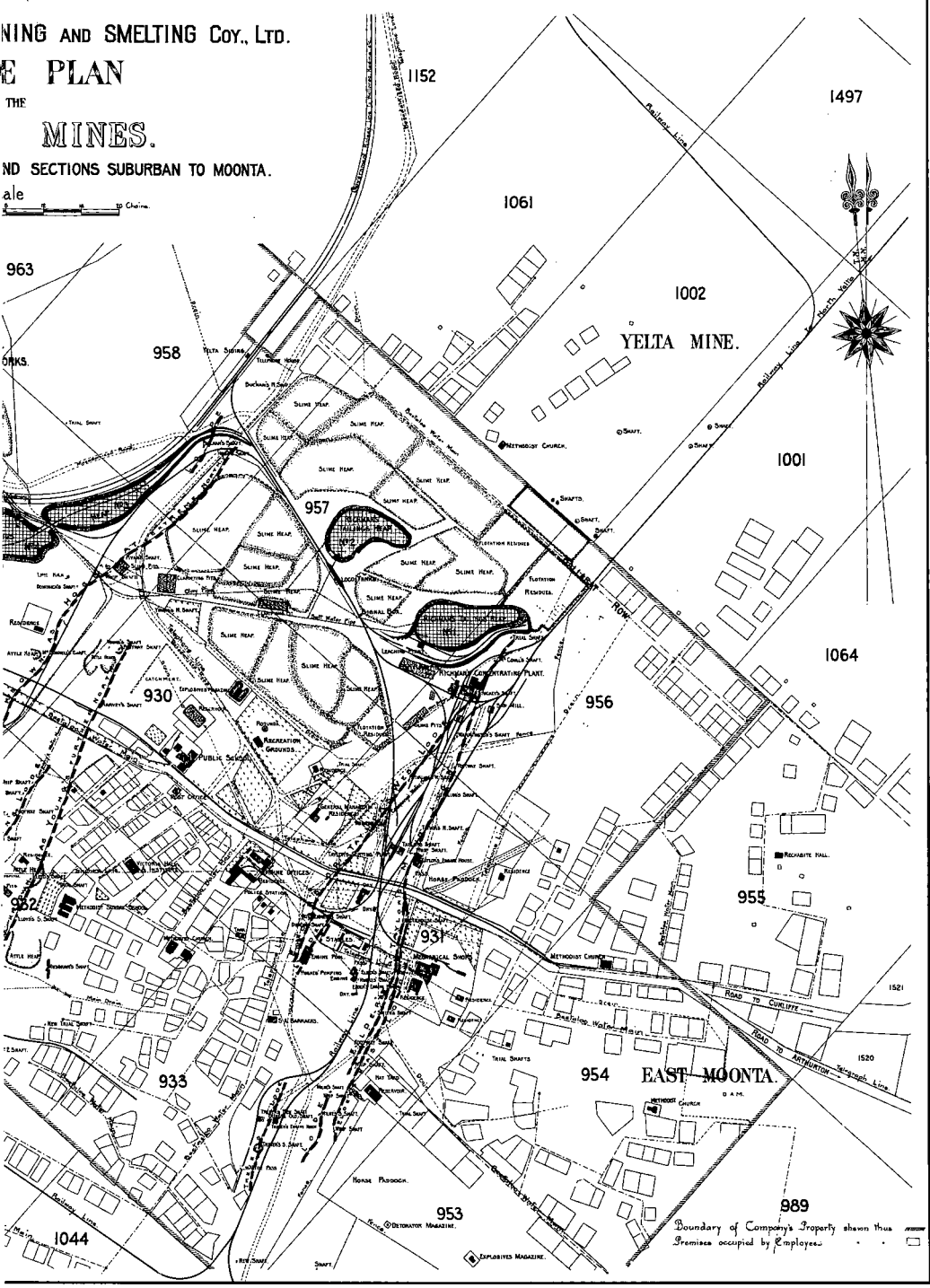
EAST-MOONTA.

953

989

1044

Boundary of Company's Property shown thus  
Premises occupied by Employees.



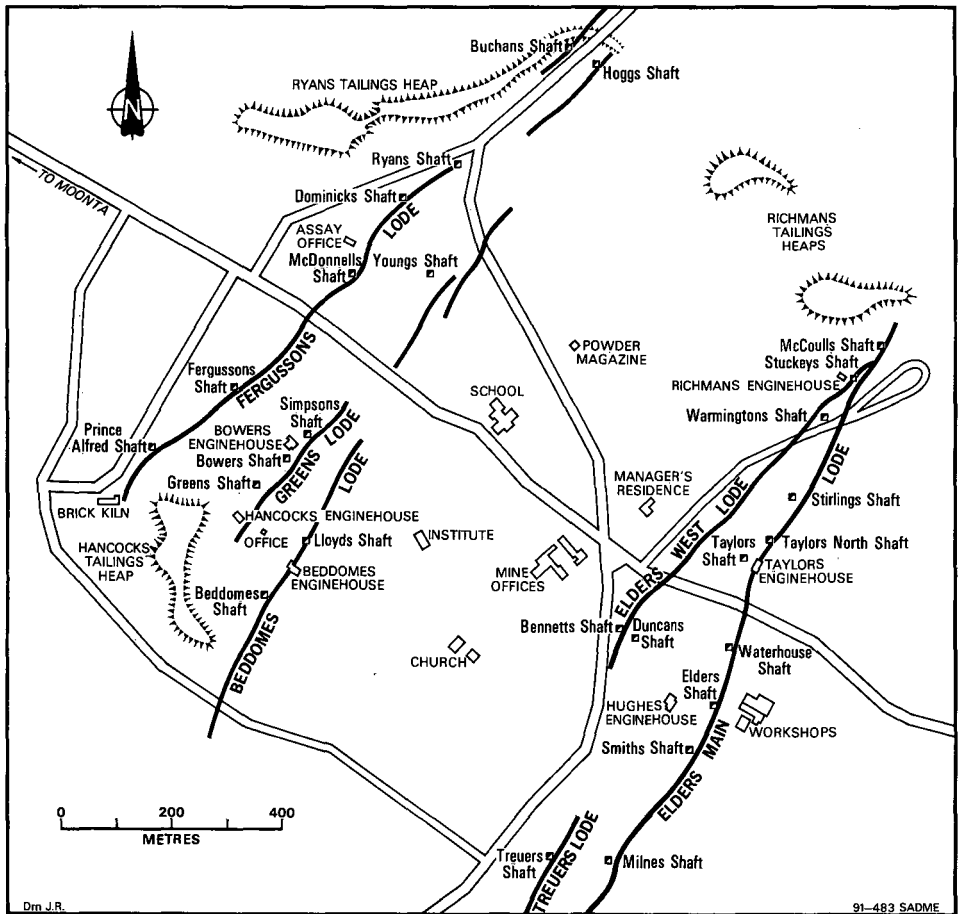
# PRODUCTION

Total production of the Moonta Mine from 1860 to 1923 was about 170,000 tonnes of copper metal valued at £10.7 million, of which about half was produced up to 1890.

# GEOLOGY

The Moonta orebodies or *lodes* consisted of pegmatitic and quartzose veins filling fractures within a sequence of ancient volcanic rocks known as the Moonta Porphyry.

Five major lodes were discovered and worked within the mine area. These lodes, which ran north-south and dipped westerly at 40° to 65°, were up to 1500 metres long and 10 metres wide with a vertical extent of up to 700 metres. Productive veins within the lodes were fairly regular and for many years yielded up to 30% copper. During the early years, rich deposits of considerable extent called *wallows* contained many hundreds of tonnes of high-grade ore. By 1900, this rich ore was largely worked out, leaving only low-grade ore.



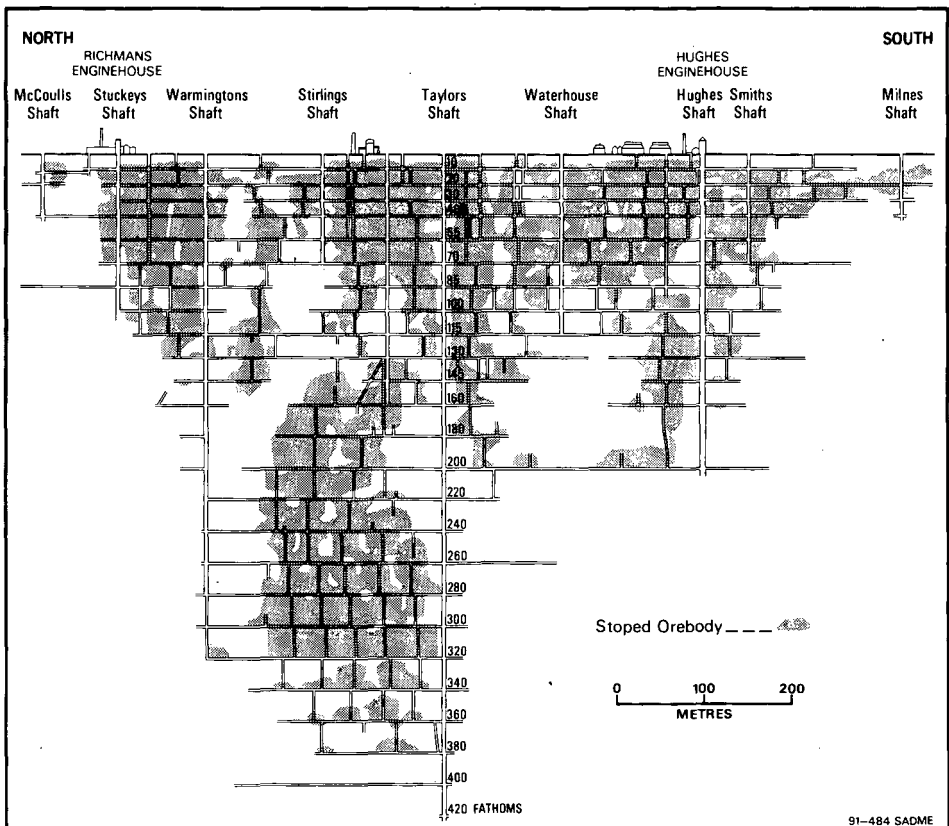
Moonta Mine, c.1910, showing major lodes, shafts and buildings.

The principal ore minerals in the Moonta lodes were chalcopyrite and bornite (copper sulphides) in a matrix of quartz, feldspar and biotite.

The main lodes from east to west were:

- **Elders (or Taylors) Lode**, which was the most persistent, occurring over a length of about 1000 metres at the surface and extending to a depth of over 700 metres.
- **Elders West Lode**, which was worked for more than 40 years producing large quantities of payable ore principally above 366 metres.
- **Beddomes Lode**, which was worked to a depth of 368 metres.
- **Greens Lode**.
- **Fergussons (or McDonnells) Lode**, which extended for a length of about 1500 metres.

Because of the relatively soft ore, the working shafts at Moonta were usually sunk on the *underlay* down the lode and wheeled skips were used for ore haulage.



*Longitudinal cross section along Elders Lode.*

## MOONTA TOWNSHIP

The Government township of Moonta was surveyed in March 1863 on a grassy plain midway between the shafts and the sea, the name being derived from the aboriginal Moonta-Moonterra meaning *impenetrable scrub*. It was laid out in a symmetrical grid pattern with a central square and surrounded by parkland reserves and cemetery. Allotments were auctioned in April 1863 but the town was initially slower to develop than nearby Kadina or Wallaroo.

Commercial buildings were the first to be established in Moonta as most miners continued to live on mining leases. The area east of the central square, along George and Ryan Streets, became the centre of business because of its proximity to the main road and the mines. In response to the prosperous mining operations after 1865, the commercial structure of the town began to expand, resulting in the town's most vigorous building period, which continued to the mid 1870s.

By 1870, the population of the Moonta district reached 10,000 of whom more than 6000 lived on mining leases, and all building blocks in the town had been sold. When the mines flourished after 1900, the new prosperity was again reflected in town growth. However, there was a rapid decline in population after the closure of the mines and, by 1926, there were only 1350 residents.

There is a consistency in Moonta's buildings, both residential and commercial, which gives the town its historical significance and character. This consistency is the result of the town's economy virtually standing still after the closure of the mines in 1923 until recent years when development began to increase with the tourism upsurge. Most of Moonta's buildings were built in the period between 1865 and 1920 and are constructed of random limestone rubble walls with brick quoins and surrounds to openings; only a few are built of faced stone. Housing styles range from early pug cottages to decorated Victorian villas with bay windows and ornate detail on verandahs. Some of the earliest dwellings have front walls built on footpath boundaries.

## MINING SETTLEMENTS

The settlement of the mining areas, by predominantly Cornish miners, evolved in a sudden haphazard form as temporary dwellings were constructed on mining leases adjacent to the mine workings. A lack of social planning and the influence of the Cornish culture led to *village* settlement patterns, clustered around the mines themselves.

The major settlements or villages were **MOONTA MINES, HAMLEY FLAT, EAST MOONTA, YELTA, NORTH YELTA and CROSS ROADS**. These settlements were overwhelmingly Cornish, consisting of miners cottages built in an *ad-hoc* fashion by arrangement with the mining companies and the area was strikingly reminiscent of Cornwall.

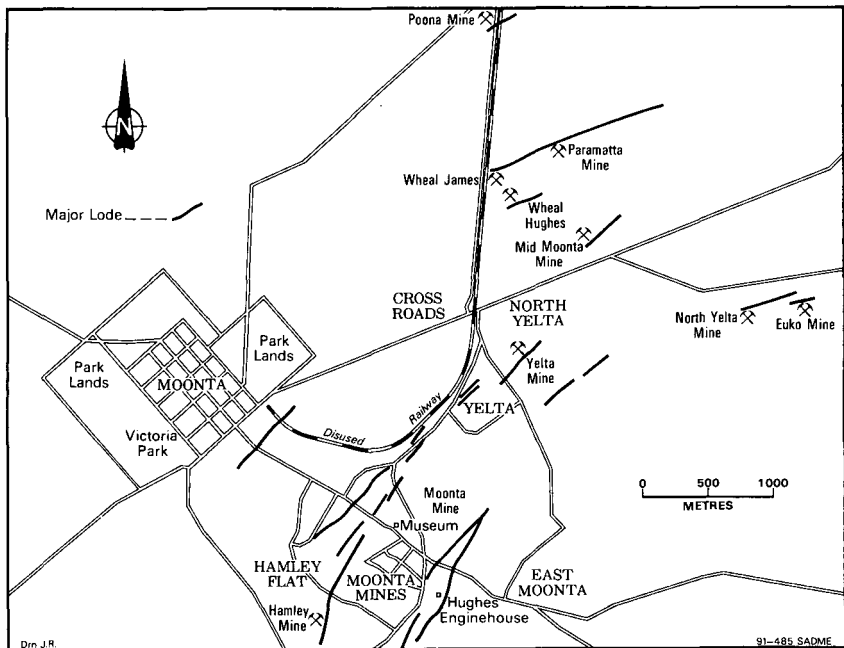
The earliest dwellings were of a primitive nature using pine and canvas, but as mining became established, small squat cottages were built by miners after their shifts and often in stages, using wattle and daub (clay reinforced with saplings) or limestone rubble and clay.

During the 1860s, large industrial buildings were erected along the line of the main lode and the Moonta Mines residential core was established in the centre of the mining area on the mining leases with easy access to the workings. This centre focused on the Moonta Mines Methodist Church, built in 1865, which formed an integral part of the Cornish lifestyle.

Smaller clusters of residences were also established near the present National Trust Cottage and at Yelta and Hamley Flat, whilst early development began at Cross Roads and North Yelta on the main road from Kadina. This resulted in a landscape of low cottages and large mining structures.

During the 1870s, there was further expansion at the Moonta Mine, which reached its peak during this period. Government planning and provision of community facilities increased during the late 1870s, with erection of Government schools at Moonta and Moonta Mines and additional churches at smaller residential areas such as Cross Roads, North Yelta and East Moonta.

The closure of the mines led to a rapid decline in the mining population and many of the houses were left to ruin or were demolished. Today, only small pockets of cottages remain - the main settlement near Moonta Mines Church, around the National Trust Cottage and on Hamley Hill, and the rows along the main road at Cross Roads and North Yelta. The remaining cottages are sparsely scattered around the mine site. By contrast the Government township of Moonta has survived largely intact as an agricultural and service centre and more recently as a tourist destination.



*Mines and settlements in the Moonta district.*

# MOONTA HERITAGE TRAIL

## INTRODUCTION

The Trail starts (and ends) at the Moonta Town Hall and is a leisurely drive of about 16 kilometres which can be completed in 1 to 2 hours. The Trail gives visitors a balanced impression of the history and development of Moonta and adjacent mining settlements. Simply follow the distinctive Trail signs (Tourist Drive No. 38).

*Note that many of the buildings featured in this book are privately owned. Please respect the privacy of owners.*

### 1. TOWN HALL - 1885

- The Town Hall was erected in 1885 by Pollard and Cowling of Moonta to the design of Thomas Smeaton of Adelaide.
- The clock tower and clock was added in 1907 with funds raised by the Institute Committee and a donation by Miss Lutze.
- The drinking fountain near the corner was presented by Mayor Symons in 1890 to mark the arrival of a reticulated water supply.



*Town Hall, c.1900, prior to erection of the clock tower. PIRSA 039638*

*After leaving the Town Hall, proceed west along George Street and on your left is:*

## **2. QUEENS SQUARE - 1897**

- Queens Square was named in honour of Queen Victoria on the 25th anniversary of the incorporation of the Town of Moonta in 1897.
- The square was part of the original survey of Moonta and was quarried for building stone in Moonta's early years. It was first planted in 1880.
- The fountain at the centre of the square was presented to the town in 1893 by the first mayor, Charles Drew.

*Continue along George Street noting on your right:*

## **3. ROW COTTAGES - c.1865**

- This row of four cottages, built right on the footpath boundary, was erected about 1865.
- They are very similar to row cottages erected in the mining towns of Kapunda and Burra.

## **4. EARLY COTTAGE (No. 82) - c.1865**

- This cottage is typical of the simple miners' cottages built during Moonta's early development.
- It is smaller and lower than surrounding later cottages with lean-to addition at the back and a small verandah added to the front.

*Continue to the corner of GEORGE STREET and FRANCES TERRACE on the boundary of the parkland belt. On the diagonally opposite corner is:*

## **5. TRAMWAY CUTTING - 1892**

- This small cutting was the route of the horse-drawn tramway that was erected in 1892 and ran from George Street to Moonta Bay until 1931.

*Turn left into FRANCES TERRACE and then left again into ROBERT STREET. Continue along ROBERT STREET passing an interesting group of early cottages on your right. At the next intersection is:*

## **6. VERCOES SHOP AND RESIDENCE - c.1878**

- This prominent corner shop and residence was built about 1878 for George Vercoe, a former manager of the Yelta Mine.
- The residence features the use of faced stone and the shop has its original facade and front intact.



*Vercoes shop and residence, Robert Street. PIRSA 039639*

#### **7. POLLY'S BONNET SHOP - c.1870**

- This corner residence is referred to as Polly's Bonnet Shop in the novel *Not Only in Stone*.

#### **8. METHODIST CHURCH - 1873**

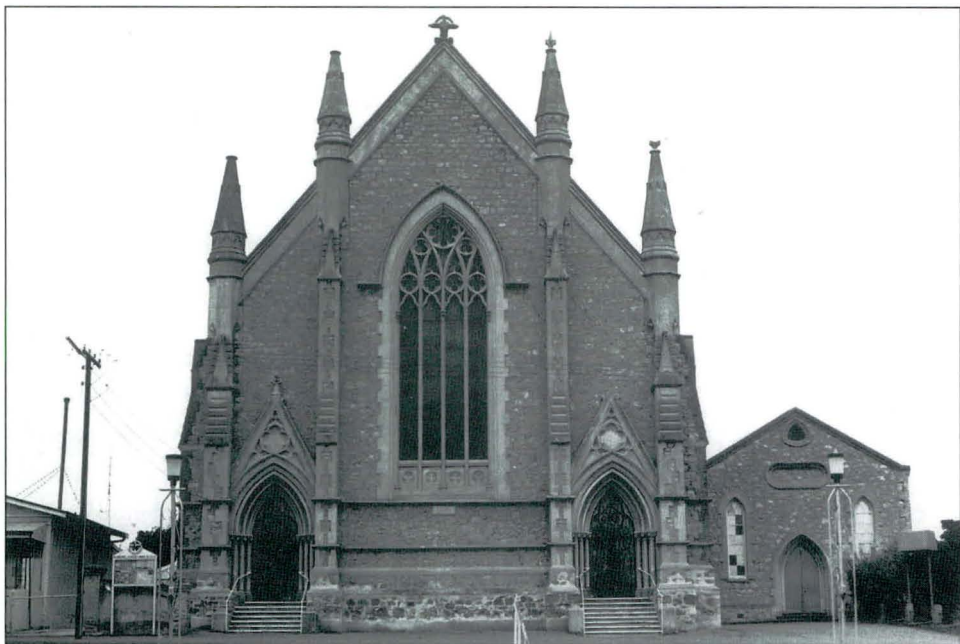
- This Gothic-style church was built for Wesleyan Methodists by Rossiter and Davies (carpenters) and Nettle and Thorn (masons), to the design of Roland Rees of Adelaide.
- The memorial stone was laid by Charles Drew in October 1873.
- The first Methodist services were held at the Moonta Mine in 1861 and soon after a small timber chapel was erected in Moonta.
- The hall alongside was the original church erected in 1866 and enlarged in 1870.

#### **9. BIBLE CHRISTIAN CHURCH - 1873**

- This Italian or Lombardic style church was erected for the Bible Christians by Rossiter and Davies, and Nettle and Thorn to the design of Thomas Jones.
- Sir Samuel Way laid the foundation stone in September 1873.
- The small hall at the rear is probably the original church erected about 1865.
- The building was purchased by the Church of Christ in 1913 and closed in 1976.

#### **10. ROW COTTAGES - c.1880**

- This row of three larger cottages with verandah were erected about 1880.



*Moonta Methodist Church.* PIRSA 039640



*Bible Christian Church and row cottages.* PIRSA 039641

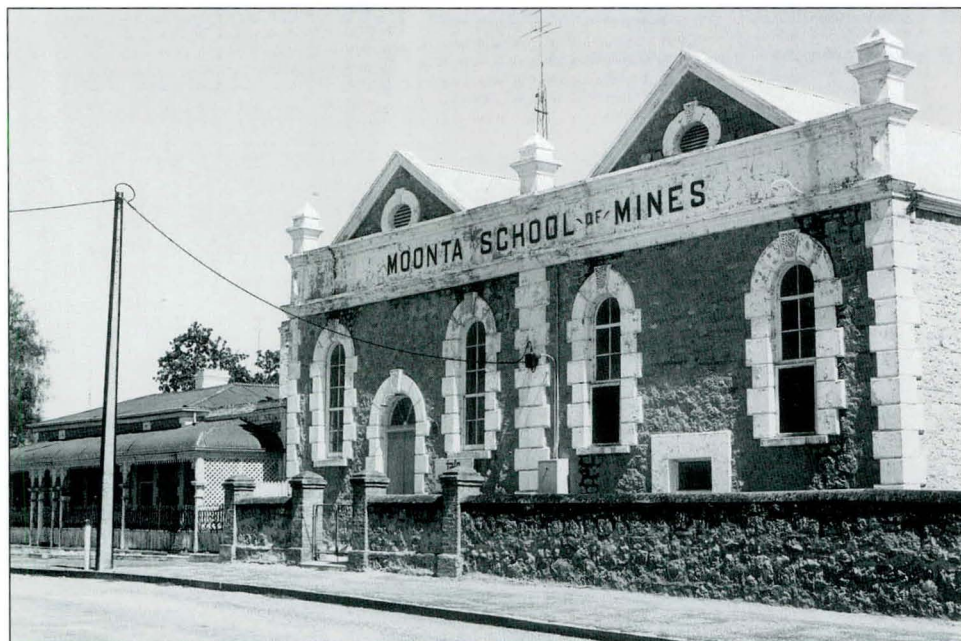
At the intersection of *ROBERT STREET* and *ELLEN STREET* are:

#### 11. SALVATION ARMY HALL - 1901

- The Salvation Army established a corp at Moonta in 1883 and this hall erected in 1901.
- The previous hall was formerly a large wheat store in a lane off Ellen Street.
- The Salvation Army also erected a large wooden hall at Moonta Mines in 1884.

#### 12. SCHOOL OF MINES - 1866/1903

- The southern portion of this building was erected as a Baptist Church in 1866. The adjacent residence (in Ellen Street) is the original Baptist manse.
- The church was purchased by the Government in 1891 and converted for use as a School of Mines, the first outside Adelaide.
- In 1903, the northern portion was added and the words *School of Mines* moulded across the front.



*School of Mines and former Baptist Manse.* PIRSA 039642

Turn right into *ELLEN STREET* past the *School of Mines* and then right again into *CAROLINE STREET* and at the next intersection is:

### 13. FIRE STATION - 1920

- The Moonta Fire Brigade was established in George Street in 1891 following the arrival of reticulated water in 1890.
- This fire station was erected in 1920, when motorised reels were introduced.

*Turn left into WILLIAM STREET and then left again into MILNE TERRACE noting on your right:*

### 14. OVAL AND SHOW PAVILION

- The oval is located in a natural amphitheatre.
- The iron and timber pavilion was originally erected at the old showgrounds near Moonta Mines (Trail Locality 22) in 1901 and transferred to the present location in 1929.

*Continue along MILNE TERRACE noting:*

### 15. COTHELE HOUSE - c.1890

- This large Victorian villa was built about 1890 by William Cowling for his daughter.
- It was originally named Cothele after a grand manor house in Cornwall.
- Note the ornate detail on the verandahs.



*Cothele House, Milne Terrace. PIRSA 039643*

## 16. VICTORIA PARK - 1887

- This green belt is part of the parklands laid out in the original survey of Moonta.
- Tree plantings began in 1887 when the area was named Victoria Park in honour of Queen Victoria's Jubilee.
- In 1891, 40 acres were fenced and planted to encourage natural regeneration.

## 17. ALL SAINTS ANGLICAN CHURCH - 1873

- This was built in early English style by Maddern and Potts (masons), and Hague and Lake (carpenters) to the design of Thomas Jones.
- The foundation stone was laid by Governor Anthony Musgrave in September 1873 and opened by Bishop Short in September 1874.
- The church was built of local stone and bricks from Wood's brickyard near the present National Trust Miners Cottage (Trail Locality 25).
- It replaced an earlier church that was located in Ryan Street near Druids Hall (Trail Locality 54).
- The bell was cast in the Moonta Mines workshops in 1874 using local copper.
- The parish hall was erected in 1903 by William Cowling.



*All Saints Anglican Church.* PIRSA 039644

## SIDE TOUR

*Turn right at the corner of BLANCHE and MILNE TERRACES and about 200 metres distant is the MOONTA CEMETERY. About 9000 burials have taken place since the cemetery was surveyed in 1862. Of particular interest are the graves of prominent Cornish mine captains, and the unmarked graves of several hundred children who died in typhoid and measles epidemics of the 1870s and 1880s.*

*After inspecting the cemetery return to the Anglican Church and continue along BLANCHE TERRACE passing:*

### 18. MASONIC LODGE - 1875

- This was built in 1875 for the Duke of Edinburgh Masonic Lodge and is the oldest masonic hall in Australia.
- It was built by Rossiter and Davies to the design of Thomas Jones.
- The lodge was established in 1869 and held its first meetings in the Royal Hotel.



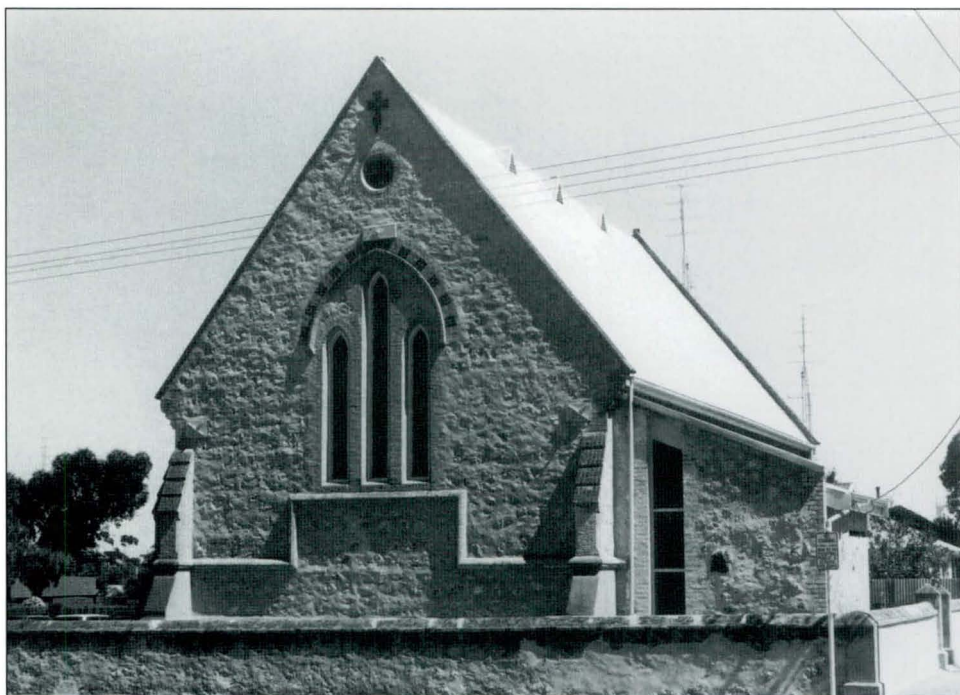
*Masonic Lodge*

## 19. MOONTA SCHOOL - 1877

- The Moonta Model School was erected in 1877 by Rossiter and Davies and opened in 1878 with Edward Pearce as first headmaster.
- A continuation class was established in 1907 and a high school commenced in 1910. The primary and high schools were combined into an Area School in 1978.
- Private schools prior to the Education Act of 1875 were operated by Solomon Jewell, James Sampson, Selena Hancock, Richard Bastian, Mary Harris and John Penalurick, W. Phillips, W. Wiltshire, Simmons and Tucker.

## 20. ST FRANCIS OF ASSISI CATHOLIC CHURCH - 1869

- Catholic services were initially provided by the Jesuit Fathers of Sevenhills, near Clare, from 1861 to 1865.
- The first permanent priest in the district was Father William Kennedy at Kadina in 1866.
- The foundation stone of this church was laid by Bishop Shiel in July 1869.



*St Francis of Assisi Catholic Church.* PIRSA 039646

## 21. MOONTA HOTEL - 1863

- The Moonta Hotel opened in 1863 with H. Latter and W. Olifent as licensees. Olifent held the license from 1864 to 1875.
- The verandah was added about 1890.

*Turn right at the corner of BLANCHE TERRACE and GEORGE STREET and proceed towards the Moonta Mine area, passing:*

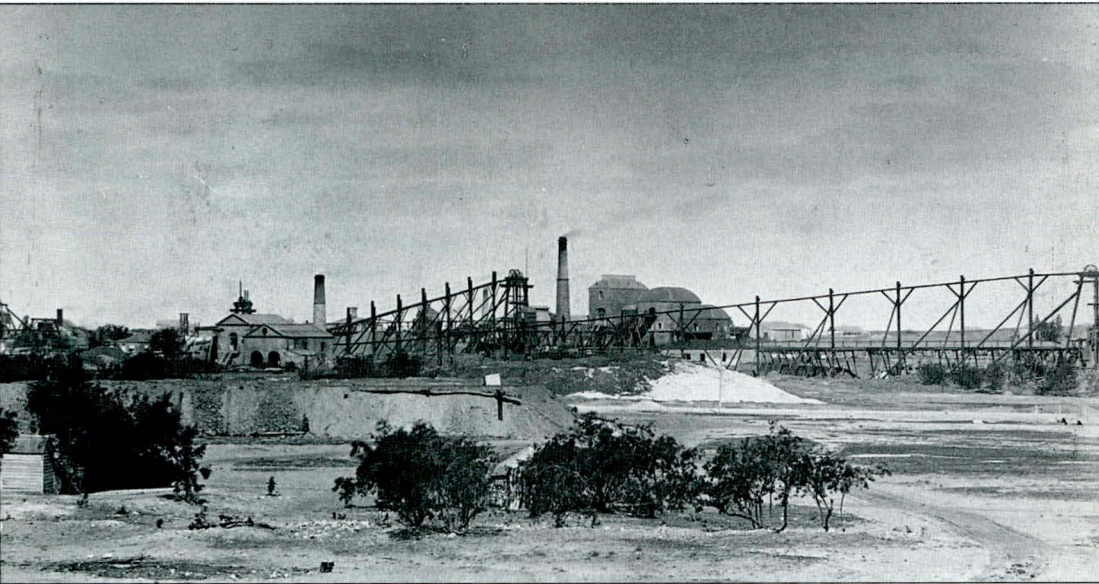
## 22. SITE OF OLD SHOWGROUNDS - 1872

- The area now used by the Pony Club was the site of the showgrounds from 1872 until 1928.
- A show pavilion was erected in 1901 and transferred to the Moonta Oval (Trail Locality 14) in 1929.

*Turn right immediately after the Pony Club and proceed up the hill past old workings on the left towards:*

## 23. ASSAYERS RESIDENCE - 1863

- This larger residence was erected by the mining company in 1863 for the first assayer, Mr Bennett.

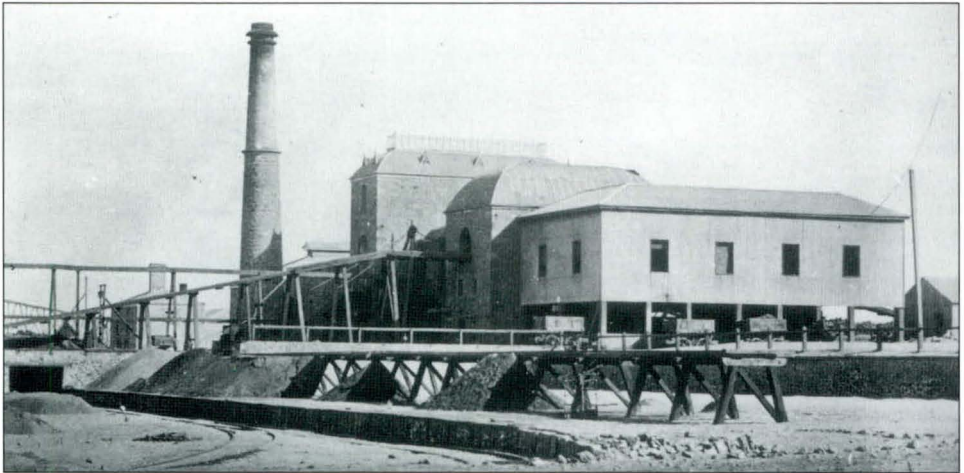


*Moonta Mine, c.1885.*

*This view, taken near Locality 22, shows from left to right Bowers Enginehouse, Greens Shaft, Hancocks Enginehouse and processing plant, and Fergussons Shaft. PIRSA 039647*

## 24. HANCOCKS TAILINGS DUMP

- This dump contains the crushed waste rock or tailings (also known as skimps) from Hancocks processing plant which operated from 1874 until 1900 when mining in the vicinity ceased and the plant was demolished.
- Nearby are several major shafts including Prince Alfred, Fergussons, Greens and Bowers Shafts, extensive ore floors and the foundations of Hancocks Enginehouse and crusherhouse.
- Three major lodes, Greens, Beddomes and Fergussons, were worked in this area to depths of 440 metres.



*Hancocks Enginehouse, crusherhouse and concentration plan, c.1900.*

*The tallest building housed a 35-inch beam engine which powered winding, crushing and jigging equipment. Broken ore was hauled to the crusher up the inclined ramp.*

PIRSA 039648

## 25. MINERS COTTAGE - c.1870

- This cottage was built about 1870 by Mr Wood who operated a small brickworks opposite the cottage.
- It is an excellent example of the early miners' cottages that were once common throughout the mines area.
- The cottage is constructed of limestone rubble walls with brick quoins and chimneys and multi-gabled roof.
- The cottage is now a National Trust museum and depicts the typical home of the Cornish miner, including an authentic garden of the period.

*Turn left into TREUERS STREET and ahead is:*

## 26. Site of **HAMLEY TRAMLINE** - 1896

- The road in this vicinity was the route of the horse-drawn tramway which ran from Moonta to Hamley Flat.
- The surrounding area was known as Hamley Flat and was once covered with cottages for miners from the nearby Hamley Mine.
- The Hamley line, which extended to near Treuers Shaft, closed in 1931 along with the Moonta Bay and East Moonta branches.



*Tramline passing through Hamley Flat, c.1900. Note Hamley Mine at left. PIRSA 039649*

*Continue along TREUERS STREET through **HAMLEY FLAT** noting on the hillside on your right:*

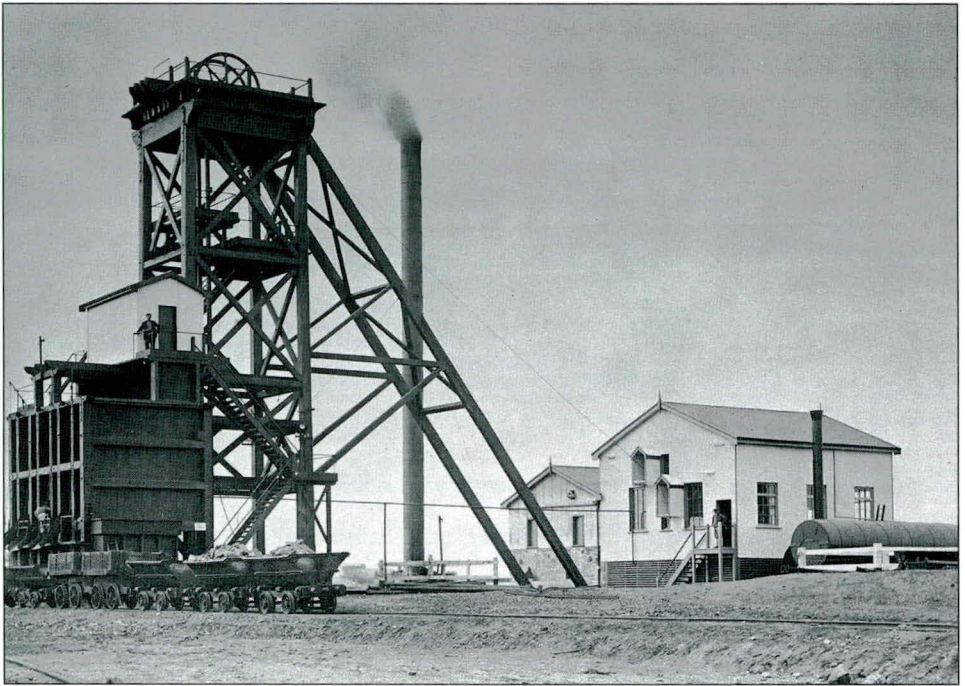
## 27. Site of **HAMLEY MINE** - 1862

- Ore was discovered in 1862 to the south of the Moonta Mine leases.
- The Karkarilla Mining Company was formed with James Warmington as Mine Captain, and worked an extension of the main Moonta lode.
- In 1868, the company was reformed as the Hamley Mining Company, and worked a lode on the adjacent hillside, which was an extension of Beddomes Lode.
- The mine produced about 40,000 tonnes of hand-picked ore from depths of up to 300 metres between 1862 and 1888.
- Notable mine captains were the father and son team of Thomas and Richard Cowling who managed the mine between 1878 and 1888.
- The site contains various shafts, ore floors and the foundations of an enginehouse erected in 1874.

*Proceed to the end of TREUERS STREET and turn left into KARKARILLA ROAD and a short distance ahead on the right are ruins located at:*

## **28. TREUERS SHAFT - c.1880**

- This shaft was named after Mr Von Treuer, private secretary of Mr Barr Smith, a director of the Moonta Mining Company.
- It was located near the southern end of Elders Lode and was a major producing area after 1900.
- In 1906, a new headframe and winding engine were erected, replacing structures built about 1880. The foundations of these structures, which operated until 1923, still remain.



*Treuers Shaft and windinghouse, c.1910. PIRSA 030203*

*Turn left into BOWER STREET noting on the right:*

## **29. HUGHES ENGINE POOL - c.1865**

- The stone walling near the edge of the road was constructed about 1865 to store water pumped from Hughes Shaft.
- The pool is divided into three internal compartments, each measuring 18 metres by 10 metres and 2 metres deep.

Proceed along *BOWER STREET* into the core of **MOONTA MINES** settlement until you reach:

### **30. MOONTA MINES METHODIST CHURCH - 1865**

- This stone church was erected by Wesleyan Methodists in 1865, replacing an earlier wooden chapel. The foundation stone was laid by Captain Hancock.
- A gallery was added in 1872 giving the church a seating capacity of 1250. A pipe organ was purchased in 1890 using a donation by Captain Hancock.
- The two large halls housed the Sunday School which had 649 pupils and 120 officers in 1872.



*Moonta Mines Methodist Church.* PIRSA 039650

Continue along *BOWER STREET* on the western side of the church passing a villa on your left which was the Methodist Manse. On the left on a slight rise near the intersection of *BOWER* and *ELDER STREETS* is:

### 31. Site of **PRIMITIVE METHODIST CHURCH** - 1865

- The pile of rubble and tall gum trees marks the site of the Primitive Methodist Church, which was erected in 1865.
- After the Methodist union in 1900, the building housed the Methodist Sunday School until demolished in 1936.
- The Primitive Methodists encouraged political radicals and three local members entered Parliament as Labor members. Two of these members became State Premiers; John Verran in South Australia (1910-1912) and John Scaddan in Western Australia (1911-1916).

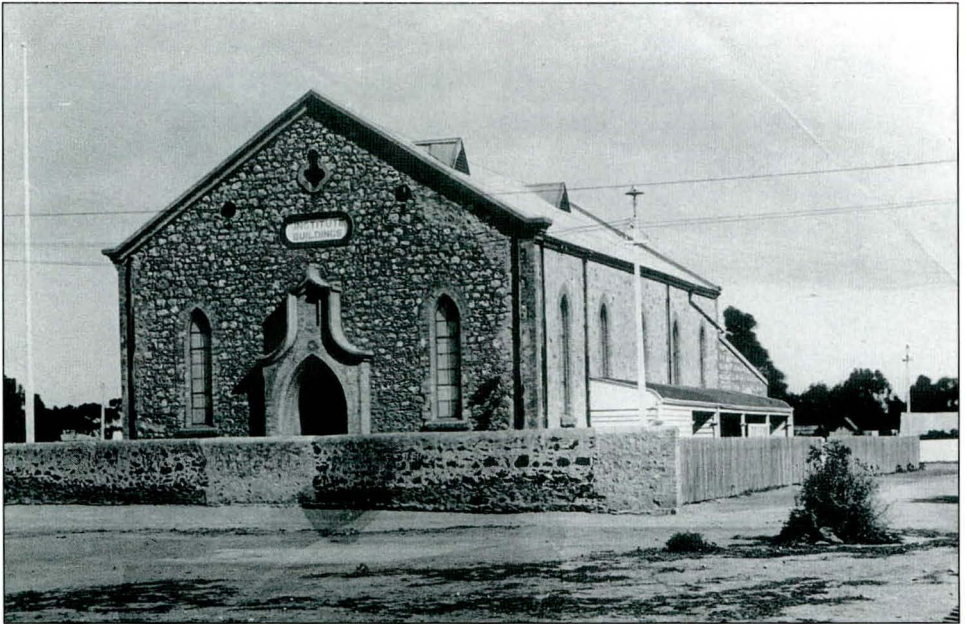


*Primitive Methodist Church, c.1910 (now demolished). PIRSA 039651*

Turn right into *ELDER STREET* and a short distance ahead on the right is:

**32. Site of BIBLE CHRISTIAN CHURCH - c.1865**

- The mound marks the site of the Bible Christian Church which was erected about 1865.
- After the Methodist union in 1900, the building was used as a Church Hall (Victoria Hall) and Institute.
- It was sold to the Rechabites after the mines closed and demolished in 1950.



*Bible Christian Church, c.1910 (now demolished).* PIRSA 039652

Continue to the main road and turn left noting:

**33. Former POST OFFICE - 1946**

- This tiny building was erected in 1946 and operated as a post office until 1976.
- The first Moonta Mines Post Office opened on this site in 1867 and underwent extensive alterations in 1903 and the 1920s.

### 34. MOONTA MINES SCHOOL - 1877

- This building was constructed by Rossiter and Davies in 1877 on land formerly leased by the mining company.
- It opened in 1878 for 800 pupils with William Torr as first headmaster and continued in use as a school until 1968.
- It is now owned by the National Trust and houses a museum which interprets the social and industrial history of the Moonta Mine and town. Adjacent is the starting point of the tourist railway to the Precipitation Works.
- At the rear of the school on the main road is the headmaster's residence.



*Moonta Mines School (now a National Trust Museum). PIRSA 039653*

*Continue along the main road towards Moonta and take the next right turn. On your right amongst the trees is the site of the assay office and McDonnells Shaft. Ahead on the left is:*

### 35. RYANS TAILINGS HEAP

- This dump contains tailings from Ryans processing plant which operated from 1864 until 1906.
- The stone-lined tunnel was erected in 1900 to enable two heaps to be joined as one and allow passage for trains and pipelines to the Precipitation Works on the other side.
- The tunnel was restored and a narrow gauge railway line reconstructed in 1984 to carry tourists to the Precipitation Works interpretive area.
- Ryans Heap, along with other tailings heaps, was subjected to a leaching process to extract copper, between 1900 and 1943.

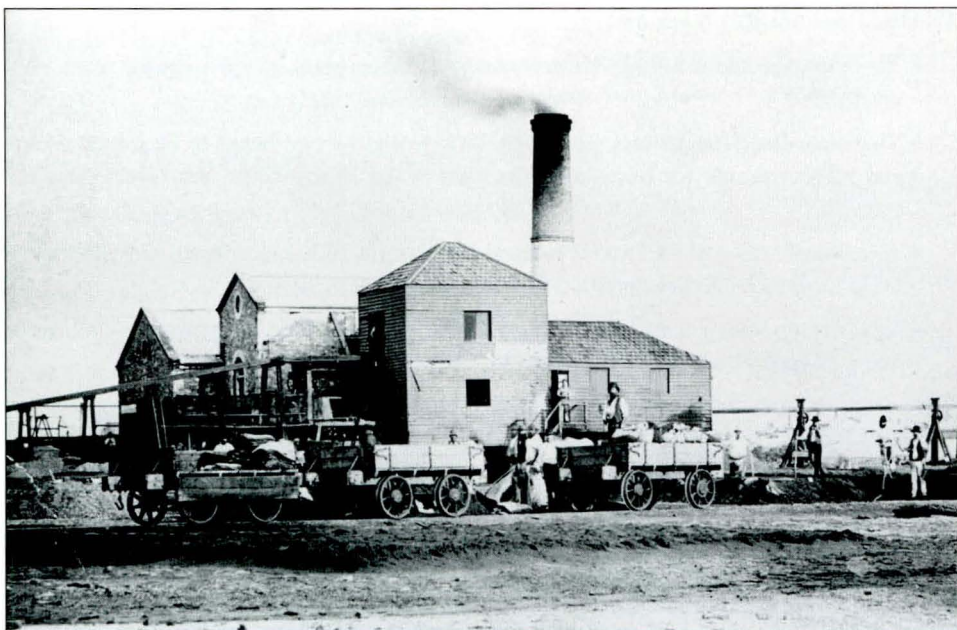


*Ryans Tailings Heap and railway tunnel, c.1910. PIRSA 030225*

*Proceed across the tourist railway line and a short distance ahead on the right is:*

### 36. RYANS SHAFT - 1861

- This shaft commenced in 1861 near the site where Patrick Ryan discovered copper ore on a wombat burrow in May 1861.
- Ryans Enginehouse was erected nearby in 1864 and, in 1865, was the site of the first crusher and processing plant at Moonta. The engine was also used for pumping from several shafts in the vicinity. The enginehouse was demolished in 1906.
- Near the shaft are outlines of rectangular slime pits used to precipitate fines from liquors.
- Ryans Shaft was located on McDonnells Lode (an extension of Fergussons Lode), which was worked to depths of 265 metres up to 1906.



*Ryans Enginehouse and concentration plant, c.1880.*

*From left to right are the boilerhouse, enginehouse, crusherhouse and jiggerhouse, the latter two being constructed of weatherboard and shingles. The engine also operated pumping gear in McDonnells Shaft via flat rods running above the ground to the right. The site is now located just north of Ryans Shaft. PIRSA 039654*

*Turn right into RYAN ROAD and ahead at the rear of the Moonta Mine School is:*

### **37. RESERVOIR - 1873**

- The stone-walled tank, lined with render, was erected in 1873 as a reservoir by the mining company.
- The tank was covered by an iron roof and held 5 million litres for mining use, and for residents during water shortages.

*On the left hand side of the road opposite the Reservoir is:*

### **38. POWDER MAGAZINE - c.1875**

- The large mound of earth surrounds the ruins of a powder magazine erected about 1875.
- Gunpowder was used initially in hand-drilled holes to shatter hard rock. Nitroglycerine was introduced in the 1870s and, later, dynamite was used in machine-drilled shot holes.

*Continue along RYAN ROAD noting the trees on the left which were planted about 1900 as part of the Recreation Grounds. Just before the main road on the left amongst trees is:*

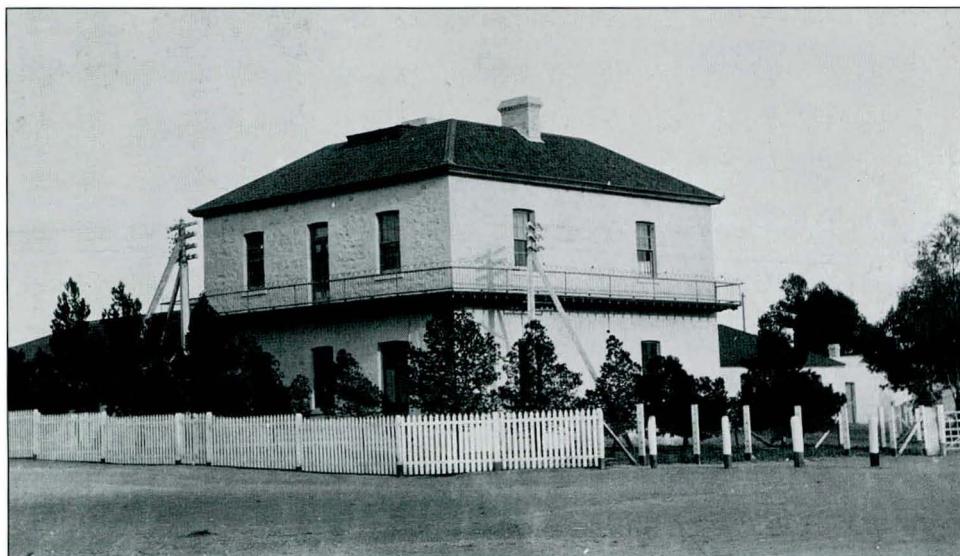
### **39. Ruins of GENERAL MANAGERS RESIDENCE - 1875**

- This former two-storey building was erected in 1875 to house the General Manager of the Moonta Mine.
- Henry Richard Hancock was appointed manager in 1864 at the age of 28 and ran the mine until his retirement in 1898.
- He was succeeded by his son Henry Lipson Hancock who ran the mine until its closure in 1923.

*Opposite the site of the Managers Residence on the other side of the main road is:*

### **40. Ruins of MINE OFFICES - 1875**

- The two-storey mine offices and associated stores buildings were erected in 1875.
- The office was the managerial hub of the mine and from the upper storey Captain Hancock was able to view the whole mine area.
- Several partial walls, cellars and piles of rubble remain.



*Mine Offices, c.1910. PIRSA 030208*

*Turn left at the main road and left again at the road marked RICHMANS ENGINEHOUSE and proceed northwards until you reach:*

#### **41. RICHMANS ENGINEHOUSE - 1869**

- This enginehouse was built using stone from Port Hughes and commenced operation in 1869.
- It contained a 32-inch Cornish beam engine and was used principally for crushing and concentration of low-grade ore.
- Tailings from the concentration process were placed in large heaps which were leached after 1900.
- In 1875, huddles were added to concentrate the slimes from the first concentration process and the resultant fine tailings (slimes) placed in large flat areas.
- In addition to Richmans Engine, other steam engines were erected nearby for a saw mill and compressor house.
- The engine ceased operation in 1917 and was replaced by a gas engine. The enginehouse was stabilised and re-roofed in 1986.
- A lookout from the top of Richmans Tailings Heap provides the best panoramic view of the mine area.

*Return to the main road, following the line of the main lode (ELDERS) which runs from Richmans Enginehouse to Hughes Enginehouse, and passing Warmington and Stirling Shafts. Near the main road is:*

#### **42. TAYLORS SHAFT - 1862**

- Taylors Shaft commenced in 1862 on Elders Lode.
- Hauling was originally by horse whim but, in 1865, Prankerds 30-inch Cornish beam winding engine was erected nearby and operated until 1901 when demolished.
- In 1901, Taylors Shaft became the main ore producing area and a new horizontal steam winder (Taylors) was erected and operated until 1923. Remains of the boiler house and enginehouse remain.
- A large storage bin and sorting plant were also erected in 1901, connected by railway to Richmans processing plant. The base stonework can be seen near the road.
- Taylors Shaft was the deepest at Moonta and eventually reached a depth of 768 metres at a point below Moonta Mines School. Water was pumped by flat rods from Hughes Enginehouse.



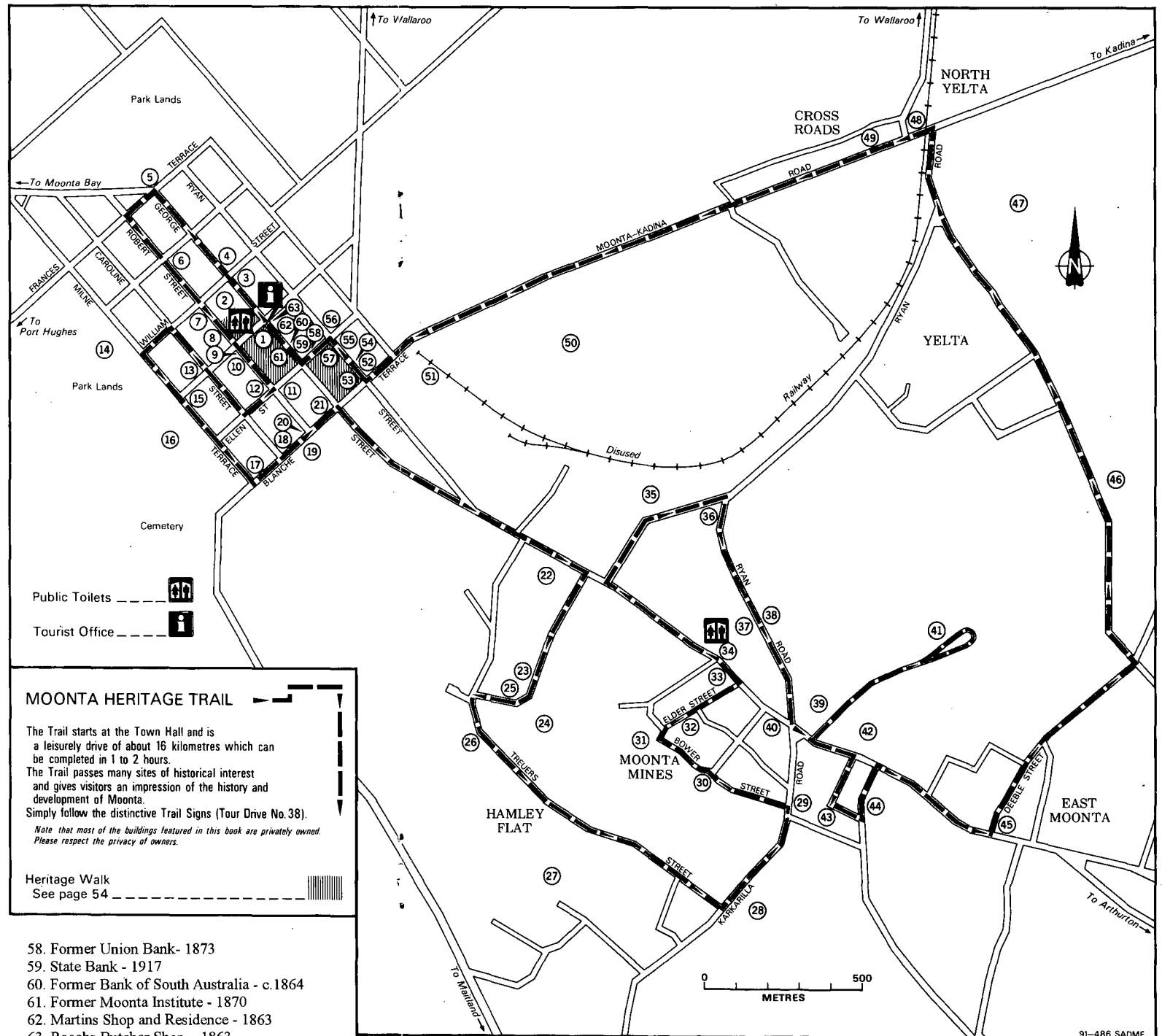
*Richmans Enginehouse and concentration plant, c.1900. PIRSA 033340*



*Taylors Shaft, headframe and ore sorting plant, c.1910. PIRSA 030199*

# MOONTA HERITAGE TRAIL

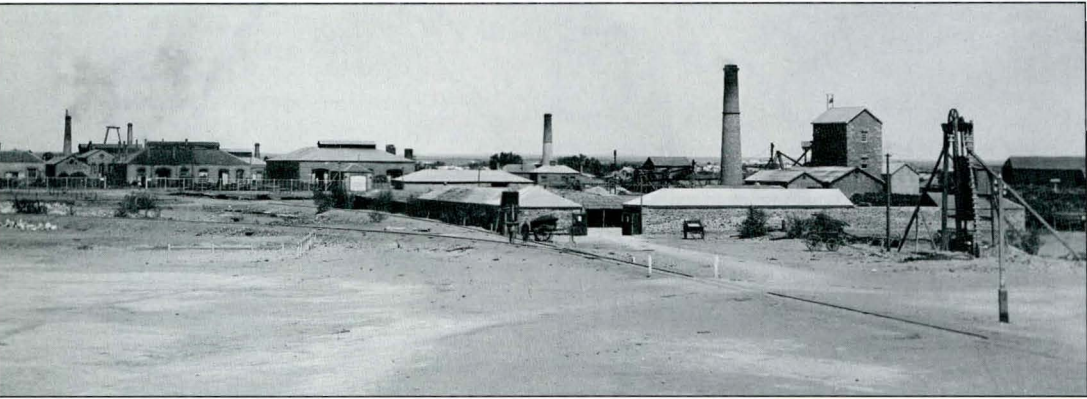
1. Town Hall - 1885
2. Queens Square - 1897
3. Row Cottages - c.1865
4. Early Cottage - c.1865
5. Tramway Cutting - 1892
6. Vercoes Shop and Residence - c.1878
7. Pollys Bonnet Shop - c.1870
8. Methodist Church - 1873
9. Bible Christian Church - 1873
10. Row Cottages - c.1880
11. Salvation Army Hall - 1901
12. School of Mines - 1866/1903
13. Fire Station - 1920
14. Oval and Show Pavilion
15. Cothele House - c.1890
16. Victoria Park - 1887
17. All Saints Anglican Church - 1873
18. Masonic Lodge - 1875
19. Moonta School - 1877
20. St Francis of Assisi Catholic Church - 1869
21. Moonta Hotel - 1863
22. Site of Old Showgrounds - 1872
23. Assayers Residence - 1863
24. Hancocks Tailings Dump
25. Miners Cottage - c.1870
26. Site of Hamley Tramline - 1896
27. Site of Hamley Mine - 1862
28. Treuers Shaft - c.1880
29. Hughes Engine Pool - c.1865
30. Moonta Mines Methodist Church - 1865
31. Site of Primitive Methodist Church - 1865
32. Site of Bible Christian Church - c.1865
33. Former Post Office - 1946
34. Moonta Mines School - 1877
35. Ryans Tailings Heap
36. Ryans Shaft - 1861
37. Reservoir - 1873
38. Powder Magazine - c.1875
39. Ruins of General Manager's Residence - 1875
40. Ruins of Mine Offices - 1875
41. Richmans Enginehouse - 1869
42. Taylors Shaft - 1862
43. Hughes Enginehouse - 1865
44. Site of Mine Workshops - c.1865
45. East Moonta Methodist church - 1872
46. Wild Dog Mine - 1924
47. Yelta Mine - 1861
48. Cross Roads Methodist Church - 1873
49. Cross Roads Primitive Methodist Church - 1873
50. Ruins of Precipitation Works - 1901
51. Railway Station - 1908
52. Royal Hotel - 1865
53. Rossiters Residence and Store - c.1865
54. Druids Hall - 1866
55. Post Office - 1866
56. Cornwall Hotel - 1865
57. Shops - c.1870
58. Former Union Bank - 1873
59. State Bank - 1917
60. Former Bank of South Australia - c.1864
61. Former Moonta Institute - 1870
62. Martins Shop and Residence - 1863
63. Roachs Butcher Shop - 1863



*Turn left at the main road and then right at the road marked HUGHES ENGINEHOUSE and proceed to the enginehouse, noting the ruined walls of the stables on your right:*

#### **43. HUGHES ENGINEHOUSE - 1865**

- This enginehouse was built by John Beaglehole using fossiliferous limestone from Boors Plains.
- It housed a 60-inch Cornish beam pumping engine which operated until 1923. The total cost of erection of the house and engine was £7000.
- A balance bob was added in 1866 and flat rods were connected to a pump in Taylors Shaft in 1868.
- Nearby are the ruins of Elders Enginehouse, Hughes engine pool and stables.



*Hughes Enginehouse from the mine offices, c.1890.*

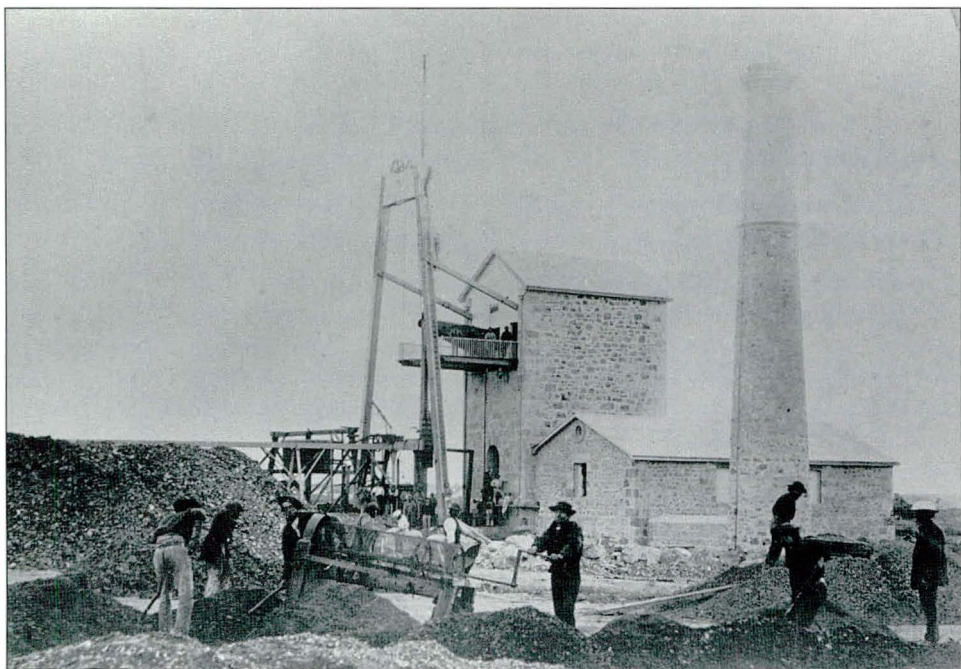
*At left are the mine workshops and in the foreground are the stables and Duncans Shaft.*

PIRSA 039655

*Follow the Trail signs after leaving the enginehouse, noting on the right:*

#### **44. Site of MINE WORKSHOPS - c.1865**

- The first mine workshops were erected in 1865 and were used for building and repairing mining machinery and equipment.
- Buildings included a fitting shop, blacksmiths shop with two steam hammers, pattern store, moulding shop containing three furnaces capable of castings up to 10 tons, and a locomotive workshop.
- The workshops employed up to 300 men and boys and were the largest mechanical workshops in the southern hemisphere.



*Hughes Enginehouse, 1865. PIRSA 039480*



*Mine workshops looking south from Taylors Shaft, c.1890. PIRSA 039656*

Turn right at the main road and proceed until you reach:

#### **45. EAST MOONTA METHODIST CHURCH - 1872**

- The East Moonta Wesleyan Methodist Church was established in 1869 and this church was erected in 1872 with a further section added in 1875.
- The building is now owned by the National Trust and used as a visual storage display and meeting hall.
- A Bible Christian Church and Primitive Methodist Church were also erected at East Moonta in the 1870s.

*Turn left at the church into DEEBLE STREET and proceed through the settlement of EAST MOONTA. This area was once serviced by the Moonta tram which ran to the East Moonta church until 1931. Only a few miners' cottages survive. Turn left at the next intersection and continue northwards noting several shafts close to the road. These belong to:*

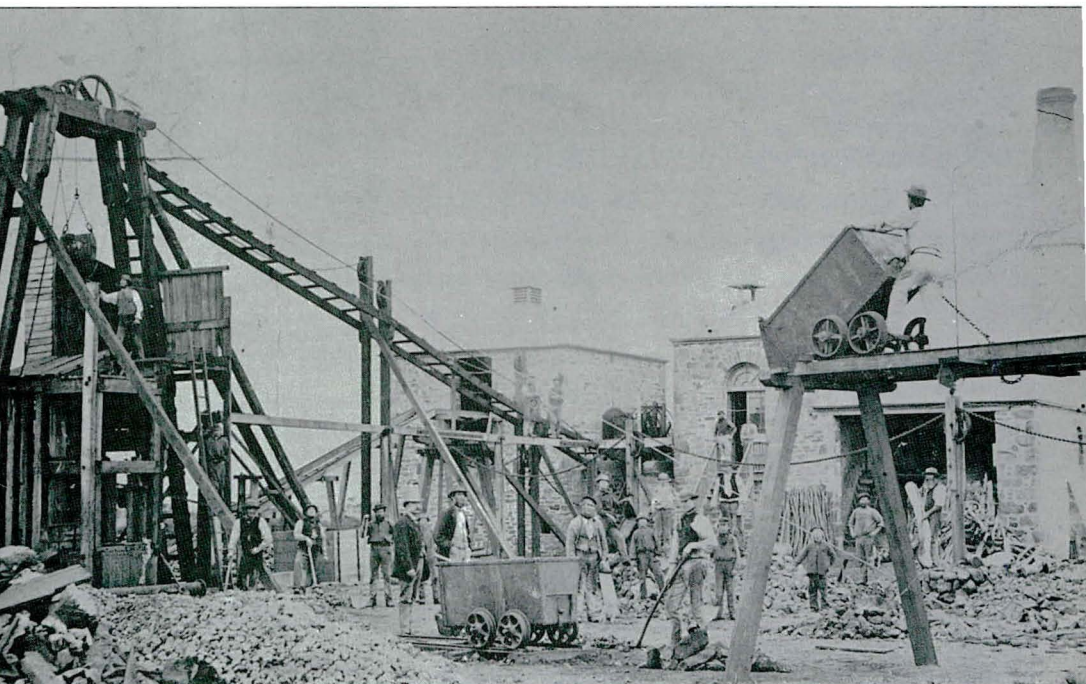
#### **46. WILD DOG MINE - 1924**

- This mine was originally part of the Yelta Mine leases and was first worked on a small scale between 1903 and 1907.
- After the closure of the Moonta Mine, leases covering this site were acquired by Hicks and Hooper, who worked the mine from 1924 to 1927.
- It was reworked with Government assistance between 1928 and 1931, and in 1937.
- The mine produced about 12,000 tonnes of ore to depths of 73 metres.

*Continue northwards noting a group of cottages on the left which are survivors of the settlement of YELTA. On the right, marked by piles of mullock and a low bank of black slag, is:*

#### **47. YELTA MINE - 1861**

- Ore was discovered in 1861 northeast of the Moonta Mine and the Yelta Mining Company commenced operation about 1863.
- The mine was worked on a small scale up to 1870 when a horizontal steam engine was erected.
- From 1870 until closure in 1877, it was managed by Captains Thomas and Richard Cowling.
- In 1903, the mine was acquired by a French company which erected two blast furnaces and operated until 1907.
- It was reworked by the Verran Labor Government between 1910 and 1913.
- Total production was about 20,000 tonnes of hand-picked ore.



*Yelta Mine, c.1875. PIRSA 039657*

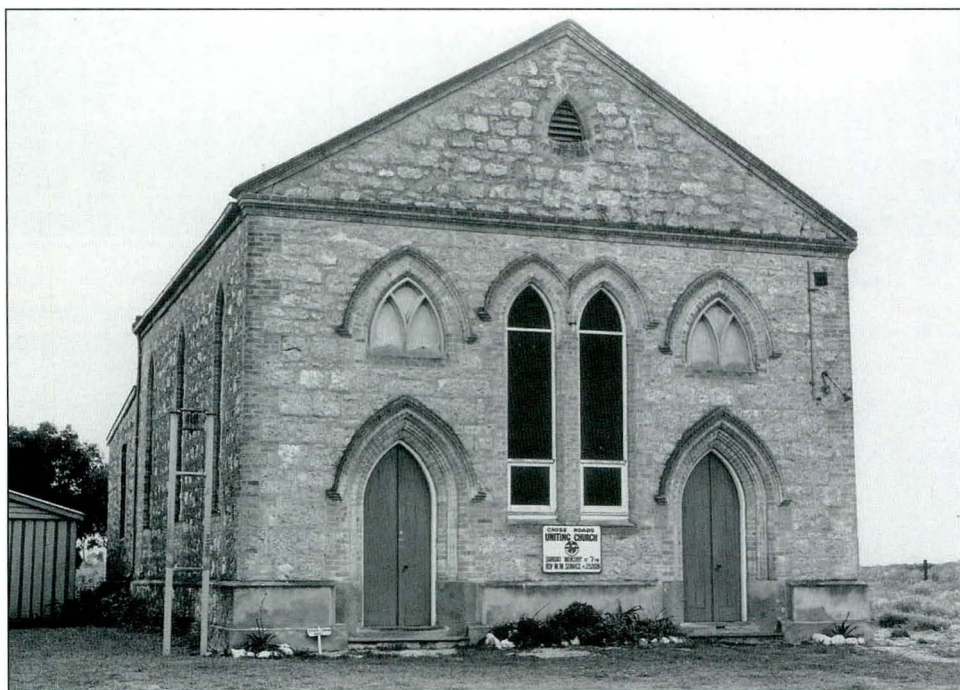


*Yelta Mine, c.1905. The old stone buildings still survive and, at right, is a water-jacketted blast covered by a galvanised iron shed. The small iron building housed a blowing machine which produced the air blast. PIRSA 039658*

Turn right into *RYAN ROAD* and continue until you reach the main bitumen road near the old railway crossing. To your right is the settlement of **NORTH YELTA** and to the left over the railway is **CROSS ROADS**. Turn left into the main road, noting on your right:

#### **48. CROSS ROADS METHODIST CHURCH - 1873**

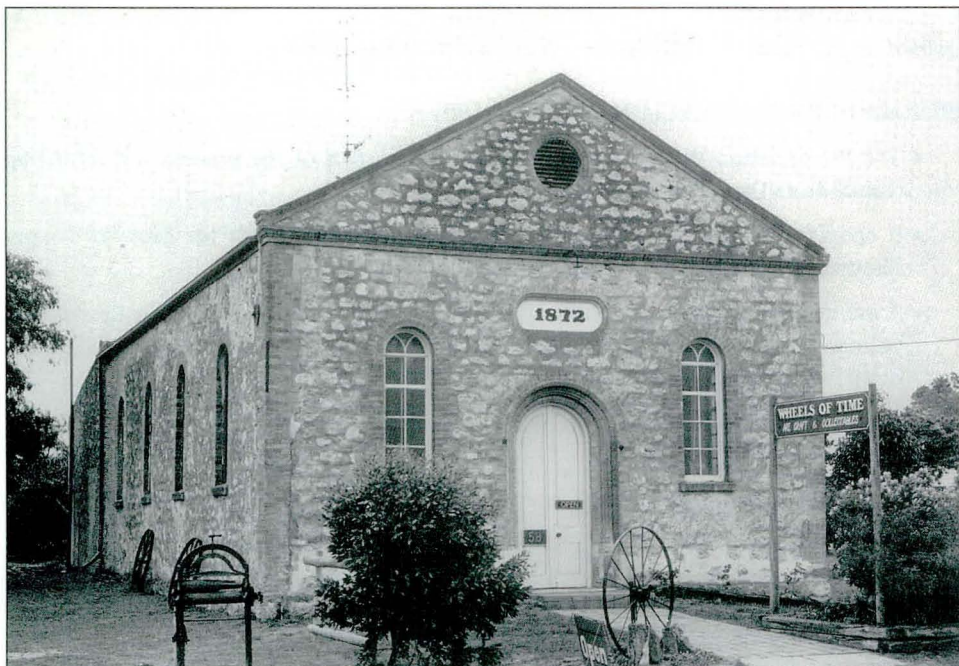
- This was erected by Cross Roads Wesleyan Methodists in 1873 and is still used as a church.
- It was used as a Sunday School after the Methodist union in 1900, when the Cross Roads Bible Christian Church was used for services.
- It was re-used for church services after the Bible Christian church was demolished in the 1970s.



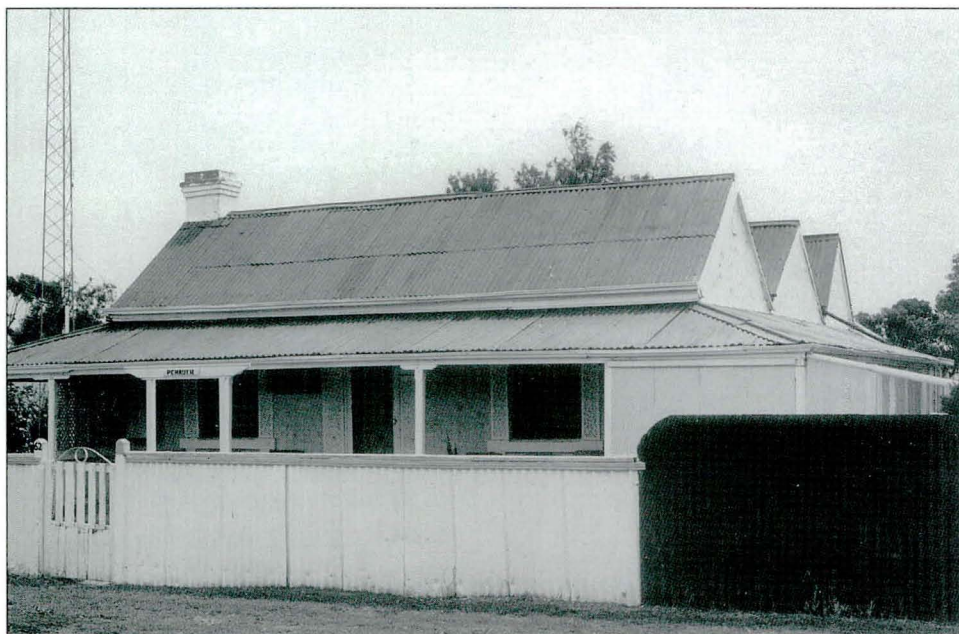
*Cross Roads Methodist Church (now Uniting Church).* PIRSA 039659

#### **49. CROSS ROADS PRIMITIVE METHODIST CHURCH - 1872**

- This was built by Cross Roads Primitive Methodists in 1872.
- After the Methodist union in 1900 it was used as a church hall until sold in the 1970s.



*Cross Roads Primitive Methodist Church.* PIRSA 039660



*Typical miner's cottage, Cross Roads.* PIRSA 039661

*Continue towards MOONTA noting numerous early miners' cottages with distinctive multi-gabled roofs. Further ahead on the left beyond flat slime heaps is:*

#### **50. Ruins of PRECIPITATION WORKS - 1901**

- The Precipitation Works was erected in 1901 as part of the process for extracting copper from the tailings heaps.
- It operated from 1901 until the mines closed in 1923, and by the Moonta Copper Recovery Company from 1925 until 1943.
- A mixture of sea water and a little sulphuric acid was allowed to percolate through the tailings into channels which flowed into cementation tanks and channels filled with scrap iron. This precipitated the copper.
- The copper sludge was collected, washed, dried and railed to the smelters at Wallaroo for conversion to copper.
- The remains of the channels, cementation tanks, wash and dry house and pumping station can be viewed from the tourist railway which departs from the Moonta Mines Museum (Locality 34).



*Precipitation works looking west along precipitation channels from Dry House to Pumping Station, c.1910. Men are removing scrap iron from the channels to recover the precipitated copper sludge. PIRSA N007170*

## 51. RAILWAY STATION - 1908

- This station was erected by Gambling and Son of Adelaide and opened in 1909, replacing the original wooden station erected in 1878.
- The Wallaroo to Moonta horse-drawn tramway opened in 1866 and was purchased by the Government in 1878, when the line was extended to Moonta Bay.
- In 1892, locomotives replaced horse-drawn trams to Wallaroo.
- The railway station closed in 1972 and the line to Wallaroo was removed in the early 1980s.
- A separate horse tram system was constructed through George Street in 1892 linking Moonta Bay (1892) and East Moonta and Hamley Flat (1896). The tram system closed in 1931.



*Moonta Railway Station.* PIRSA 039662

*Continue into BLANCHE TERRACE and turn right into RYAN STREET noting on the opposite corners:*

## 52. ROYAL HOTEL - 1865

- The Royal Hotel was erected in 1865 with H. Lester as first licensee.
- The upper-storey verandah was added about 1890 and has been removed from the southern end of the building.
- In 1896, sample rooms fronting Ryan Street were added for travelling salesmen.



*Royal Hotel, c.1900.* PIRSA 039663

## 53. ROSSITERS RESIDENCE AND STORE - c.1865

- This large residence with attached two-storey shop complex was erected by Rossiter and Davies about 1865 for Samuel Rossiter.
- William Cowling, a son of Captain Thomas Cowling, acquired the business and residence in 1875.
- The bay windows were added about 1900.
- The original shop fronts were destroyed by fire and replaced in 1990.

*Proceed along RYAN STREET noting on the right:*

## 54. DRUIDS HALL - 1866

- The original Anglican church was erected at the rear in 1865 and this building followed in 1866 as the church school room.
- It was sold to the Druids in 1902 when the present church hall was erected (Trail Locality 17).
- It was used as a meeting hall by the Druids until sold for commercial use in 1988.
- The adjacent cottage is probably the original Anglican manse erected about 1865.



*Rosstiers residence with two-storey shop at rear.* PIRSA 039664



*Druids Hall, Ryan Street.* PIRSA 039665

## 55. POST OFFICE - 1866

- The Moonta Post Office and Telegraph Station was built by T.R. Heath of Wallaroo in 1866.
- In 1909, a bull-nosed verandah was added and, in 1908, a telephone exchange opened with 25 subscribers.
- Apart from a new verandah in the 1960s, the external appearance is unchanged.



*Post Office.* PIRSA 039666

## 56. CORNWALL HOTEL - 1865

- This was erected in 1865 as the Globe Hotel with W. Square as first licensee.
- In 1885, the building was extensively damaged by fire.
- The original narrow balcony was removed in 1910 and replaced with the present structure of footpath width.

*Turn left into ELLEN STREET and proceed past:*

## 57. SHOPS - c.1870

- These well-preserved single and double-fronted shops with verandahs were built about 1870.
- They feature brick parapets, some with mouldings, and retain shop fronts common to the late 19th Century.
- The shops originally housed a variety of service trades and professions including saddlers, merchants, solicitors, bootmakers, bakers, carpenters and chemists.



*Cornwall Hotel.* PIRSA 039667



*Shops, Ellen Street.* PIRSA 039668

**58. Former UNION BANK - 1873**

- This ornate two-storey building was erected in 1873 for the Bank of South Australia which opened a Moonta branch in George Street in about 1864.
- In 1892, this building was acquired by the Union Bank as part of the rationalisation of Australian banking.
- The bank closed in 1943 and is presently used as a private residence.



*Former Union Bank, Ellen Street. PIRSA 039669*

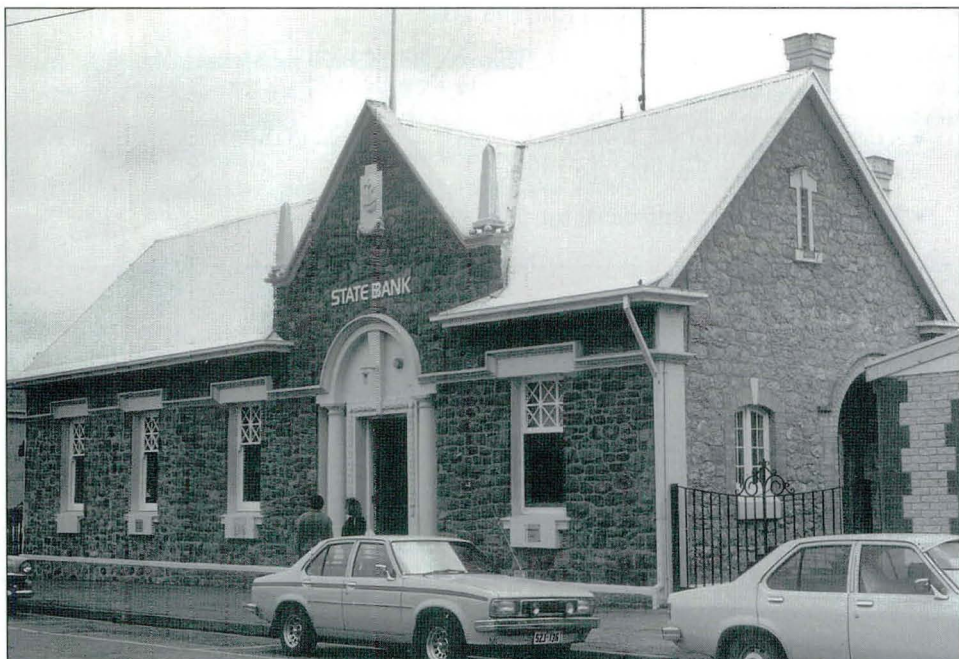
*Turn right into GEORGE STREET and continue to the starting point, at the Town Hall noting:*

**59. STATE BANK - 1917**

- Formerly the Savings Bank of SA, this was built by Webber and Williams using stone from Moonta Bay and was opened in 1917.
- The building was enlarged in 1972 using similar stone.

**60. Former BANK OF SOUTH AUSTRALIA - c.1864**

- This was built about 1864 and was the first bank in Moonta.
- The Branch moved to a new two-storey bank building in Ellen Street (Trail Locality 58) in 1873.
- The entrance porch with semi-circular arches is typical of the work of early colonial architect Sir George Strickland Kingston.



*State Bank, George Street. PIRSA 039670*



*Former Bank of South Australia, George Street. PIRSA 039671*



## 62. MARTINS SHOP AND RESIDENCE - 1863

- Henry Martin established a general store at Moonta Mines in 1862 and purchased this block at the first Moonta land sales in 1863.
- Martin erected one of Moonta's first shops in 1863 and conducted business until about 1923.



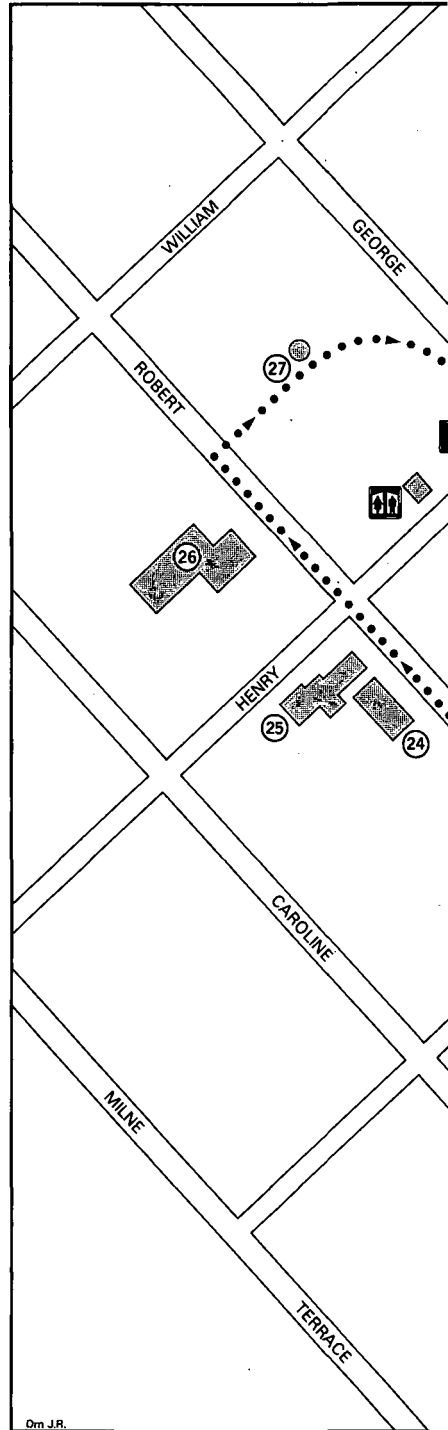
*Martins shop and residence, George Street. PIRSA 039673*

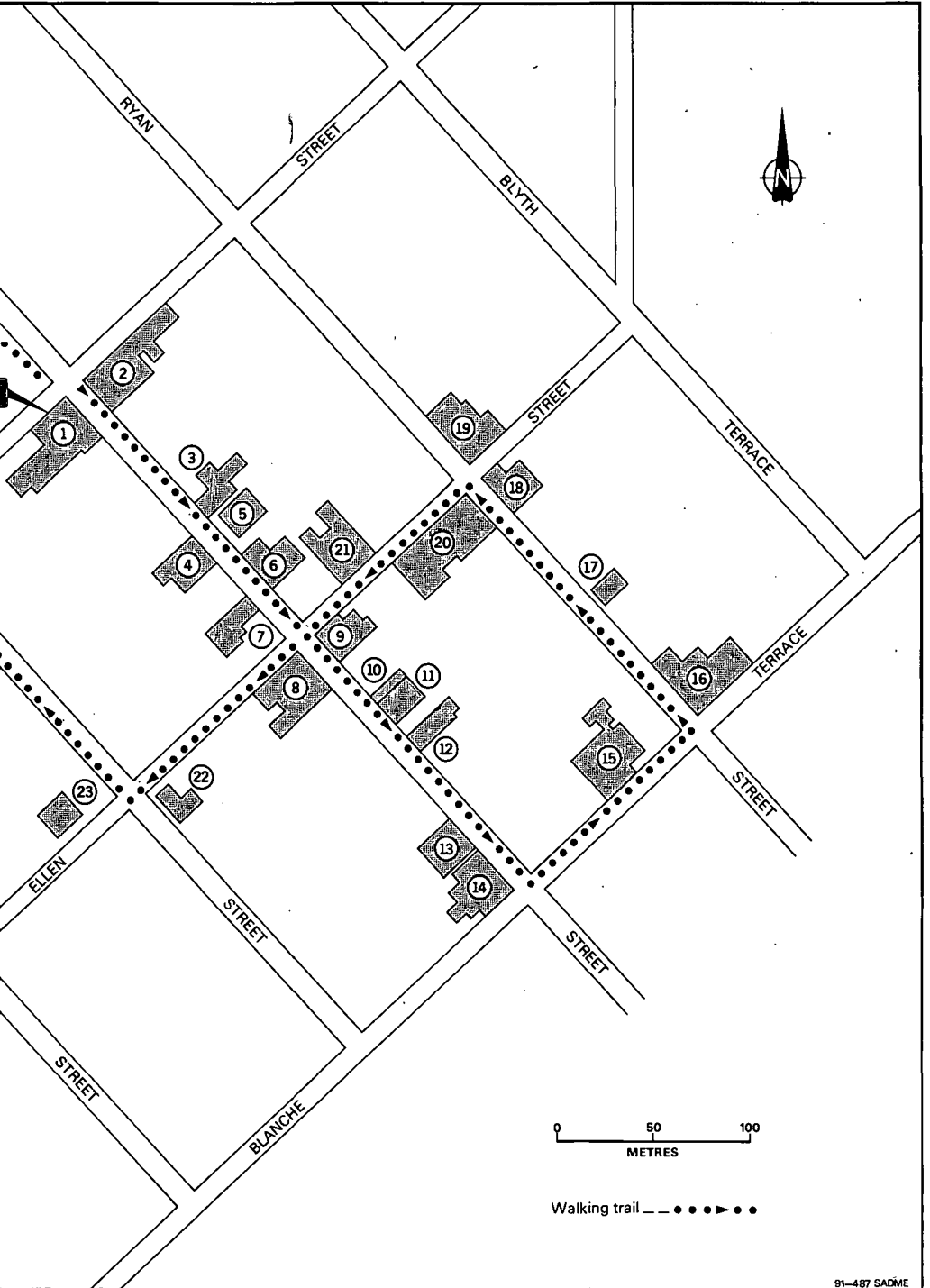
## 63. ROACHS BUTCHER SHOP - 1863

- The Roach family came to Moonta from Burra and opened a butchers shop at Hamley Flat in 1862.
- Peter and Henry Roach purchased this block in 1863 and erected the present store and residence shortly after.
- The business remained in the Roach family until the mid 1980s.
- A new verandah was added in 1980 but the original shop front, with shutters, is intact.

# MOONTA HERITAGE WALK

1. Town Hall - 1885
2. Roachs Butcher Shop - 1863
3. Martins Shop and Residence - 1863
4. Former Moonta InSTITUTE - 1870
5. Former Bank of South Australia - c.1864
6. State Bank - 1917
7. Shop and Residence - c.1875
8. Former Prince of Wales Hotel - 1863
9. Thomas Shop - 1864
10. Birks Chemist shop - 1868
11. National Bank - 1867
12. Beytheins Shop - c.1870
13. Marshall Building - 1873
14. Moonta Hotel - 1863
15. Rossiters Store and Residence - c.1870
16. Royal Hotel - 1865
17. Druids Hall - 1866
18. Post Office - 1866
19. Cornwall Hotel - 1865
20. Shops - c.1870
21. Former Union Bank - 1873
22. Salvation Army Hall - 1901
23. School of Mines - 1866/1903
24. Row Cottages - c.1880
25. Bible Christian Church - 1873
26. Methodist Church - 1873
27. Queens Square - 1897

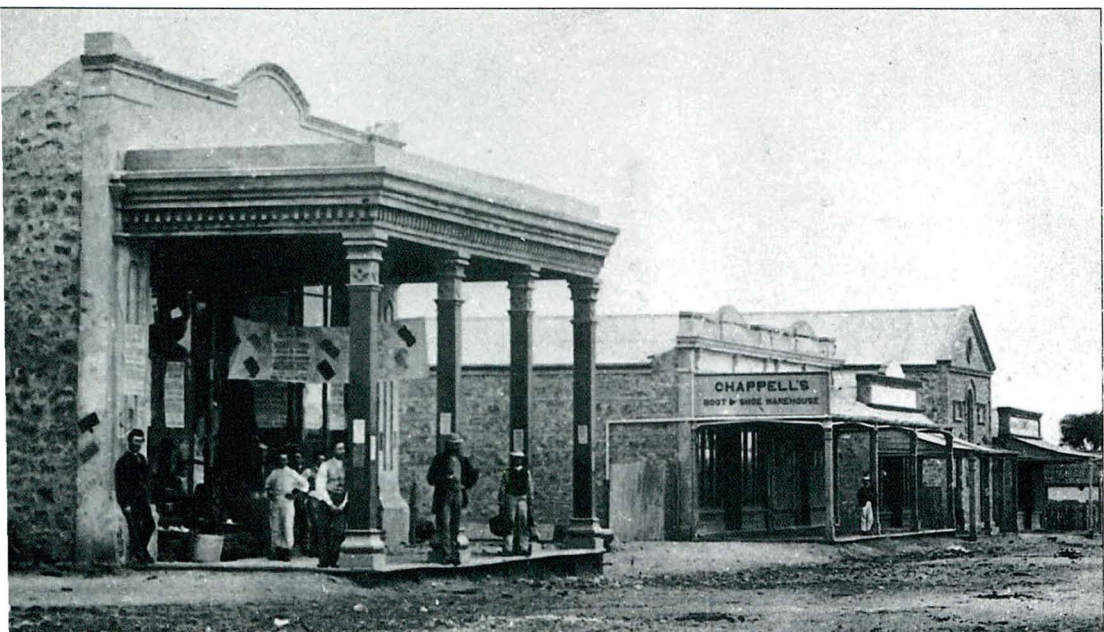




# MOONTA HERITAGE WALK

This walk covers the main commercial area of Moonta and starts and finishes at the Town Hall. This area contains most of Moonta's shops, hotels, banks, post office, meeting halls and several houses. Most of these were erected between 1863 and 1875 and many retain their authentic shop fronts and verandahs.

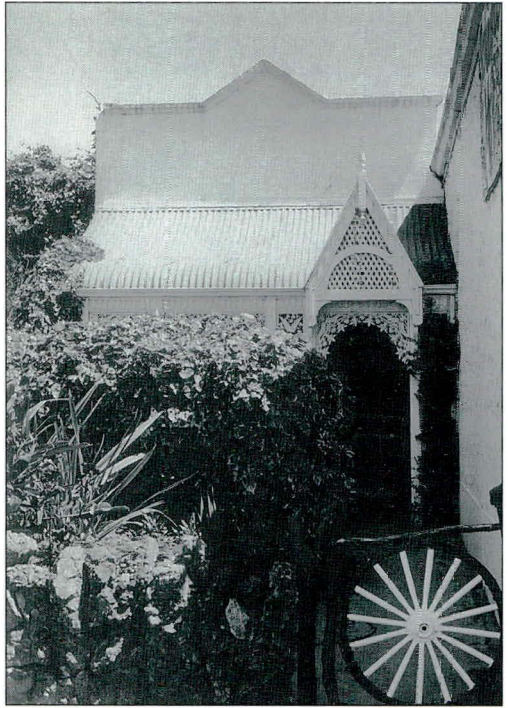
1. **TOWN HALL** - 1885  
See Trail Locality 1
2. **ROACHS BUTCHER SHOP** - 1863  
See Trail Locality 63
3. **MARTINS SHOP AND RESIDENCE** - 1863  
See Trail Locality 62
4. Former **MOONTA INSTITUTE** - 1870  
See Trail Locality 61
5. Former **BANK OF SOUTH AUSTRALIA** - c.1864  
See Trail Locality 60
6. **STATE BANK** - 1917  
See Trail Locality 59



*George Street looking west, c.1870. At right is the Moonta Institute. PIRSA 039674*

**7. SHOP AND RESIDENCE – c.1875**

- This shop was built in about 1875.
- The attached residence (eastern side) still has its original verandah with iron lacework in an interesting fern leaf design.



*Shop residence, George Street. PIRSA 039675*



*Martins shop and former Bank of South Australia, c.1870. PIRSA 039676*



*George Street looking west towards the Town Hall.*

*Upper: c.1900. PIRSA 039677*

*Lower: 1990 PIRSA 039678*

## 8. Former **PRINCE OF WALES HOTEL** - 1863

- This was opened as the Prince of Wales Hotel in 1863 with Mr Weeks as first licensee. It was delicensed in 1911.
- Many prominent Moonta organisations held their first meetings in the hotel including the Council, Cemetery Trust and Football Club.
- Cornish miners held cock fights in the yard at the rear during Moonta's early years.

## 9. **THOMAS SHOP** - 1864

- This corner shop was first occupied by J. Thomas, grocer, in 1864.
- It was used as a butchers shop by the Giesecke family from the 1920s until the 1980s.



*Ellen Street looking north from George Street, c.1874. Note the two-storey Union Bank at left and Thomas, grocer, at right and the absence of street lights. PIRSA 039679*

## 10. BIRKS CHEMIST SHOP - 1868

- This two-storey building was erected in 1868 for G. Birks, chemist.
- The shop has some ornate work on the parapet, and a timber, brass and glass shop front of note.

## 11. NATIONAL BANK - 1867

- This imposing bank building was completed in 1867 at a cost of £2751.
- The building has some interesting mouldings around windows and doorway.
- The drinking fountain in front of the bank was erected in 1890 by the Corporation to mark the arrival of reticulated water.

## 12. BEYTHEINS SHOP - c.1870

- This two-storey shop with upper-storey verandah was built about 1870 and was occupied for many years by E.A. Beythein, one of Moonta's first chemists.
- The building is adorned by an ornate parapet and the original timber and glass-panelled shop fronts remain.



*Birks chemist shop, National Bank and Beytheins shop, Ellen Street. PIRSA 039680*

### 13. MARSHALL BUILDING - 1873

- This fine two-storey building was erected in 1873 by S.D. Marshall of Wallaroo.
- The facade is constructed of dark stone from the Moonta Mine in contrast to the commonly used lighter coloured limestone.
- The building contains four separate shops with original shop fronts.



*Marshall building, George Street. PIRSA 039681*

### 14. MOONTA HOTEL - 1863

See Trail Locality 21

### 15. ROSSITERS STORE AND RESIDENCE - c.1865

See Trail Locality 53

### 16. ROYAL HOTEL - 1865

See Trail Locality 52

### 17. DRUIDS HALL - 1866

See Trail Locality 54

### 18. POST OFFICE - 1866

See Trail Locality 55



*George Street looking west from Blanche Terrace.*  
*Upper: c.1895. Note the horse drawn tram. PIRSA 039682*  
*Lower: 1990. PIRSA 039683*

- 19. CORNWALL HOTEL - 1865**  
See Trail Locality 56
- 20. SHOPS - c.1870**  
See Trail Locality 57
- 21. Former UNION BANK - 1873**  
See Trail Locality 58
- 22. SALVATION ARMY HALL - 1901**  
See Trail Locality 11
- 23. SCHOOL OF MINES - 1866/1903**  
See Trail Locality 12
- 24. ROW COTTAGES - c.1880**  
See Trail Locality 10
- 25. BIBLE CHRISTIAN CHURCH - 1873**  
See Trail Locality 9
- 26. METHODIST CHURCH - 1873**  
See Trail Locality 8
- 27. QUEENS SQUARE - 1897**  
See Trail Locality 2



*East Moonta horse-drawn tram outside Town Hall, c.1900. PIRSA 039684*

## SURVEY DAY, 1874

From the *Adelaide Observer*, 14 February 1874

"Big Survey" took place on Saturday, when the number of men who assembled in front of the office was computed at no fewer than 1,200. The spectacle of such a host of miners engaged in taking contracts either on tutwork or tribute was a most interesting one, as showing the magnitude of the operations carried out by the chief mineral industry of the district. Probably this was the largest gathering of miners that a survey had ever previously drawn together at the Moonta Mines, a circumstance accounted for by the fact that the number of employees have latterly been on the increase. It may be mentioned that there are two kinds of surveys held on the mine - one denominated the Little Survey, and the other the Big Survey, each taking place at intervals of about nine weeks. The former deals most exclusively with tribute bargains, the latter with tribute and tutwork. For the information of those unacquainted with mining pursuits, we may explain that all the underground work of the mine, as of most mines, is of two kinds - dead work, or that carried on in the rock or metalliferous deposit for the purpose of trial and discovery, and productive labour which is employed in the actual breaking down and extraction of the ore. The dead work is named tutwork, and the raising of ore tribute, the mode of payment in each case being entirely different. In tutwork, where the miner is employed in sinking shafts, winzes, or driving levels, he is paid at so much per fathom, according to the work done; in tribute work he receives a certain percentage on the value of the ore, being paid at the rate of so many shillings in the pound upon that value. In tutwork bargains this rate of pay varies according as the ground is refractory or otherwise. In tutwork this rate is chiefly regulated by the degree of productiveness of the lode. It is not often that the wages of tutwork men fluctuate to any considerable extent, as the ground seldom varies as to its hardness during the period of the contract. With tributors the case is frequently very different. A party, or "pare", may take a "pitch" or agree to work a certain extent of poor lode at a high percentage - perhaps 15s. in the pound - and in consequence of a sudden improvement in the lode they may make, and not unfrequently do make, a large amount of money. On the other hand the reverse of this often happens, and the pare find themselves at the end of their contract indebted to the mine; that is, being allowed under any circumstances "subsis" money, which at the Moonta Mines is £1 a week per man - it sometimes happens that amount has not been earned. Previously to the "survey" every part of the mine is visited and inspected by the underground agents, who afterwards consult together and determine their plans of operations for the next "take" or period of nine weeks, registering in detail the work to be performed and what they consider a fair price to be paid for each separate item. At 1 o'clock on the day appointed for the "survey" or "setting" the men assemble in front of the mine office. Captain Hancock, the Manger, attended by a clerk and two or three agents, mounts a platform and calls out in succession every "pitch" or piece of work to be performed in the mine. The pitches are numbered and accurately defined, and the prices stated the tutwork pitches at so much a fathom, and the tribute pitches at so much in the pound. Each pare have the refusal of their old pitch, which in the majority of cases is retaken, the spokesman of the party signifying his assent to the terms offered by

saying, "Put it down", whereupon his name is immediately appended to the description of the pitch in the selling book. If the price offered be refused, the pitch may then be taken by any other party. On Saturday, for instance, some of the tribute pitches were refused by those who had worked them in the previous "take", but in every instance except one these pitches were taken by other men. The survey generally passed off in a satisfactory manner to the contracting parties on both sides. The number of men, of all classes, employed at the present time at the Moonta Mines is about 1,500.



*Surface workers and picky boys, c.1910. PIRSA 032725*

## A TRIP UNDERGROUND, 1878

From the *Adelaide Observer*, 23 February 1878

My "guide" having seen me "rigged out" in miner's costume from tip to toe, including the hard "billycock" hat with the orthodox candle stuck thereon with clay, conducted me to the top of Hughes's Engine-house, one of the highest buildings on the mines. From the platform here a good view can be obtained of the whole of the Company's property, which is two square miles in extent. It is not a picturesque spot, therefore the less said on that score the better. It is within a couple of miles of the western shore of Spencer's Gulf, and, I may be pardoned for adding about 200 miles from Adelaide by sea and 120 by land. The population of the corporate town of Moonta and of the township on the mines is so large as to justify the Council of Education erecting handsome schools at both places, each to accommodate 800 children. Although a good deal of the work on the Mines is carried on below ground, there are on the surface many signs of the vast dimensions of the concern. There are 20 main shafts, and about as many secondary ones. There are engine-houses with their tall chimney stacks and other large buildings which with their contents, have cost thousands of pounds each; there are jiggging apparatuses more costly in construction than euphenious in name; there are "tailings" heaps, composed of hundreds of thousands of tons of vein stone containing too small a percentage of copper to pay for the cost of reduction to fine copper, even after having been quarried from the rock below; and there are many other large stone buildings, including fitting shops supplied with expensive machines for making and repairing engines on the spot, carpenters' and smiths' shops, the office, and the superintendent's residence. There are 14 steam engines on the mine. One of these at Hughes's shaft together with the building and the gearing connected with it, cost no less than £7,000. The one already mentioned, a beam engine of about 120 horse-power, besides working a double skip pumps water from three different shafts - from Hughes's 115 fathoms direct, and from Taylor's (160 fathoms) and Duncan's (25 fathoms) by means of flat rods, running almost along the ground. This engine regulates its speed to the quantity of water to be raised. It is capable of 11 strokes per minute, but as the Moonta Mines are drier than most others it only needs to take two or three strokes per minute. It was by aid of this engine that we descended Hughes's Shaft to the 100 fm. level in less than two minutes. We went down in the skip 70 fathoms perpendicularly, and then on the course of the lode for 30 fathoms more, the skip in which we stood resting on stout "guides". In the skip is a safety-break, which being turned in the event of an accident would prevent the skip falling by instantly forcing some strong "catches" against the "guides". On arrival at the 100 fm. level, with the temperature considerably less than 110° which we left above we at once proceeded to examine the workings. With our lighted candles, occasionally stuck in our hats, but generally held in the hand, we wended our way through various drives, probably "doing" about half a mile of distance and reaching the extreme north of the workings. The total length of all the levels on the Moonta property is 19¼ miles, but including shafts and winzes (main thoroughfares) 25 miles. In our short walk we saw all varieties of operations being carried on. The drives are generally regarded as over 6 ft. in height; but in many cases they are much less - as we found to our cost. This led to a

practical discovery of the reason why miners below wear their peculiar kind of hard hats. We found the workings exceedingly dry and well ventilated. The former feature was particularly noticeable, and is I believe specially characteristic of the Moonta Mines. In only one of the drives was the atmosphere bad; and even there my guide assured me it was good or the candles would not burn so well. I agree with his philosophy; but I am afraid my first impression of the fact remains. In these works - the most distant from a shaft - there is a current of fresh air constantly forced in by the engine above, aided by a ventilating machine. While below we came up to parties of men, some of whom were chipping off yellow or purple ore, the vein of which was distinctly traceable and glimmered in the dim light of the candles; other men were drilling holes in the solid rock preparing to blast; and others again were clearing away the shattered fragments. We were present at one blasting operation. At least we saw the preparations; then gracefully retired to a distance, and returned to see the effect of the explosion. It was a good blast; probably about a ton of ore had been displaced from the solid rock; but it seemed to me a very small return for all the labour that had been expended in drilling and clearing and "roping". The last process is that of fastening a thick rope in front of the piece likely to be broken in such a way as to prevent it injuring the timber which supports the hanging ground above the level. The powder holes are about an inch in diameter and a foot in length. I was disappointed with the report of the blast - perhaps my guide had taken me a little too far



Double-decker man skip which was introduced after 1880. PIRSA 030191

- but afterwards, when further from the shaft in a crosscut, I was momentarily startled by a loud report and a booming wave of sound which rushed along the drive. This was from a dynamite blast in a more confined portion of the workings. Most of the ore is got by blasting. We passed one or two shafts and a double skip, by means of which as much as 300 tons of ore had been raised from the 70 fm. level to the surface during one "shift" of eight hours. Each skip holds about a ton. The crosscuts - drives hewn or blasted out of the solid rock from one lode to another - must be very costly affairs. One through which we passed - from Taylor's to Duncan's Shaft - is about 50 fathoms in extent. Before returning to the surface we went down a ladder way to the 115 fm. level. The travelling was not nearly expeditious or agreeable as by the skip. We there found the need of the miner's suit and also of the extra attention and care of our guide. The deepest level is 160 fathoms or 960 feet (Taylor's Shaft), where a good lode has been found. There are on the Moonta properly eight main levels. Towards the surface these are 10 fathoms apart, but lower down the distance between them has for motives of economy been extended to 15 fathoms. The greatest length of the main lodes is about the mile. About three quarters of the distance has been tried already, and towards the end it is found the lode becomes weaker. Yellow ore (copper pyrites) form the bulk of the produce raised on the Moonta, but there is a good deal of purple ore, besides a little of the black and grey kinds. When raised to the surface the solid portions of the ore are picked out, crushed by rollers, and sampled for the smelting works direct. The bulk, however, is found mixed with a very large proportion of veinstone, consisting mainly of quartz. This stuff, which gives an average as raised from the shaft of from 3 to 5 per cent of copper, is conveyed to extensive crushing and dressing machinery, the possession of which is one of the reasons why the Moonta pay so well while smaller concerns prove failures. The large crackers to which the ore is first taken are capable of receiving solid rock a foot in diameter and crushing it till it becomes the size of an egg. The stuff is still further reduced by rollers till it will drop through holes which run 20 to the square inch. Then it is sent on to the jiggering machine, by means of which the ore is extracted from the waste. The jigger is a long oscillating sieve like arrangement, with a constant flow of water through it. The rich portions of the ore by their specific gravity and by a double motion of the jigger pass through the machine and drop into compartments according to their value. The waste is conveyed over the jiggering sieve into a train wagon at the end and is sent on to the tailings heap the gigantic embankment already mentioned. The whole of the operations from the time the rock is received by the crackers till the different qualities of ore drop into their respective compartments and the refuse falls in the tram wagon are performed by the machine without the intervention of hand labour. The jiggering machines used on the Moonta are on an improved principle, the invention of Captain Hancock, who has taken out a patent for them. One of these useful machines will effectually dress 150 tons per day of 24 hours at a cost of about 7d. per ton, including the charge for the removal of the ore and the refuse. After leaving the jiggers the ore has only to be sampled and sent of to the smelting furnaces.

## MOONTA MINES, 1899

From the *Adelaide Advertiser*, 25 May 1899

*Trees are so scarce to-day, the country is so flat and open, while the buildings mentioned are so large and prominent, that it is difficult to believe these stories, although it is very evident from the fences round the miners' residences and other outward and visible tokens that ti-tree scrub must once have been very plentiful on the land, whose only covering today consists of the countless cottages of the workmen, the capacious churches, the lofty engine-houses, the tall chimney stacks, the bewildering forest of tramway, rope, and pipe stagings, the soaring poppet heads and the innumerable mine buildings. All these structures are old and somewhat dingy looking, but all now in use are kept in thorough working order, and they are capable of dealing with many hundreds of thousands of tons of copper ore yet. The mine office, with its narrow balcony, is in a very central position, not far from the deepest shaft, which, like the chief working at Wallaroo mines, is named after the late Mr. John Taylor. The manager, Mr. H. Lipson Hancock, resides in a large double-storied house, standing in extensive grounds, just opposite, and the busy workshops of the company are so near that the noise of the hammering can be distinctly heard. Taylor's shaft, which descends to a depth of 2,400 ft. on the underlay, is also adjacent to the manager's house. In fact, it passes right underneath, and well on towards the State school.*

*The workings in operation at Moonta are Taylor's shaft (2,400 ft.), Hughes', Young's, Hogg's, and Warmington's shafts, while tribute workings are in operation at Beddome's Green's Prince Alfred's, and Fergusson's shafts .....*

*Mr. Hancock, following the example of his father, always works with sufficient ground opened up to given three or four years' supply of ore in sight. Development is kept ahead of the ore getting operations, so that the manager may be sure that the ore bearing ground is ready for stopping, although its exact value cannot be known until it is broken and sent to the surface. Moonta Mine has been diminishing in its productiveness and gradually coming to an end for the last ten years, and if it were not for the extent of the workings the manager would not have been able to maintain its output for so long. All that is worked now is dredge (or poor vein stuff), carrying ore throughout the rock, which has to be finely pulverised, jigged, and the slimes buddled. The great feature at Moonta mines is the extent of the dressing appliances, and if they were not of the most efficient and economical character the property could not have been worked so long .....*

*From the bob platform at Prankerd's enginehouse, which is near the centre of the mines, close by the school, a very comprehensive view can be obtained, and among the smaller houses of the miners can be distinguished 16 churches and one building which has been a church. All of them are large and comfortable buildings, the Wesleyans, Primitives, and Bible Christians being the only denominations represented on the mines with the exception of the Salvation Army. Prankerd's is the centre of a circle having a radius of two miles, which practically takes in all the congeries of settlements. Northward are to be seen the large stacks of Yelta, then come Ballarat Row, East Moonta, Moonta Mines,*

*Hamley, Moonta town across the plain, the Cross Roads near the Yelta railway station, and then Yelta again. No order has been observed by the miners in the building of their cottages, and except that they are numbered as belonging to the Beetaloo water district, the highest number being 700, there is no means of identifying them. The flat-topped tailings heaps are the highest elevation. Generally the cottages consist of four rooms, with double gable ends, and a verandah, the door being in the middle of the front, with a window on each side. Sometimes there is but one gable, the back part being a lean-to. The walk from the Hamley tram terminus to the Moonta mines office is through streets formed by the tree trunk fences of the bewildering confusion of cottages. There is no attempt at a rectangular survey, but the tracks wind in and out through the dust in a most perplexing fashion. Each cottage is detached, and cosily enclosed, and though there is no pretence outside, all are comfortable within. Mr. R. Hooper's residence, near the Hamley tram, is protected by a neat verandah, over which blossoming convolvulus is climbing. The big, broad, brown stone bulk of the Wesleyan Church forms a prominent landmark, the original chapel of weatherboards and shingle which once stood near the State school site, having been removed to a site behind the newer edifice. The Moonta mines office is two stories high, with a large shed surrounded square at the rear where coke, hardwood, and oregon are stored. Opposite and across the tramline is the large State school, of which Mr. Hunn is headmaster, and shafts are scattered over the plain in front and on either hand. The manager is continually prospecting below with diamond drills, while auger bores are used in surface searchings. The ore being raised at present is obtained from Hughes's, Taylor's, Warmington's, and Treuer's shafts on the east lode; Hogg's and Young's shafts, which tap a lode traced to Dominick's shaft; Fergusson's shaft on a separate lode; and Green's and Beddome's shafts, to the extreme south. Most of the ore comes however, from Taylor's and Warmington's.*

*The oldest shaft is Elder's which was opened in 1861, but which is now dismantled the top gear having been taken away. Three or four years ago a subsidence took place near here, and the hole thus caused with the little heap of tailings close by is all that now tells of the first working. Elder's engine is used today to pull the men up from Hughes' shaft, which communicates below with Taylor's and Warmington's. The youngest shaft is Fergusson's, which was sunk 29 years ago.*

*There are three crushing establishments – Hancock's, Ryan's, and Richman's, the last two of which have buddles for treating the slimes. The pumping of the east lodes are done by Hughes's engine. Then Hancock's engine empties Green's, Beddome's, and Fergusson's shafts, at each of which, however, there are winding engines, with the necessary headgear. Hogg's, Young's and Dominick's shafts are drained by Ryan's pumping engines, all the western lodes are comparatively idle, and most of the stuff at Hancock's concentrators comes from Taylors shafts. The mechanical shops near Hughes's pumping shaft are most extensive and well equipped.*

*On May 1 the Moonta and Wallaroo miners are to receive a 10 per cent advance of wages, which will mean £16,000 a year to the company. Three shifts are worked daily from midnight on Sunday to 12 p.m. on each following Saturday, the times of changing shifts being 7 a.m., 3p.m., and 11 p.m. Night and day is to be heard the sound of the machinery,*

*the rattle of the dredge as it falls from the skips into the trucks, and the whirl of the concentrators. The boom of the blasts is not heard, for that work is going on far below the surface, but in the manager's house the vibration of the charges in Taylor's shaft is felt. Its depth on the underlay is 2,400 ft, or 2,000 ft vertically. The pump at this shaft is worked from Hughes's engine, 220 yards south, and a donkey engine there hoists the stuff broken in the bottom of the shaft to the first level (2,280 ft), where it is shot into an iron skip 8-ft. deep and 2-ft. square, carrying 1 ton. Hughes's engine has a 60 in. cylinder, with a 10-ft. stroke, and it is the largest on the mine. Here there is an air compressor engine to work the rock drills underground. The air is brought up to a pressure of 70 lb. to the square inch, and is then stored in a reservoir, being carried underground in pipes. Hughes's shaft, 1,200 ft. deep is close by the engine house and is on the underlay below 420 ft. and at Taylor's shaft, 1,000 tons of veinstuff is raised each week, but this is only payable because the lode is so wide. It varies from 8 ft. to 30 ft., the average being 20 ft. The other 1,000 tons crushed and concentrated weekly is distributed as follows: Warmington's, 350 tons; Hughes', 250 tons; Hogg's, 300 tons; and Beddome's, 100 tons. The tributors do the other work, and nearly all at work on Beddome's lode are paid according to the percentage and quantity of the ore raised. Some do very well if they get a good "take", and as much as £10 weekly has been made for two months by some men. There are about 50 tributors on Beddome's and Young's lodes. Taylor's winding engine is at Pranker's shaft, 100 yards north. The skip being brought to the top of the poppet heads is emptied on the side of a raised tramway pending the reconstruction of the screen at the end. It is there handpicked, a little of the waste being thrown out and loaded into iron trucks carrying a ton each, which are drawn to the crushers by a small locomotive, one of which, Richman's, is a quarter of a mile to the north. It has been working more than 20 years, and has a tremendous skimp heap. The man skips are placed one on top of the other, the lower being reached by a stair to the flat below the surface of the shaft. Each carries four men, and there has never been an accident through the rope breaking. Those in Taylor's shaft are worked by Pranker's engine, which has a 22-in. cylinder, with an 8-ft. stroke. A pile of mallee stumps near by tells of the value which the mines are to the farmers, from whom all available firewood is bought.*

*A succession of engine pools hold the water from the condensers. Nearly all the supply comes from the shafts, though some of the boilers have to use either Beetaloo water or other water specially condensed. About every three weeks the accretions from the mineralised water have to be cleaned off.*

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  - State Heritage Branch:  
7, 24, 38, 41 upper.

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