North Queensland's

Mining Heritage Trails

About North Queensland's Mining Heritage Trails

The aim of this publication is to encourage the conservation, appreciation and sustainable use of north Queensland's unique mining heritage places.

North Queensland's Mining Heritage Trails is compiled from the *Queensland Mining Heritage Places Study, 1996*, by Jane Lennon & Associates and Howard Pearce. The study furthered earlier research in the *Queensland Historical Mining Sites Study, 1992,* by Ruth Kerr. Both studies were commissioned by the Queensland Department of Environment and Heritage and funded through the Commonwealth National Estate Grants Program. Additional research and writing was undertaken by Kay Cohen, Margaret Pullar and Howard Pearce. Sections of the historical text were corrected by Ruth Kerr. Historical photographs are from the Queensland Government Mining Journal, unless otherwise attributed. Colour photography is by Howard Pearce.

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Disclaimer

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North Queensland's mining heritage trails

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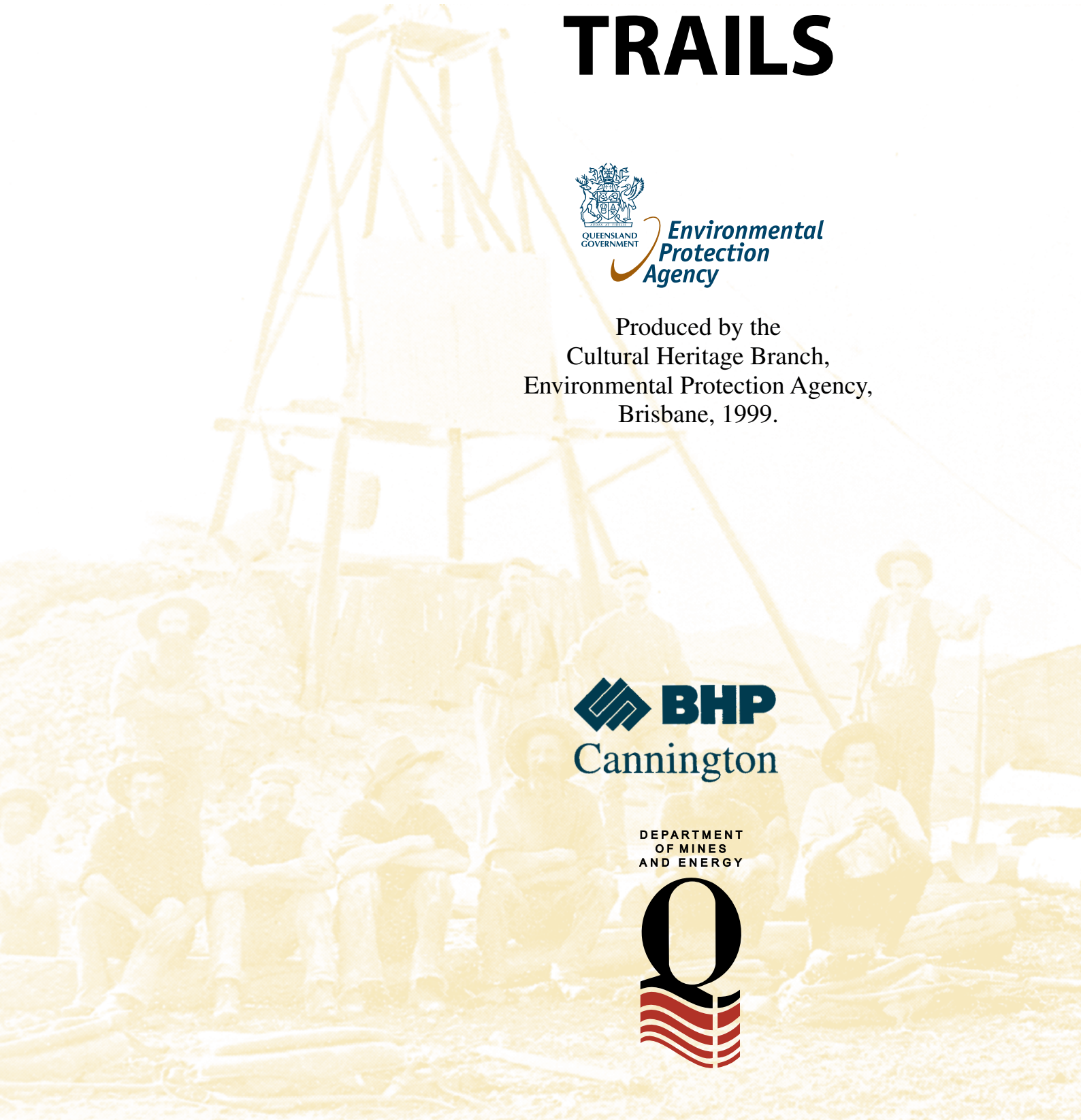
NORTH QUEENSLAND'S

MINING HERITAGE TRAILS



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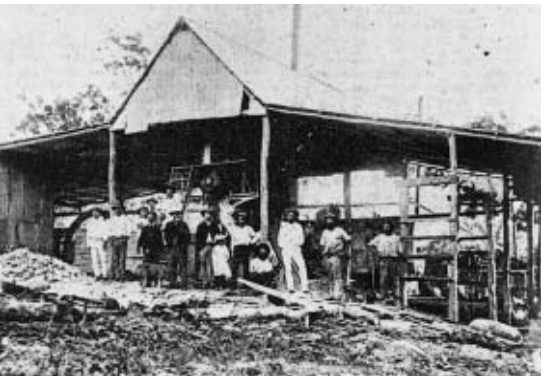
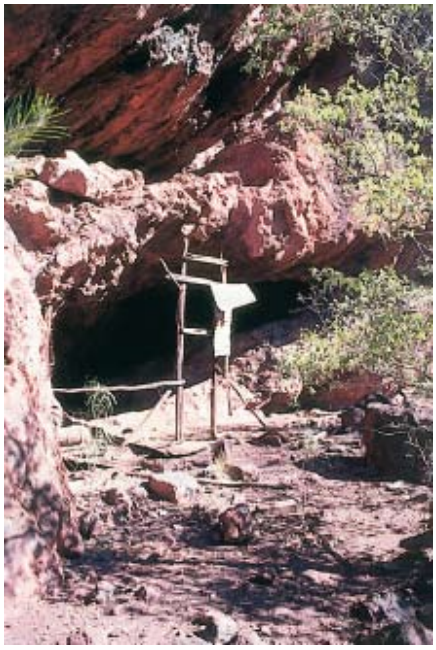


Enterprise Battery at Coen, c1896.



Magazine cave reputedly used as a shelter by Ernest Henry.

Slag dump at Chillagoe Smelters.

A Hundred Years Ago

Mining made north Queensland. No other early industry, with the exception of sugar, had such an impact in consolidating the transformation from colony to statehood. The cultural heritage of north Queensland's early mining industry plays an important part in the national story of 'the rush that never ended'. It reflects the early development of the region and its rich cultural diversity.

The northern vote for Federation was the decisive factor that brought Queensland into the new Commonwealth (Bolton, 1972:210). In north Queensland the year 1900 saw the construction of the Chillagoe Smelters and railways which were to influence the industrial economy of the state for more than 40 years. The north Queensland mining communities played an important role in the development of a national industrial relations policy. At the same time the region joined the arms race to World War I, soon becoming the major Commonwealth supplier of copper and wolfram to Europe.

Mining in north Queensland, which was established by gold in the 1870s, was consolidated in the early 1900s through the growth of base metal production technologies. Evidence of this growth is still apparent throughout the region, overlain by subsequent development and settlement. On some sites later industries have emerged — grazing, timber, tobacco and cropping — or events have left their mark, such as dams and irrigation, World War II and creation of protected areas. These activities have resulted in rich layers of cultural and industrial heritage in the north Queensland landscape.

Early Prospecting and Mining

As the pastoral occupation of Queensland was spreading beyond the Darling Downs, gold was discovered in 1857 on a sheep station, Canoona, in the Rockhampton district. This began the first of the northern gold rushes. Although the field was a disappointment it drew attention to the region's prospecting opportunities for southerners. During the early years of settlement 'north Queenslanders' were more concerned about grass than gold, although discoveries in Victoria and New South Wales showed the impact of gold in fostering settlement. But by the 1860s there was a growing feeling that a providential find was needed to support the struggling pastoral industry.

Initially it was copper that encouraged prospecting in north Queensland. A geologist turned pastoralist, Richard Daintree, of the Cardwell district, began a systematic search for minerals, photographing many rock formations in the district. Daintree's first venture, with his grazing partner William Hann, was a copper mine on the Einasleigh River. Several tons of ore were excavated in 1866, but freight rates made the mine unpayable (Bolton, 1972:45). In the following year pastoral pioneer Ernest Henry found rich copper country near the Cloncurry River, but his Great Australia Mine, probably the most isolated mine in Australia with incredibly expensive transport costs, could not be worked profitably until copper prices rose and the railway reached Cloncurry in 1908 (Fitzgerald, 1986:178).

Daintree's advice assisted a prospecting party to locate the first payable gold on the upper reaches of the Cape River in July 1867. A full-scale rush set in.

Almost simultaneously, a major rush at Gympie, about 130km north of Brisbane, helped solve the new colony's economic problems when 16,000 diggers produced 84,792 ounces of gold in 1868. Despite its short, productive life the Cape Goldfield brought 2,500 people to the struggling north, creating new ports, strengthening old ones and providing a ready market for local beef. A pool of experienced gold prospectors in the district increased the possibility of further discoveries (Fitzgerald, 1986:158). In 1868 gold was discovered on Ravenswood Station, between Townsville and the Cape River, resulting in a new rush. Then in April 1869 Daintree discovered gold in the headwaters of the Gilbert River. The decline of the Cape Goldfield stimulated prospecting at Ravenswood and the discovery of major reefs (Bolton, 1972:46-7). Ravenswood's success stimulated widespread prospecting resulting in major finds on the Etheridge River (1870), at Charters Towers (1872) and on the Palmer River (1873) — 'A Thousand Miles Away'.

Mining Patterns

Gold discoveries from 1867 onwards created the alluvial rushes and transient townships, which was a major feature of north Queensland settlement until the 1930s. One of these discoveries stands alone. The Palmer, the archetype of alluvial goldfields, produced nearly a million ounces of alluvial gold in five years from 1873, sparking the development of new ports in north Queensland, Chinese immigration and a population movement of major proportion into the Cooktown region — an area far beyond previous European settlement (Bell, 1982:1).

Meanwhile, underground mining led to the development of more stable settlements: Charters Towers with a peak population of more than 30,000 became the most important in north Queensland, and Ravenswood, Croydon and the Etheridge contributed to the bulk of other underground gold production.

Other metals fostered small mining towns: in the 1880s silver was mined near Ravenswood and Herberton. Tin created settlements throughout the Herberton–Irvinebank–Mount Garnet district and the Cooktown hinterland between 1880 and 1914.

Chinese-built water race, Palmer River Goldfield.

The copper towns of the Chillagoe and the Cloncurry fields boomed at the beginning of this century, and financial problems facing the base metal companies after 1907 brought to life north Queensland's two coal mining towns, Mount Mulligan and Collinsville, to supply coal for the copper smelters (Bell, 1982: 1-2).

In half the years from 1873 to 1906, Queensland's exports of gold and metals exceeded wool and the impact of gold on Queensland's growth was powerful. The ports of Townsville, Cairns and Cooktown were made or magnified by mining fields, and the web of commerce spun by gold invigorated the whole colony. In addition, the tin magnate John Moffat became an astute financier of new mining ventures in north Queensland. He built dams, tramways and railways and developed the copper-silver-lead mines of the Chillagoe field (Blainey, 1969: 132).

The total value of gold produced in Queensland to 1898 was £44.5 million, compared with tin £4.5 million, copper £2 million, and silver £0.7 million. Gold did more to bring Europeans to Queensland and to establish settlement in Queensland's tropics than any pastoral or agricultural product ever did. The placement of towns, ports and railways is a legacy of early mining in a colony that once wanted a single substantial mineral field (Fitzgerald, 1986: 179).

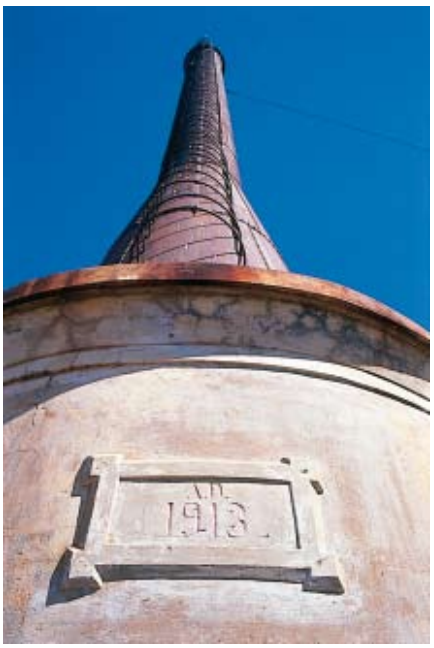
Headframe at the Vulcan tin mine, Irvinebank.

Mabel Mill of the New Ravenswood Co. c1902.

Introduction

Fireplace at Mount Cuthbert township.

Thornborough cemetery.



Hampden Consols Mine, Kuridala.

Stamper cams of the Tyrconnel Battery, Thornborough.

About the Trail Guide

The North Queensland Mining Heritage Trail forms a circuit from Townsville on the east coast to Mount Isa in the west, and from Normanton on the Gulf of Carpentaria to the Atherton Tableland above Cairns. Branch trails extend from the circuit to nearby historical mining sites. On Cape York Peninsula the trail follows the Peninsula Development Road to include the Palmer River, Coen and Wenlock goldfields. This booklet is intended as a historical guide to Queensland's major mining heritage places and it is recommended that it is used in conjunction with a detailed road map of the region. Some of the places included in this guide are only accessible by four-wheel-drive vehicle.

Code of Conduct for Visitors

Many of the places described in this guide are privately owned and the property rights of owners and mining lease holders should be respected by visitors. Places have been chosen for this guide because most can be viewed from public areas without the need to enter onto private land or active mining leases. Intending visitors should obtain the prior permission of landholders and mining lease holders before entering onto private land. Remember also that these are places of cultural heritage significance and should be protected and conserved for the appreciation of today's visitors and for the benefit of future generations.

When visiting historic mining areas, beware of open shafts and warn children of the dangers. Do not use metal detectors at historic mining places. Use of detectors can result in thoughtless damage to historic machinery and disturbance of contextual objects. On the Palmer River Goldfield Reserve, metal detecting is prohibited under the management regulations. Mining heritage places can be appreciated and enjoyed by everyone. Leave places as you found them. Be a responsible visitor.

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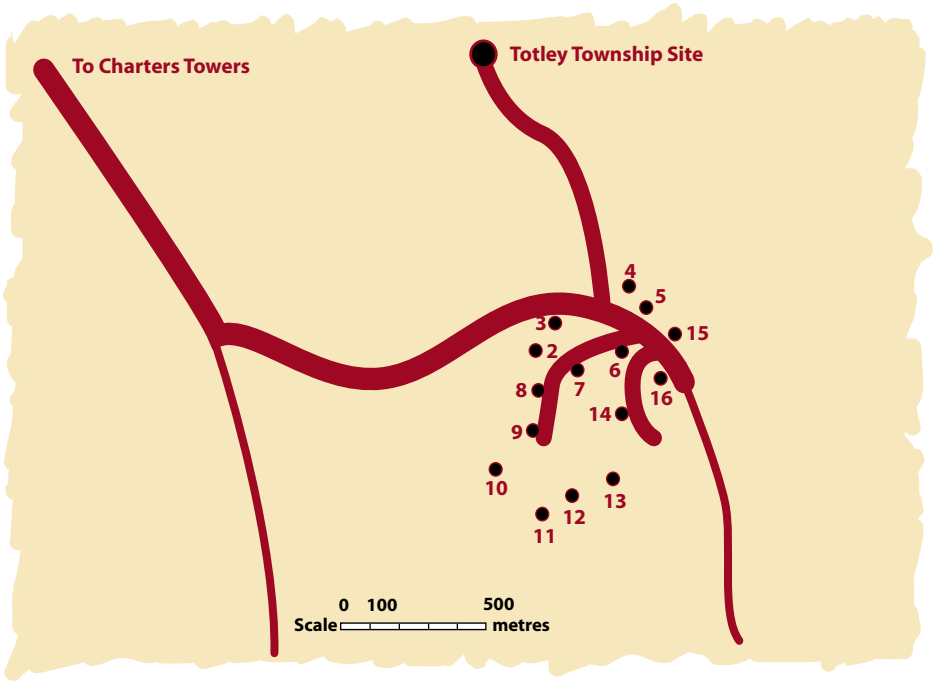
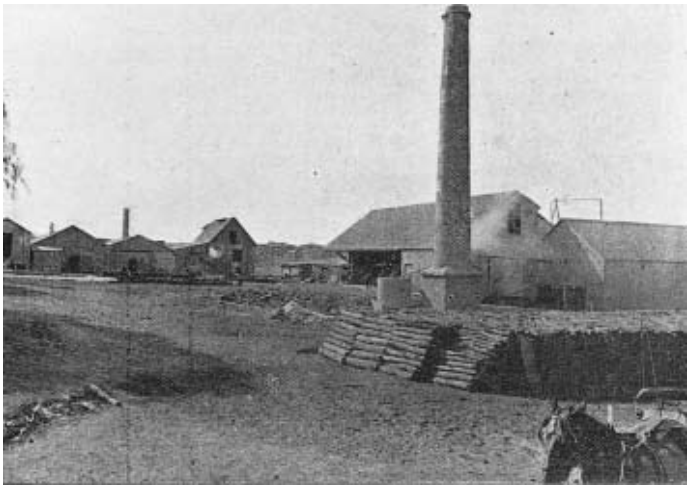
LOCALITY MAPS PAGE

Ravenswood

Map 1: Ravenswood





2. The Mabel Mill boiler house and battery, c1902.

2. Mabel Mill stamp battery

1. Ravenswood Township.

Gold was discovered on Ravenswood Station in 1867. By 1871, 900 people were on the field. At first they concentrated on alluvial gold in the creeks, but it soon became clear that the alluvial had come from quartz reefs which held the bulk of the field's wealth. The Ravenswood field had five batteries operating when the miners began to encounter difficulties extracting gold from the mundic sulphide ores beneath the water table. Over the next three decades new technologies including smelting, chlorination and cyaniding were experimented with to extract the gold. In 1899 local mine owner Archibald Wilson floated the New Ravenswood Company and with British capital, acquired most of the reefs and mills. Extraction of fine gold from mundic stone was partly solved when Wilson successfully introduced the cyanidation process for the treatment of sulphide ores. The first decade of the century became the heyday of Ravenswood. The town's population rose close to 5,000. However by 1912 dividends had dropped. The New Ravenswood Company collapsed in 1917. It was not until the late 1980s, with improved recovery technologies for low yield ores, that extensive open pit and underground mining recommenced at Ravenswood through Carpentaria Gold operations.

2. Mabel Mill, Barton Street, Ravenswood.

The Mabel Mill was established in 1871 and was one of the earliest batteries on the Ravenswood Goldfield. During the 1880s the mill was owned by H.H. Barton, who installed a chlorination process in an attempt to treat difficult ores. The chlorination technology was not successful. In 1899 A.L. Wilson's New Ravenswood Company acquired Barton's assets. Wilson pioneered the cyanidation of tailings in Queensland at the Mabel Mill. However by 1917 the New Ravenswood Company went into liquidation. The Mabel Mill continued to crush ore for local miners throughout the 1920s and '30s. In 1938 Partridge and Ralston adapted part of the cyanide treatment plant to re-treat tailings. The mill was acquired by Percy Kean in the 1950s and adapted to treat silver ores from his Totley Mine.

3. Railway Hotel, Barton Street, Ravenswood.

Built in 1902 by John Moran, a part-owner of the London Mine situated directly opposite the hotel. Moran's original hotel, a single-storey timber building, was standing on this site by 1887. It was moved across the road as a shop in 1902 to make way for the new brick building. The Railway Hotel is constructed of locally made bricks for its external walls, partitions and piers. The floors are of timber and the ceilings of pressed galvanised iron. The building contains a basement area, which provided cheap accommodation for single miners.

4. Former court house, Ravenswood.

4. Court House and Police Cells, Raven Street, Ravenswood.

The mining warden's court was the hub of any mining town. At Ravenswood the site became known as Commissioner's Hill. The police station contained a station office, living quarters and cells. In 1965 the buildings were removed to a Burdekin pastoral station. For many years Commissioner's Hill was marked only by a brick retaining wall and steps. The original court house and police buildings have now been returned to their former sites and restored. The court house now serves as a community museum.

5. Post Office and House, Macrossan Street, Ravenswood.

The existing post office building dates from 1886 when it replaced an earlier post office and store. The present building has been in continuous use as a post office since its construction although the former postal counter area has been converted to a general store. The postmaster's house is located alongside.

6. Ambulance Office, Deighton Street, Ravenswood.

Erected in 1904 to replace an earlier building in Macrossan Street. The date 1902 on the parapet probably refers to the date of establishment of the ambulance service. Establishment of the ambulance service underlines the dangers inherent in mining. After the Ravenswood Hospital closed the ambulance centre played an important part in the health of the town for many years. The ambulance officer acted as the town's medical adviser and the office is still used for the Flying Doctor's visits.

7. Chinese Temple Ruins, Deighton Street, Ravenswood.

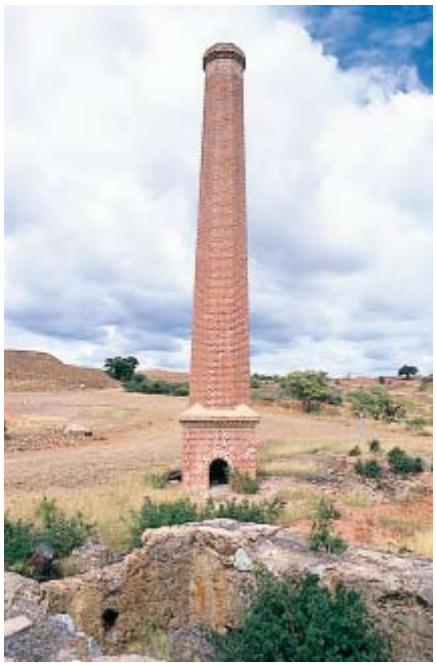
Deighton Street was the centre of Ravenswood's Chinese community. Up to 300 Chinese were living on the field at different times from the 1870s to the 1920s. From the 1880s, around the town they were cultivating up to 30 market gardens which kept the goldfield supplied with fresh fruit and vegetables. The only surviving evidence of the Chinese commercial and community centre on Deighton Street are the temple floor and stairs beneath two mango trees.

8. Grand Junction Consols Mine, Ravenswood.

The Grand Junction Consols Mine is significant as one of the least successful mines at Ravenswood. The Grand Junction was opened by local miners in 1902 and acquired by the New Ravenswood Company in 1908. The mine only yielded about 400 ounces of gold throughout its life. The large square brick chimney and engine foundations testify to its over-capitalised development.

6. Ravenswood ambulance office.

Ravenswood



9. Chimney at the Sunset No. 2 Mine.

9. Sunset No.2 Mine, Ravenswood.

The mine is an early component of the rich Sunset reef, which was the most productive on the Ravenswood field from 1876 to 1912. The boiler house was equipped with an unusual octagonal brick chimney - one of only three associated with early mining in north Queensland.

10. Judje's Battery, Ravenswood.

Jim Judje's battery was opened in 1938 to treat the Sunset Mine dumps. The initial plant comprised 10 head of stamps including five head in a Union Ironworks mortar box manufactured in San Francisco three years before the earthquake. After several years of efficient operation, Judje was joined by other partners and upgraded the battery to 30 head of stamps. A large Stirling boiler was bought from the Sellheim meatworks. The upgrading was not successful. The payable Sunset dumps were almost worked out; the boiler required vast quantities of wood; and the new stamps were mounted on brick rather than concrete footings and these were not strong enough for constant operation. The plant often broke down and the battery closed in 1942.

11. Sunset No.1 underlie shaft headframe, c1903.

12. General Grant Mine headframe, c1901.

13. Cornish Boilers at the Duke of Edinburgh Mine.

11. Sunset No.1 Mine, Ravenswood.

The Sunset reef was found in 1869, revealing its presence by rich gold-bearing ore outcropping on the surface. The mine was acquired with other central Ravenswood mines in 1900 as part of the New Ravenswood Company. The mine is now significant for containing one of the few surviving north Queensland examples of an early timber underlie brace. The Sunset No.1 and General Grant Mines are off-limits to visitors.

12. General Grant Mine, Ravenswood.

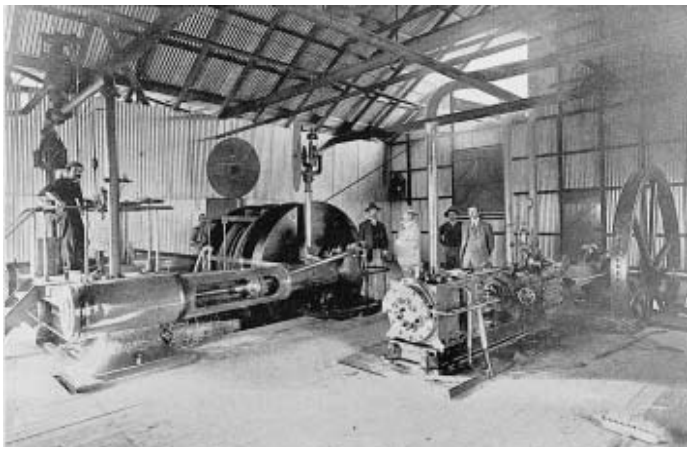
The General Grant was one of the first outcropping quartz reefs opened on the field in 1869. By 1872 the shaft had reached the difficult mundic ore below the water table. The mine was worked almost continuously until the late 1880s. In 1899 the New Ravenswood Company acquired the property.

13. Duke of Edinburgh Mine, Ravenswood.

The Duke of Edinburgh Mine was developed early in the life of the Ravenswood Goldfield. It operated intermittently until 1908 when it was again re-opened as part of the New Ravenswood Company. The mine closed with the company's collapse in 1917. Part of the underlie shaft brace has survived. The mine is now located on the edge of Carpentaria Gold's Buck Reef West pit.

14. Ravenswood Deep Mine, Ravenswood.

Miners called the Deep the 'Hot as Hell Mine'. It cost two lives in 1904 and 1905 when one miner was buried in a rock fall and another was blown up. The mine was developed by the local entrepreneur A.L. Wilson as the most ambitious undertaking on the field. Starting with a vast amount of speculative English capital, Wilson set out to build a model mine and battery. Most of the work was carried out during 1903. The mine eventually became the deepest on the field, but only a few hundred ounces of gold were recovered.



14. Ravenswood Deep Mine winding plant, c1905.

15. Imperial Hotel, Macrossan Street, Ravenswood.

The Imperial Hotel built in 1902 is the third building on the site. Proprietor Jim Delaney made his money as a member of the Donnybrook Mine syndicate. Delaney died soon after the building was completed and the hotel passed to his wife and subsequently to his daughters who continued to run the hotel until recently. The building has a highly decorative facade which features applied plaster ornamentation on brickwork. The Imperial is the best known building in Ravenswood and one of the most significant.

15. Bar at the Imperial Hotel.

16. School of Arts, Macrossan Street, Ravenswood.

The building dates from 1882 when it replaced an earlier School of Arts. The hall fulfilled a vital community need for many years as the social centre of the town being used for dances, concerts, live theatre and as a cinema. Silent films were screened to the piano accompaniment of the Delaney sisters from the Imperial Hotel. The hall was restored in 1989 after suffering from termite and storm damage. The adjoining School of Arts Library, which was established by 1876, was demolished recently after suffering similar damage.

16. School of Arts hall, Ravenswood.

Ravenswood District

19. Great Extended Mill foundations, Totley.

20. Diesel engine at the Great Extended Mine.
(see the Louisa Mine, page 46)

17. Totley Township, near Ravenswood.

In early 1880, a silver-lead discovery on One Mile Creek led to renewed prosperity for Ravenswood. Richard King developed the earliest mines during 1881-82. The township of Totley was surveyed in 1886 and the King family dominated the lives of the residents. Over half the streets of the township were named after the King family members. Silver mining ceased in the early 1890s.

18. King's New Mill, Totley.

Richard King began developing the first silver discovery at Totley in 1881. Following favourable assessments of the ore potential in King's Mine, a Melbourne syndicate bought into the company. The new company proposed an elaborate treatment plant to be housed in an all-brick building on One Mile Creek, connected by an endless chain tramway to the mine. Today there is little evidence of the mill, other than brick foundations for machinery. The tramway formation running from King's Mine to the mill site is still visible under the streets of Totley township.

19. Great Extended Mill, Totley.

The Great Extended Mill was completed at great expense in 1888 and, apart from trial runs, never treated a single ton of ore for export. The equipment, including two Linkenbach round buddles, was sold to the Montalbion Silver Mining Company near Irvinebank and dismantled in 1891. The Great Extended Mill's location alongside King's New Mill illustrates the competition between rival companies and the duplication of plant and facilities during the silver boom.

20. Great Extended Mine, Totley.

The Great Extended Mine is significant as a silver mining operation which was sustained more by hope than metal returns during two separate phases — 1883-1890 and 1947-1964. The existing plant, comprising a steel headframe and M.A.N. diesel engine, was originally imported by a French company in 1912 for use on the Wolfram Camp molybdenite leases. In 1915 it was re-located to the Louisa Mine on the Palmer River Goldfield from where it was recovered in 1949. The engine is associated with the beginnings of diesel technology for mining.

Map 2: Charters Towers District

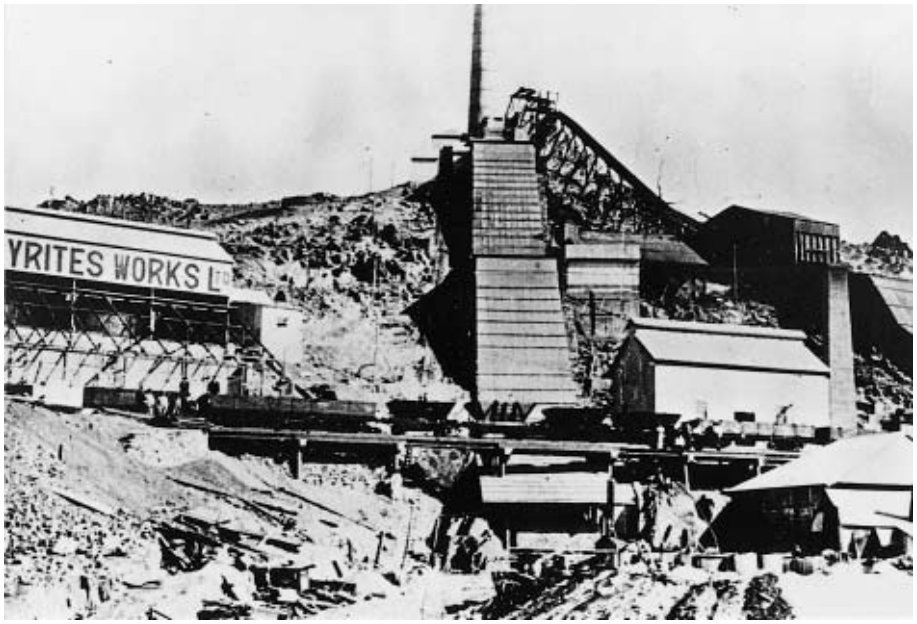
21. Charters Towers Goldfield.

Gold was discovered at the 'Towers' in late 1871 by the prospectors Mosman, Clarke, Fraser and Jupiter, an Aboriginal who worked for Mosman. The field was proclaimed in 1872 and named after the district's mining warden, William Charters. By year's end there were an estimated 4,500 people on the new field. As the field expanded it became necessary to sink deeper shafts requiring greater capital. Soon more capital was needed than was available locally. By 1885 a mining exchange was formed for the buying and selling of mine shares. British investment was sought in 1886. At the time some mines on the Day Dawn line of reef were producing extraordinary quantities of gold. The response resulted in a speculation boom. The fabled Brilliant line of reef was discovered in the following year and the fortunes of the field recovered. In 1892 the introduction of the successful McArthur-Forrest cyanidation process boosted production which peaked in 1899. The population also peaked this year at around 26,500. Charters Towers had become the second most important city in Queensland and an internationally acclaimed goldfield. After 1899 the yields gradually declined and by 1916 all of the great mines had closed.

21. Gill Street, Charters Towers.

22. Pyrites Works, Towers Hill, Charters Towers.

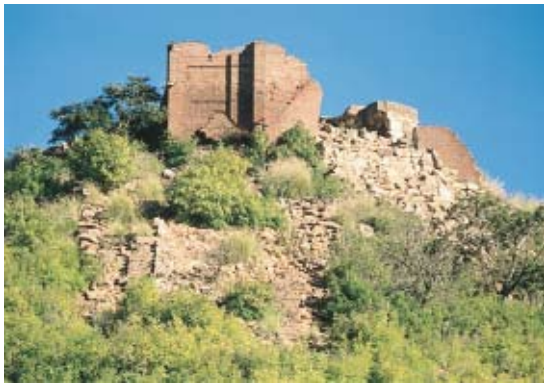
The ruins on Towers Hill are the largest surviving remains of a 19th century pyrites chlorination works in Queensland. By the 1880s gold milling technology had developed considerably since the early reef mining days when the ore was crushed by gravity stampers. When mining reached below the water table this method proved inadequate for the recovery of gold in pyrites and sulphide ores. New methods were experimented with. Chlorination, introduced in the mid-1880s, involved roasting the concentrates in a reverberating furnace. D.A. Brown designed and installed the original works. He was sent to South Africa and England and on returning, built his 'Hillside' furnace. The process was soon overtaken by the advance of cyanide treatment technology. By 1904 the Pyrites Works had been converted to a cyanide plant.



22. Pyrites works furnaces, c1900. (Don Roderick Collection)

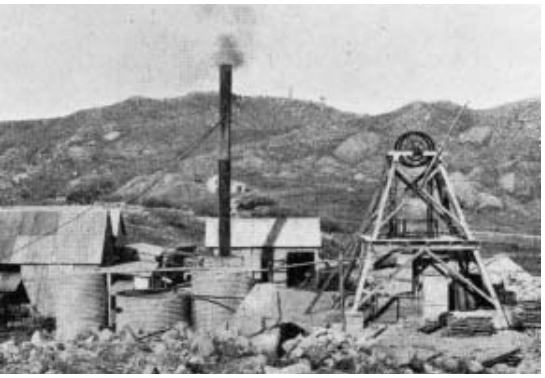
23. Rainbow Battery, Towers Hill, Charters Towers.

The Rainbow Battery ruins are visually associated with Towers Hill and the Pyrites Works. The Rainbow reef was the location of some of the earliest Charters Towers claims worked in 1872. The battery was probably erected sometime during the 1880s. By 1903 there were extensive areas of retreated tailings associated with the plant and some of these dumps have survived to recent times. The last reference to the Rainbow Battery occurs in 1917.



22. Pyrites works ruins, Towers Hill.

Charters Towers



24. Clarke's Mine, Towers Hill, c1915.

25. Frederick Pfeiffer's former house.

26. The Stock Exchange Arcade.

24. W.W.II Explosives store at Clarke's Mine.

24. Clarke's Mine, Towers Hill, Charters Towers.

The North Australian Reef, where gold was first discovered in December 1871, was worked as a large number of claims from 1872 to 1885 and then as Mosman Gold Mines until 1898. The North Australian Reef, including Clarke's Mine, was later re-tested. In 1914 it was reported that Clarke's Mine was operating on a small reef, but by 1917 the returns were so small that the mine was forced to close. During World War II the mine waste dumps were re-used to conceal and protect military explosives stores which formed part of a larger complex of similar wartime structures.

25. Pfeiffer House, Paull Street, Charters Towers.

One of the oldest houses in Charters Towers; this building is significant for its association with Frederick Pfeiffer who from 1874 was closely involved with the development of the rich Day Dawn P.C. Mine — the first lode mine in Queensland to produce gold to the value of £1 million. Pfeiffer's house was erected in late 1881 for his marriage. It stands on Day Dawn Ridge occupying the site that his tent did in his bachelor days. The house had fallen into a state of extreme disrepair by 1971. The property is presently owned by the Mormon Church.

26. Stock Exchange Arcade, Mosman Street, Charters Towers.

The Stock Exchange Arcade is a symbol of the importance of gold in the development of north Queensland. Its grand architecture illustrates the wealth and confidence of nineteenth century Charters Towers, referred to by miners as 'The World'. The Stock Exchange Arcade was built in 1888 for the site owner, Alexander Malcolm, as a shop and office block named the Royal Arcade. In 1890 the Charters Towers Stock Exchange took up offices in the arcade which became the focus of gold mining investment during the heyday of Queensland's most important goldfield.

27. School of Mines, Hodgkinson Street, Charters Towers.

Standing next to the mining warden's court, the School of Mines was established in 1899 by the Charters Towers Mining Institute. It was taken over by the Government as a mining school and classes began in 1901. The school became a highly regarded institution. By 1912 many people were leaving the town and by 1916 the goldfield closed. The school continued to produce a small pool of graduates who were to distinguish themselves in many branches of the mining industry. The school closed in 1925 after it was taken over by the Department of Education. In 1977 the building was leased to the National Trust and is currently occupied by the Queensland Parks and Wildlife Service.

28. Court House, Hodgkinson Street, Charters Towers.

The new court house, commissioned in 1886, was constructed to a design by the Colonial Architect's office during the period when John James Clarke was in the position. In addition to accommodation for the local magistrate's court, the building also provided office space for the mining warden and the mining surveyor and registrar. By 1890 a new wing was constructed with verandahs on three sides. The building remains in use as a court with the west wing containing the court room and the east wing housing the offices for the mining registrar, magistrate and mining warden.

28. Court house at Charters Towers.

29. Thornburgh House, King Street, Charters Towers.

Built in 1890 for the Charters Towers mine and mill owner Edmund Harris Thornburgh Plant. In 1872, within a short time of the discovery of the Charters Towers Goldfield, Plant had erected his Venus Battery. He served as chairman of Dalrymple Shire from 1893 and in 1905 became a member of the Legislative Assembly. When the house was offered for sale in 1918 the Methodist and Presbyterian Churches took out an option to purchase the property for a school for boys. Ownership of the school passed to the Blackheath and Thornburgh College in 1978.

29. Thornburgh House, now a college.

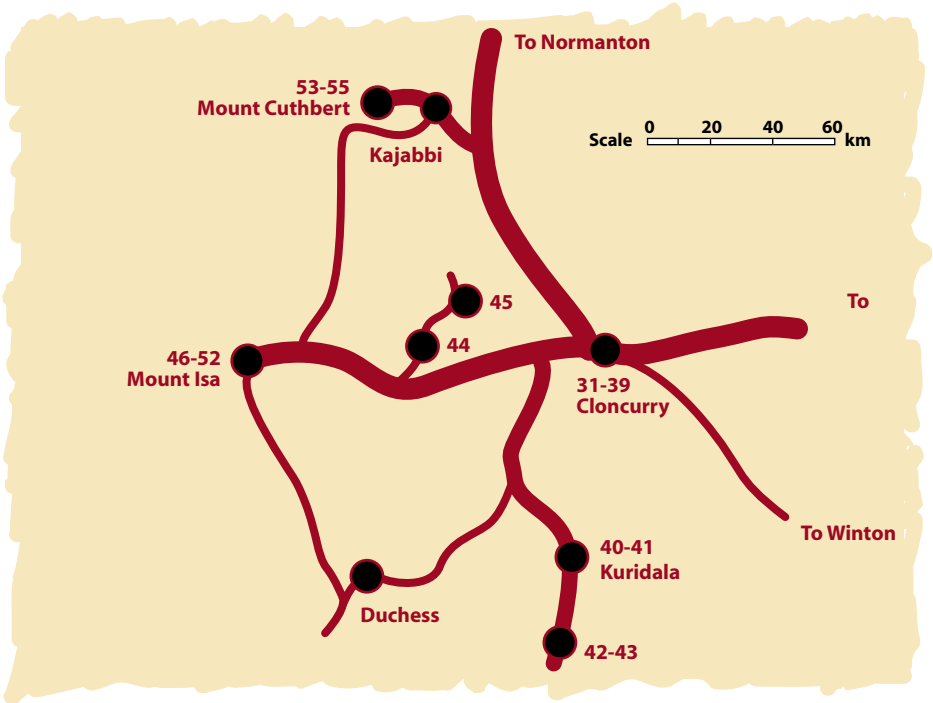
30. Venus State Battery, Millchester Road, Charters Towers.

Plant and Jackson's Venus Battery was operating on Gladstone Creek, Millchester, as early as July 1872. The battery was equipped with five head of stamps, but by late 1873 it had 20 head. By 1897 the Venus was one of 17 batteries operating on the goldfield. The number of stamps was increased to 35 about 1907 and the building was enlarged. The Charters Towers reefs were exhausted by 1917, but the town survived with the support of the Venus, which became a State-owned battery from 1919 and provided crushing facilities for small miners long after the other mills had closed. Mains electricity was installed in 1946 and the cyanide plant was increased to its current capacity in 1954. The battery was presented to the National Trust in 1975.

30. Five head of stamps at the Venus Battery.

Cloncurry

Map 3: Cloncurry & Mount Isa



31. Cloncurry Township.

The Cloncurry district was first mapped by Burke and Wills in 1861. In 1867 Ernest Henry found the Great Australia copper deposits which provided the impetus for the establishment of Cloncurry. The discovery of gold along the Cloncurry River in 1869 attracted new prospectors and a permanent town site was laid out by surveyor Bishop in 1876. The mining industry was the catalyst for Cloncurry's 'golden era' which began in 1905 and lasted until 1920. World copper prices rose to unprecedented heights and provided the investment necessary to exploit the mineral wealth. The end came in 1921 with a collapse in the world price of copper. During the 1920s and 1930s the town was eclipsed by the development of Mount Isa. It was not until the 1950s that Cloncurry again experienced a period of relative prosperity with high cattle prices and the discovery of uranium at Mary Kathleen.

32. Cornish boilers and haulage plant foundations.

32. Great Australia Copper Mine, Cloncurry.

In May 1867, Ernest Henry discovered copper outcropping on the Cloncurry River and named his find the Great Australia. It was the most northerly mine in Australia and probably the most isolated. The Great Australia Mine was a milestone development for north Queensland. While the mine was not very successful, Henry's subsequent discoveries elsewhere in the region were the catalyst for further development of the Cloncurry district copper resources. The site is on a current mining lease and visitors should obtain permission before entry.

33. Leaching vats at the Metallurgical Plant site.

33. Mount Elliott Company Metallurgical Plant, Cloncurry.

In 1926 W.H. Corbould's Mount Elliott Company decided to employ a new form of electrolytic smelting to use the low-grade ores of the district. The process was the invention of an Englishman, H.S. Mackay, and the plant was designed in London. It was the first plant of its kind ever built. Construction started on what was planned to be a large electro-chemical copper treatment plant. However, before the plant was actually commissioned, instructions were received to close it.

34. Former A. J. Smith and Company Store, Ramsay Street, Cloncurry.

One of the few surviving 19th century commercial buildings of the many that once lined the streets of Cloncurry during the copper boom. The building is also important for its association with the A.J. Smith family's chain of stores. The company established its first store in Cloncurry during the prosperous years of the early 1880s, having also established stores in Burketown, Normanton, Julia Creek and Richmond. The Cloncurry store was subsequently owned by the Lee Brothers and more recently, the local Butts family The building now houses Macs store and the Cloncurry Pharmacy.

35. Court House, Daintree Street, Cloncurry.

Although a police magistrate was appointed in 1882, Cloncurry did not have district court sittings until 1890. The registrar of the court was also the mining registrar and telegraph operator. Court hearings were held in the early police station, demolished in 1965. The first section of the present court house was built in 1897. In 1907 it was moved slightly to be integrated into a new and larger building. The court house received additional extensions in 1914 and 1961, and served as a circuit court and mining warden's court until 1963.

36. Former Mining Warden's House, Sheaffe Street, Cloncurry.

This house is one of a pair of public service residences in Sheaffe Street formerly occupied by the mining warden and the clerk of petty sessions. Built in the 1890s, the warden's house holds associations with the establishment of the Mount Isa field. The houses were removed from their original location at the base of Shell Hill to their present sites in the town immediately after World War II. A mining inspector was stationed in Cloncurry until 1947. The house is now privately owned.

37. St. Colman's Catholic Church, Sheaffe Street, Cloncurry.

St. Colman's is symbol of the Cloncurry copper boom at the beginning of the 20th century when world copper prices soared. The foundation stone was laid in 1907 by James Duhig, Bishop of Rockhampton. Until 1909 when a presbytery and convent school were built, classes were conducted in the church and the parish priest slept on the back verandah. The church was blown down in a cyclone in 1921 and rebuilt with the addition of the distinctive timber bell tower above the front porch.

38. Qantas Hangar, Cloncurry.

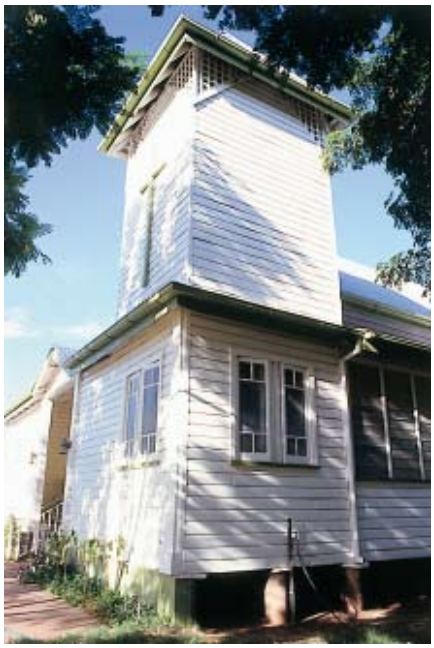
In 1919 Hudson Fysh and Paul McGinness recognised the potential for an aerial service that would link the unconnected railhead towns of Charleville, Longreach, Winton and Cloncurry. Queensland and Northern Territory Aerial Services Limited was established in 1920. In February 1922 Qantas contracted Stewart and Lloyds, Engineers, to supply and erect steel-frame hangars at Cloncurry, Longreach and Charleville. The Cloncurry hangar is a symbol of the town's importance as an early copper mining centre. However the fortunes of the town had declined by the time the hangar was erected.

39. Afghan Mosque Site, Cloncurry.

A mosque was established at this site at the height of the Cloncurry copper boom. Built of galvanised iron on a timber frame and shaded by grape vines, it had a verandah and one room, which accommodated about 20 worshippers. The mosque was located near the junction of the Cloncurry River and Coppermine Creek on an area set aside for market gardens. Although many Afghan teamsters and their camels camped here the area was locally known as Chinatown. Imprints of the mosque and the water tank for ablutions can still be detected on the surface.

34. Former A.J. Smith and Co. store.

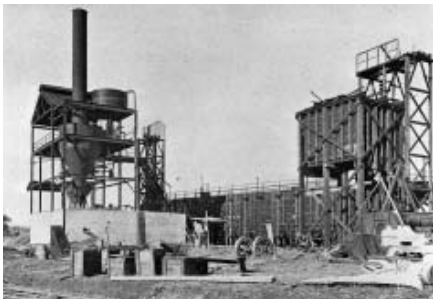
35. Court house verandah.



37. Bell tower of St.Colman's church.

38. Former Qantas hangar.

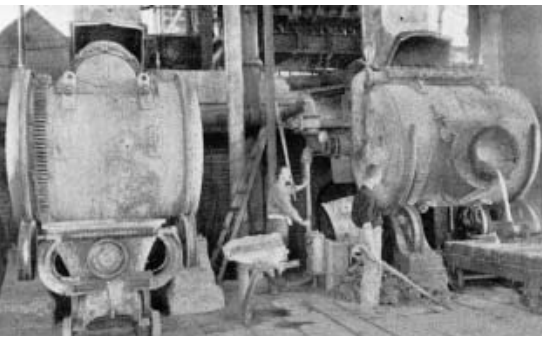
Cloncurry District



41. Hampden Smelter under construction, c1910.

41. Early water-jacket blast furnace at Kuridala.

43. Ruins of the copper floor at Mount Elliott.



43. Copper converters at Mount Elliott, c1912.

40. Kuridala Township, near Cloncurry.

Established in 1908, the township was known as Hampden after the line of copper reef upon which it was located. By 1912 it was officially called Friezland. When German names became unpopular at the outbreak of World War I it was re-named Kuridala. The railway extension from Cloncurry to Mount Elliott Smelter reached the township in 1910. By 1913 there were 1,500 people increasing to 2,000 by 1920 before the collapse in the world price of copper. With the discovery of Mount Isa in 1923, the town's administrative and commercial buildings were dismantled and moved there. Other buildings including the police residence and many private houses were moved to Cloncurry. The last inhabitant moved into Cloncurry about 1982.

41. Hampden-Cloncurry Copper Smelter, Kuridala.

Kuridala's Hampden copper deposits were discovered in 1884. By 1905 rising prices, new discoveries and the promise of a railway led to a resurgence of interest. The Hampden Cloncurry Copper Company was registered in Victoria in 1906. Hampden Cloncurry combined with its competitor, the Mount Elliott Company, in 1908 to finance a railway extension from Cloncurry. The smelter was begun in 1910 and was first fired in March 1911. The outbreak of World War I conferred four years of prosperity on Kuridala. To ensure regular ore supplies the Hampden Cloncurry Company built a series of light railways to its mines. The company stopped production after copper prices collapsed in 1920. The smelter is on a current mining lease and visitors should obtain permission before entry.

42. Selwyn Township, near Cloncurry.

Selwyn township site is at the head of the valley to the Mount Elliott Smelter. The town was surveyed about 1910 and took its name from the nearby Selwyn Ranges, which were named for the Victorian Government Geologist during Burke and Wills' expedition. In 1918, before the drop in copper prices and closure of the smelter, the township held 1,500 people. The site now comprises garden plots, house stumps and water tanks. The Mount Elliott railway was constructed by the Railways Department after the Hampden Cloncurry Company and the Mount Elliott Company agreed to pay the cost. The line opened to Selwyn in December 1910 and became the busiest branch railway on the Cloncurry copper field until the boom ended in 1920. Station staff were withdrawn from Selwyn in 1930, but the branch line remained open until 1961.

43. Mount Elliott Copper Smelter, Selwyn.

Mount Elliott Limited was floated in Melbourne. Development commenced in 1906 and the mine was taken over in 1907 by British and French interests. W.H. Corbould was appointed general manager and the new company entered into an agreement with the Queensland Government for extension of the railway from Cloncurry. Corbould designed new smelting works, which were in operation by 1910 when the first train arrived. Throughout World War I the Mount Elliott Smelter operated in costly competition with its near neighbour, the Hampden Company smelter at Kuridala. In 1920 the world price of copper plunged and the smelter closed. Mount Isa Mines purchased the plant and machinery in 1943 enabling a start in copper production during World War II. The smelter is on a current mining lease and visitors should obtain permission before entry.

44. Mary Kathleen Township, near Mount Isa.

A town unique in Australian mining and urban planning history because its design also envisaged its removal. Mary Kathleen was established to serve the needs of a uranium oxide mine community. It was commissioned by the Rio Tinto Mining Company and intended to be temporary, paralleling the life of the mine. The architect's brief called for buildings that could be mass-produced and remain in use for just 10 years. Construction took place during 1954. In all, 226 buildings were erected. In 1961 the population was about 1000. Mining ceased in 1963 after existing contracts were met and the town was mothballed. It was re-opened in 1976 and finally closed in 1982. The town buildings and the mining plant were sold at auction in 1983.

45. Mary Kathleen Uranium Mine.

In July 1954 Clem Walton and Norm McConachy found radio-active ore in the Selwyn Ranges between Cloncurry and Mount Isa. It was Australia's most promising outcrop of uranium. Walton's syndicate called for tenders; the highest, from Australasian Oil Exploration Limited, was accepted. The mine was named after McConachy's wife. From 1958 until 1963, Mary Kathleen became Australia's largest uranium producer to fulfil a contract with the United Kingdom Atomic Energy Authority. In 1976 the mine was re-opened and operated until 1982. Mary Kathleen is significant as the first commercial uranium mine in Queensland and an early example of life-of-mine planning and environmental rehabilitation.

46. Mount Isa Mine, Mount Isa.

Lead outcrops were discovered by John Miles at Mount Isa in 1923 and 118 leases were soon pegged out. By the end of 1925 William Corbould's Mount Isa Mines Limited had achieved a coup, unprecedented in Australian mining, which resulted in the entire mineralised area of the new field being held by one company. But vast amounts of capital were required and by June 1927, Leslie Urquhart's Russo-Asiatic Consolidated had become a major investor and in 1928 plans were drawn up for the mine and mill. In 1930 and a half share in the Mount Isa Mining Company was sold to the American Smelting and Refining Company. Ore production commenced in May 1931. A profit was finally made in 1937, by which time well over £5 million had been expended.

Large reserves of copper were found in the Black Star Mine at Mount Isa in 1941 and copper smelting commenced from April 1943 using antiquated machinery from the abandoned Cloncurry field to boost wartime production. A new copper smelter was opened in 1953, but it was soon too small and was replaced. With new copper smelters the annual copper yield at the Black Rock open cut had grown to twice that of all other Australian mines by the end of 1965. By the same period Mount Isa had produced more silver than any mine in Australia and ranked third among Australian lead mines and fifth amongst zinc mines. The company developed the 'Isasmelt' process in the 1980s, increasing the lead output by more than 200,000 tonnes a year. The mine is off-limits to visitors.

47. Urquhart Shaft Headframe, Mount Isa Mine.

In 1927 the Russo-Asiatic Consolidated Company, chaired by Leslie Urquhart, took over the shareholdings of Mount Isa Mines. Urquhart contracted the New York firm of Knox and Allen to produce plans for development of the ore bodies and treatment processes. An American engineer, Charles Mitke, designed the Man and Supply Shaft to take all men and materials underground and the Urquhart Shaft to hoist the ore and pump the water. Mitke supervised the sinking of the Urquhart Shaft in 1929. The headframe and winding engine were erected in 1930-31 and the first ore produced was smelted into lead bullion for the official opening of the Mount Isa Mines complex in June 1931. The Urquhart Shaft operated for more than 30 years until the K57 Shaft was opened in 1963. Though the headframe is off-limits to visitors, the structure is visible from the town.

45. Open cut uranium mine at Mary Kathleen.

46. Lead smelting plant at Mount Isa Mine.

47. Steelwork of the Urquhart Shaft headframe.

Mount Isa

48. Lawlor headframe under construction, 1929. (Courtesy of John Oxley Library)

48. Lawlor Shaft boiler and haulage foundations.

51. Former miner's tent house at Mount Isa.

48. Lawlor Shaft Winding Plant, Mount Isa Mine.

The Lawlor Shaft and winding plant now hold symbolic value because of their direct association with the initial development of Mount Isa Mines Limited from 1924. The plant is the only example of a steam winding engine to survive at Mount Isa. Robert Lawlor held the Crystal Lease on the new Mount Isa field in September 1923. This lease was consolidated into Mount Isa Mines holdings by the end of 1924, but Lawlor's shaft remained as the major access point to ores in the Rio Grande lode during the early exploration phase. In 1930 the Rio Grande Mine was served by the three-compartment Lawlor Shaft. During World War II the Lawlor Shaft was used in haulage of copper ore. The site is off-limits to visitors.

49. Base Supply Depot Rail Siding, Mount Isa Mine.

During the early months of the Pacific War military supply storage depots were established at strategic rail sidings for the receipt and trans-shipment of stores. The Mount Isa Base Supply Depot (BSD) siding, initially known as the Commonwealth Siding, was constructed early in 1942. The Base Supply Depot became the trans-shipment point for troops and war materials destined for the Darwin front line. After the war the BSD barracks precinct and mess (dining) hall were used by Mount Isa Mines to accommodate their new workforce, many of them single men from European countries, notably Finland.

50. Casa Grande House, Mount Isa Mine.

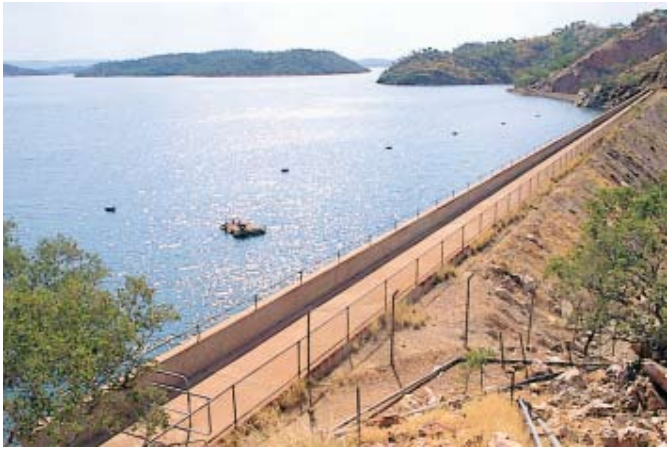
Casa Grande was associated with Mount Isa Mines director Julius Kruttschnitt whose Mexican and Arizona associations with the American Smelting and Refining Company (Asarco) may have influenced the architectural style of the house. The house was built in 1949 at the foot of the range overlooking the surface workings and plant. Kruttschnitt resigned as manager and chairman of directors in 1953. His successor, Sir George Fisher, lived in Casa Grande until 1966 when he moved to Brisbane. Thus for 30 years Mount Isa Mines was unique among Australian mining companies because the chairman lived on the field. The house and grounds are off-limits to visitors.

51. Miner's Tent House, Fourth Street, Mount Isa.

Now the only example of once common accommodation erected during the 1930s as a temporary shelter to ease the housing shortage. Between the town and the mine there were hundreds of tents, housing railway and construction workers. Conversion of a tent into a tent house included the addition of an iron roof above the existing tent roof and iron walls outside the tent walls. The tent house at Fourth Avenue, now managed by the National Trust, was one of the last remaining in the city in 1967 when it was decided to retain it as a museum.

52. Lake Moondarra, near Mount Isa

In 1957 a major new dam was constructed on the Leichhardt River to supplement the 1930 Rifle Creek Dam and serve the needs of the rapidly expanding Mount Isa township and mine. Located 20km downstream from Mount Isa, the dam has a capacity of 790 billion litres of fresh water. The dam with its landscaped picnic grounds is a popular recreational location for Mount Isa residents and tourists for power-boating, fishing, or just relaxing.



52. Dam wall at Moondarra Reservoir.

53. Mount Cuthbert Township, near Kajabbi.

At its peak the town had a number of stores, two hotels, a boarding house, a hospital, a police station and two railway stations. The majority of miners and smelter workers lived in the township in corrugated iron huts or tents. The railway arrived in Mount Cuthbert in 1916. The population escalated from about 50 in 1908 to a peak of 1000 in 1918, dropping to fewer than 400 by 1924. Mount Cuthbert had become a ghost town by 1927. The township area today contains the remains of more than 60 discernible buildings. Larger foundations of the stores and hotels are still evident.

53. Mount Cuthbert township and smelter, c1916.

53. Hotel bake-oven, adapted from a water tank.

54. Mount Cuthbert Copper Smelter.

By 1907 the Mount Cuthbert Company began developing a number of copper mines including Mount Cuthbert, Kalkadoon and Mighty Atom. In 1915, with the price of copper soaring, the company spent £120,000 constructing smelters before the railway reached the mine in September 1916. The blast furnace was fired early in 1917 and the mine and smelter operated until 1920 when a collapse in the copper price forced its closure. Mount Cuthbert Smelter is among the largest and most impressive smelter remains in north Queensland. It was the last early-phase copper smelter in the Cloncurry district. The smelter is on a current mining lease and visitors should obtain permission before entry.

54. Mount Cuthbert Smelter ruins.

55. Kalkadoon Copper Mine, Mount Cuthbert.

The Kalkadoon Mine workings contain evidence of a number of periods of development. The mineral lease was first taken up by Cuthbert Fetherstonaugh in 1899. It was further developed by the Mount Cuthbert Company from 1907. By 1913 a permanent headframe from Charters Towers had been erected over the main shaft with a boiler and winch. The Kalkadoon Mine closed in the early 1920s when copper smelting ceased at Mount Cuthbert. It was worked again in the 1960s before being abandoned.

Normanton

57. Former Burns Philp and Co. store.

58. Former Bank of New South Wales office.

59. The Gulflander leaving Normanton station.

56. Normanton Township.

The Norman River was first navigated in January 1867 during a search for an alternative settlement to Burketown, which had been abandoned due to fever and flooding. A township site was selected and settlement had commenced by May 1867. Planning commenced for construction of a railway from Normanton to Cloncurry in 1886. However by May 1888 the Government decided to direct the line to Croydon which was then nearing its peak as a new goldfield. By 1891 the railway was completed from Normanton to Croydon. As fortunes waned on the Cloncurry and Croydon mineral fields, so did those of Normanton. The importance of the township as a port diminished with the completion of the Townsville to Cloncurry railway. Renewed development began 1963 with investment in prawn fishing and processing based at Karumba.

57. Burns Philp Store, Landsborough Street, Normanton.

James Burns acquired the store from Clifton and Aplin about 1879. Burns and Robert Philp, later Premier of Queensland, founded their Townsville-based trading company in 1883 and set about establishing stores throughout north Queensland. The Normanton store was the most important as the trading base, not only for the Gulf hinterland, but also for the firm's expanding shipping connections with New Guinea and the South Pacific Islands. Two separate stores were required initially for the large amount of stock carried but, with the decline of Normanton as a port, the two were amalgamated in 1889. The company became the principal trader for the region and from 1883 to 1891 issued its own bank notes.

58. Westpac Bank, Landsborough Street, Normanton.

This building was constructed in 1886 as the office and manager's residence for the Normanton branch of the Bank of New South Wales. It was designed by the noted Brisbane architect Richard Gailey. By the mid-1880s, Normanton was the supply port for the new mining and pastoral enterprises of the Croydon and Gulf regions and banking facilities were an important service. The Bank of New South Wales had commenced trading in Normanton in 1884 in rented premises, acquiring the present site in 1885. As the Westpac Bank, it is now the only remaining bank in Normanton.

59. Normanton Railway Station, Matilda Street, Normanton.

Built in 1891, Normanton station is an outstanding example of traditional Victorian railway architecture adapted for tropical conditions. The high pitched iron roof and wide verandahs are complemented by the imposing arched roof of the carriage shade with its decorative ironwork and cast iron columns made by the Toowoomba Foundry. A goods shed, crane and cast iron water tank are located nearby. The station reflects Normanton's years of greatness as a river port for the Croydon Goldfield and for the Gulf country's expanding cattle industry. Today it is the terminus for the weekly Gulflander train service to Croydon.

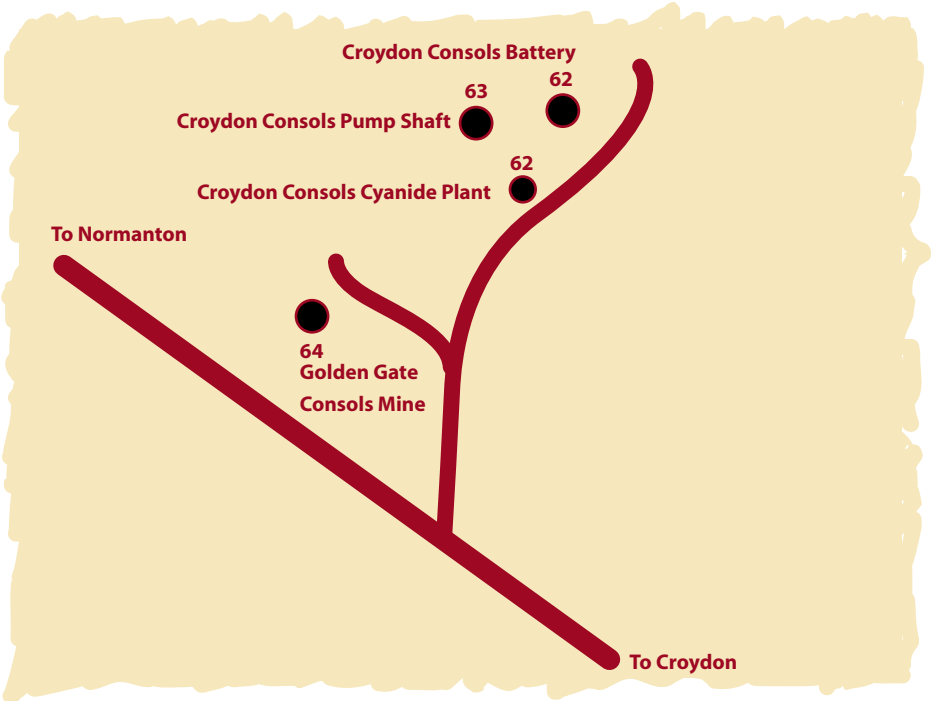
60. Normanton–Croydon Railway.

The only line in Queensland not connected to the state rail system, the Normanton to Croydon railway was opened in July 1891 and provided a vital transport link for the Gulf region. Surveyor and engineer George Phillips, who built the railway, solved the problems of termites and floodwaters with his 'Phillips sleepers'. Instead of timber, the sleepers carrying the rails were of steel. They were laid directly on the ground and packed with mud for stability. Maintenance costs were low and this helped to keep the line open. In recent years the weekly Gulflander rail motor service from Normanton, has become a popular tourist journey.

61. Croydon Goldfields

Gold was first discovered at Croydon in 1885. Until the first batteries were erected in December 1886 ore had to be carted to Georgetown for crushing. From May 1887 Croydon boomed with a population of 7,000 in 1890 making it the second-largest inland town in Queensland. In 1896 of 134 mines on the goldfield, half were still operated by man-powered windlass and only 27 used steam-powered winding gear. Many finds were lost or wasted through technological inefficiencies. The Golden Gate line of reef was re-opened in 1893 by the British-based Croydon Consols Company, resulting in a renewed flush of prosperity that faded after 1901. The Croydon Goldfield now retains one of the largest surviving concentrations of steam-powered mining plant in Queensland. These historic items are eligible for protection under the *Queensland Heritage Act* and should not be moved or relocated.

Map 4: Golden Gate, Croydon



62. Croydon Consols Battery and Cyanide Plant, Golden Gate, Croydon.

The Golden Gate reef was first worked in 1886, but was later abandoned until 1893 when a rich shoot of ore was discovered in the No.8 North Golden Gate (later the Croydon Consols). This led the new owners, the English Croydon Consols Limited, to erect a 30-head battery and a cyanide treatment plant. The Croydon Consols cyaniding plant operated from 1897 to 1904. During its short life it was the largest and most productive tailings treatment plant on the Golden Gate Reef. The Croydon Consols Battery and cyanide works contain a valuable assemblage of early plant which is eligible for protection under legislation. A recent tailings dump covers the site of Golden Gate township.

63. Croydon Consols Pump Shaft, Golden Gate, Croydon.

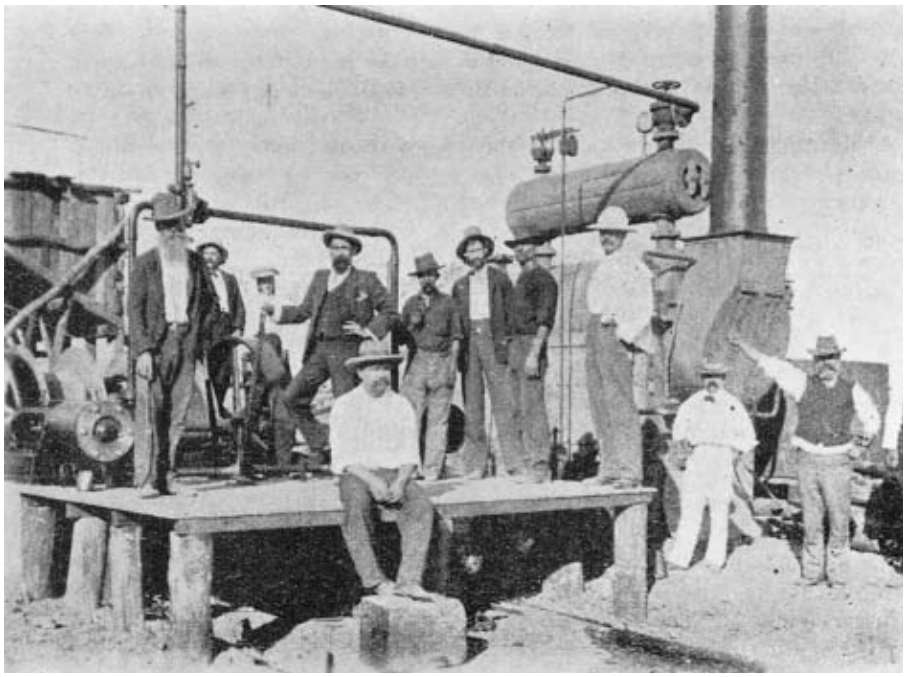
In 1898, flooding of the mine, then the deepest on the field, required an expensive pump out. To control further inflow of water, pumping equipment was purchased from Walkers of Maryborough and installed early in 1899. The pump shaft and equipment represented a considerable capital investment by the company to achieve control of the water in the mine. The concrete collared mine shaft, pumping well and beam pump arm contribute to the most intact early pumping plant surviving in the district.

62. Croydon Consols Battery at Golden Gate, c1900.

63. Winding drums at the Pump Shaft.

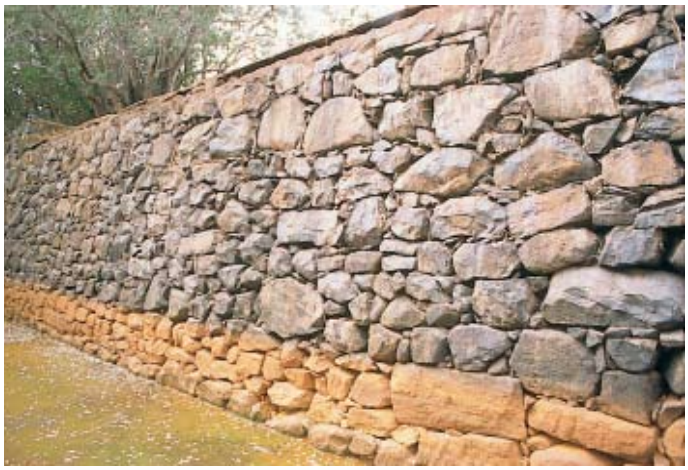
62. Ruins of the cyanide vats

Croydon Goldfield



64. Christening the winding engine, Golden Gate Consols, 1903.

64. Stuart and McKenzie winding engine.



65. Stone wall at Homeward Bound Dam.

64. Golden Gate Consols Mine, Golden Gate, Croydon.

Between 1886 and 1911, this mine accounted for more than one-third of Croydon's entire gold output. Following the discovery of a rich leader in 1900, a new decline shaft was sunk. The new shaft was equipped with a winding plant made in Croydon by Stuart and McKenzie's Union Foundry. An early photo shows the plant being christened by Miss Stuart with a bottle of champagne at a demonstration attended by the directors, shareholders and manager. The plant, which was probably the first locally manufactured winding engine, can still be seen at the mine.

65. Homeward Bound Battery Dam, near Croydon.

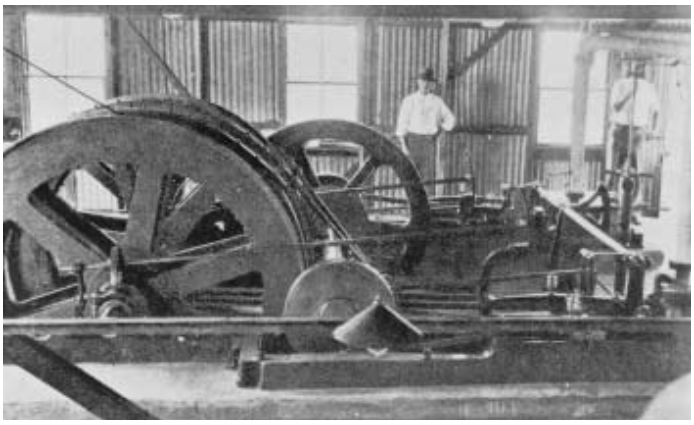
In February 1888, the 20-head Homeward Bound Battery began crushing ore from mines along the Homeward Bound reef. Lack of surface water was a problem throughout the Croydon Goldfield and a large stone dam was constructed in 1888, by a Mr Schumacher. The stone-pitched dam rises up to 5 metres above the creek bed and contains a spillway. The dam has survived for over a century and is a significant engineering achievement. The Homeward Bound settlement comprised a small camp centred around a store. Cyaniding was undertaken from 1902 and the mine continued to be a consistent producer until 1904.

66. Enterprise Battery Tailings Dump, near Croydon.

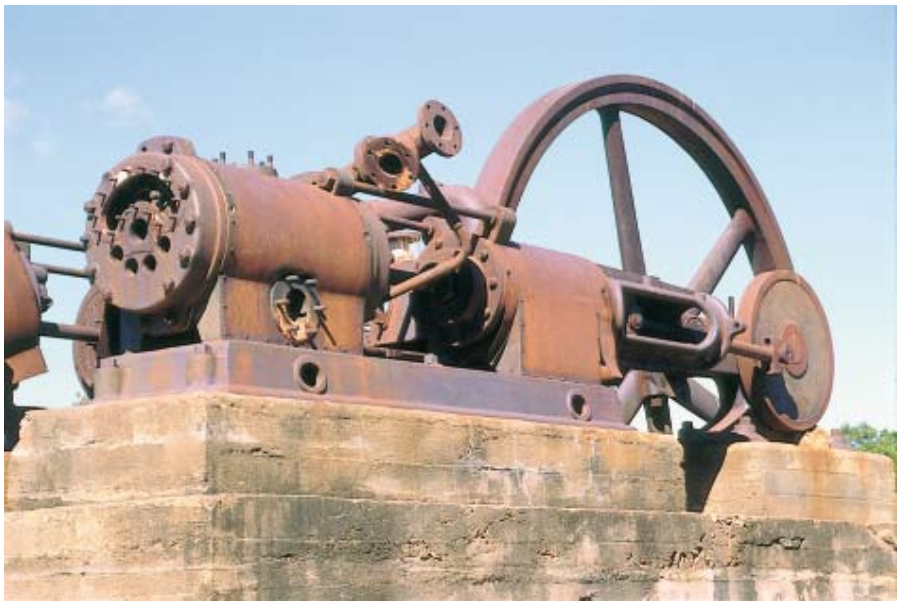
The Enterprise Crushing Company erected their battery on Belmore Creek in 1889 to crush ore from the Golden Gate mines. Mill owner Andrew Richardson purchased the Enterprise in 1900 and erected a cyanide plant for re-treating mine tailings. Between 1904 and 1906 it was the largest cyaniding works on the Croydon Goldfield. As mines closed, the supply of tailings dwindled and the plant ceased operations by 1909.

67. Iguana Consols Mine, Croydon.

The Iguana was among the first reefs discovered on the Croydon goldfield in 1885. The rich ore had to be carted to Georgetown for crushing until two batteries were erected at Croydon in December 1886. Cyanide treatment of mine tailings started in 1893. But in 1897, the Iguana reef was lost. An extensive diamond drilling program to relocate the reef began in 1901. It continued without success until 1918 and again in 1923 when expensive drilling equipment was installed. Because the Queensland Government subsidised the later drilling to assist local development, the Iguana became known as the Croydon State Mine. The Iguana Consols haulage plant includes a steam winding engine manufactured by the Glasgow firm of John Donald and a steam air compressor by Thompson's of Maryborough, Victoria.



67. Winding engine at the Iguana Consols Mine, c1917.



67. Air compressor at the Iguana Consols Mine.

68. Croydon Township.

In 1885 William Brown and the Aldridge Brothers discovered payable gold on their grazing property Croydon Downs, on Station Creek (now Belmore Creek). Their discovery was registered as the Lady Mary Prospecting Claim. A rush to the area quickly resulted in other finds and the development of outlying fields. Croydon Goldfield was proclaimed in 1886. By this period there was a population of more than 2,000. Croydon was linked by rail to Normanton in 1891. On Saturday nights crowds from the town and outlying settlements, such as Golden Gate, gathered in Sircom Street. The town was partly destroyed in May 1897 when a fire swept through the main commercial centre. Croydon reached its peak in the early 1900s and then declined as the gold was worked out. Mining came to a virtual stop in 1925.

69. General Store and Garage, Sircom Street, Croydon.

Mining investor Fred Cuthbert established the store in 1887. Business was so good it expanded to a three-department store, which he sold to John Sabine in 1919. Cuthbert also backed small ventures as well as highly profitable mines on the Croydon field. The adjoining garage was the base for the Green family's transport business which in 1922 began the first motor truck service between Croydon, Georgetown and Forsayth. With Croydon's decline, the store and garage closed. Re-opened as the Croydon General Store, the building remains historically intact and retains the atmosphere of the town's early years.

69. Croydon general store window.

Croydon

70. Club Hotel, Croydon.


71. Jib crane at the railway station.


73. Former court house.


74. Early graves at Croydon cemetery.

70. Club Hotel,
Sircom Street, Croydon.

The lone survivor of 15 hotels trading in Croydon in the early 1890s when around 7,000 people were on the goldfield. This timber and iron building was erected for J.B. Loridan in 1890, probably to replace an earlier Club Hotel built in 1887. The original iron balustrade on the upper verandahs was apparently cast in Croydon at Stuart and McKenzie's Union Foundry. The upper verandahs, extending over the footpath, have since been enclosed for additional accommodation.

71. Croydon Railway Station,
Helen Street, Croydon.

The Normanton railway reached Croydon in July 1891. As originally constructed Croydon station comprised a station office with a large carriage shade over the platform, a goods shed and crane, and an engine shed. The present station office was rebuilt to replace the original structures which were destroyed in wind storms in 1969. On display at the station is a re-built A10 class locomotive manufactured in 1877 and last used about 1915. The station building still serves as the terminus for the weekly Gulflander rail motor service from Normanton.

72. Croydon Shire Hall,
Samwell Street, Croydon.

The shire hall is an outstanding municipal building which survives from Croydon's golden era. Within a decade of its discovery in 1885, Croydon Goldfield had produced more than 700,000 ounces of gold. Prosperity seemed assured with the completion of the railway to Normanton in 1891 and Croydon was declared a municipality the following year. Croydon town and district were united as Croydon Shire in 1902 and the shire council's offices were located in this hall until 1991 when new premises were erected. For more than one hundred years, the hall has been the venue for events ranging from Queen Victoria's jubilee celebrations in 1897 to community dances and concerts.

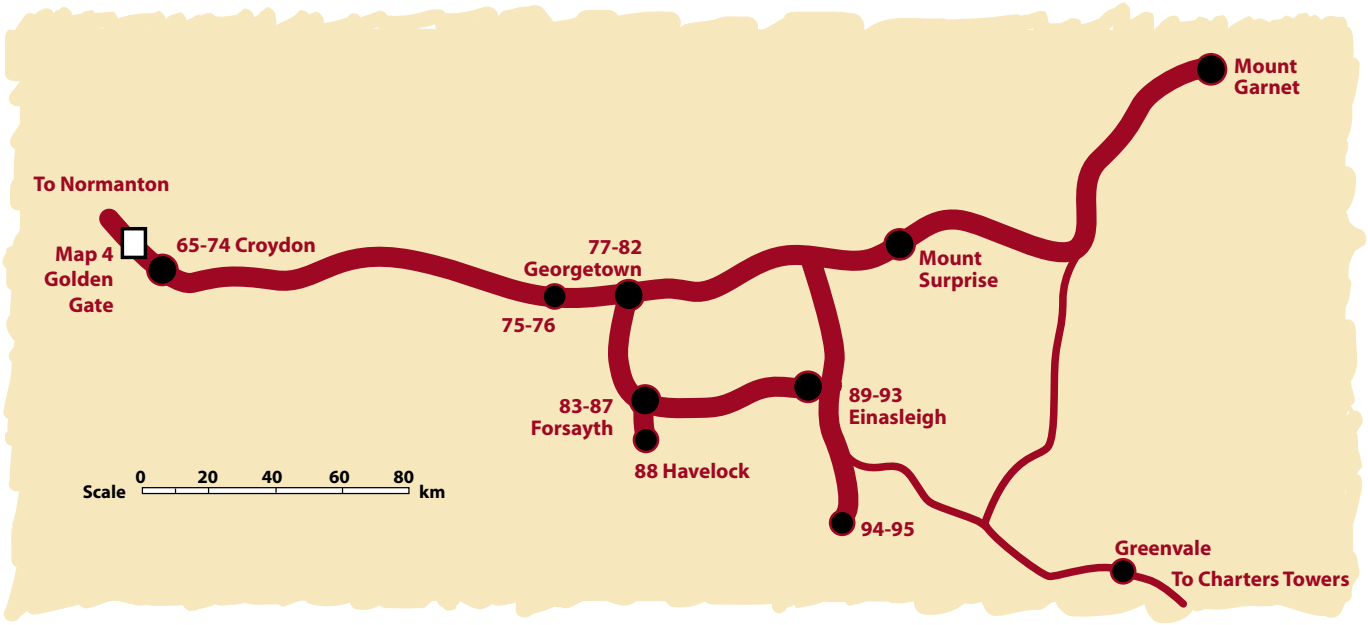
73. Court House,
Samwell Street, Croydon.

By the end of 1887 Croydon had developed from a mining camp to a settled township, with essential Government services established in buildings of easily transportable timber and iron. Among them was the court house which also served as the mining warden's court. It is a fine example of a government building designed for the climate and remote location.

74. Croydon Cemetery,

Many of the cemetery's remaining markers and headstones dating from the late 19th century provide a glimpse of the turbulent years when Croydon developed as a rich gold mining town. There are a large number of children's graves, some marked with iron bedframes where the parents were too poor to afford a headstone. Stone posts inscribed with Chinese characters mark the Chinese graves located in a separate section of the cemetery.

Map 5: Croydon & Etheridge



75. Cumberland Battery, near Georgetown.

The brick chimney marking the site of the Cumberland Battery is the only one surviving in the Georgetown district. Gold was discovered at Cumberland in 1872 and by 1878, more than a quarter of the gold produced annually on the Etheridge field came from the Cumberland Mine. To secure a permanent water supply the mine owners, O'Brien and Company, constructed an earth dam with a concrete spillway across Cumberland Creek. Throughout the 1880s, the mine continued to be the richest producer on the Etheridge field. Declining yields in the early 1890s forced the new owners, the Cumberland Gold Mining Company, to install a cyanide treatment plant to extract gold from the mine tailings. The mine closed in 1897, but cyaniding continued until the 1940s.

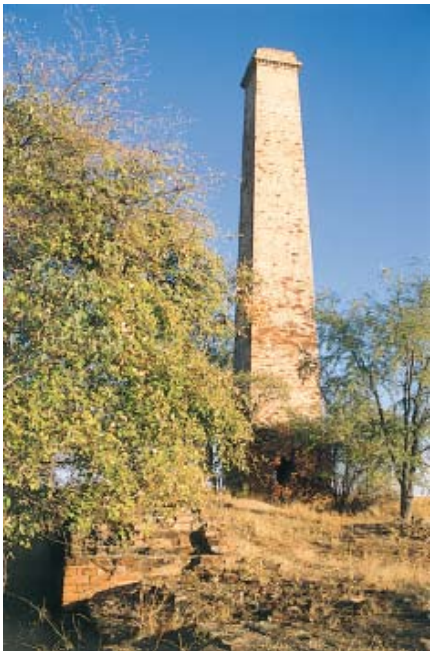
76. Cumberland Township Site,

A few stumps and bricks are the only reminders of the township's heyday in the 1880s. The town's population grew to nearly 400 residents within a few years as gold production reached its height. Although the post office and a hotel remained open until 1930, residents gradually left for other fields after the mine closed in 1897. Beside the town site are the remains of a tramway, built in 1891 to reduce the cost of transporting the ore 800 metres from the Cumberland Mine to the battery. It was an expensive undertaking involving cutting, embankment and bridgework to ensure a steady gradient for the ore trucks. The tramway closed with the mine in 1897.

77. Georgetown Township.

Richard Daintree discovered gold on the Gilbert River in November 1868. By July 1869 there were 3,000 diggers on the Gilberton field. As the gullies were quickly cleared of surface gold and the waters dried up, a new settlement was established on the telegraph route at the crossing of the Etheridge River in November 1870. The settlement was called Etheridge until re-named Georgetown after Howard St. George the district's first gold commissioner. Gilberton was abandoned by mid-1873 and thereafter Georgetown became the centre for the Etheridge district. Georgetown was slow to develop due to continuing rushes to more lucrative fields. Development of the British financed Durham and Cumberland mines in 1886 provided the first long-term prospects for the township. Georgetown experienced a boom in the construction of public and commercial buildings from the 1880s to the 1900s. In 1907 the Chillagoe Company commenced construction of a railway to the company's mines at Einasleigh and Forsayth and Georgetown found itself excluded from the rail link. After World War I Georgetown began to consolidate as the centre for the district's struggling cattle industry. The town survives as a local administrative and community centre.

75. Treating the Cumberland battery dumps, c1904.



75. Brick chimney of the Cumberland Battery.

Georgetown.

79. Etheridge Shire Hall.

82. Georgetown Masonic Temple.

83. Township of Charleston, c1908.

83. The site of Charleston township.

78. Nugent's Battery, North Street, Georgetown.

This five-head stamp battery has been retained in its original location above the Etheridge River at the entrance to the town and a park has been developed around it as a reminder of Georgetown's importance as the centre of the Etheridge Goldfield. The battery was one of the last operating on the early field, crushing ore from the Nugent brothers' Golden Horseshoe Mine at Georgetown and from the International Mine south of the town. It is not certain when the battery closed, but the Golden Horseshoe Mine was worked by the Nugent brothers from about 1938 to 1940.

79. Etheridge Shire Hall, St. George Street, Georgetown.

The Georgetown district was part of the Einasleigh Divisional Board which was formed in 1879 but disbanded soon after. A new municipal board, elected in 1882, met in the local school until the building of the board office later that year. In 1902 the Einasleigh Divisional Board became a shire council. The present shire hall was built in 1908 as the Einasleigh Shire Council office. In 1919 the name of the district was changed to Etheridge Shire. The interior of the building has undergone renovations on several occasions, most recently in 1998.

80. Mining Warden's House, St. George Street, Georgetown.

Mining Warden St. George moved his tent from Gilberton to the new centre of the Etheridge Goldfield in 1871. When a new post and telegraph office was constructed in 1885, the old post office, one of Georgetown's earliest buildings, was rented to the mining warden. This building was sold for removal in 1893, when the present office and residence was probably erected. The mining warden's house served as the clerk of court's residence until October 1980. It is now privately owned.

81. Antbed House, Haldane Street, Georgetown.

This is a rare example of an adobe, or antbed, house built of hand-made bricks from crushed termite mounds. The actual date of construction is unknown, but it was occupied by well-known Georgetown families including the Louden's and the Everett's since the 1880s. Thomas Everett was part-owner and editor of the local *Mundic Miner* newspaper from about 1902 to 1919. The Aylett family lived in the house from the 1930s until the late 1980s. The house is privately owned.

82. Masonic Temple, Haldane Street, Georgetown.

A masonic lodge was formed in Georgetown in 1890 but for many years there was no permanent meeting place. By the 1920s Croydon's declining population could no longer support a Catholic Church. The church building was sold and transported to Georgetown where it was re-erected as the Masonic Temple. The church's belfry, constructed of railway rails, remains in Croydon outside the Anglican Church.

83. Charleston Township and Cemetery, Forsayth.

Charleston developed from an early mining settlement known as Finnigan's Camp. From the late 1870s to 1900 it was the thriving centre for the Queenslander, Havelock, Big Reef and Nil Desperandum gold mines. The population fluctuated with the rise and fall of mining operations. Today nothing survives but the cemetery. The earliest headstone is that of Susannah O'Brien who died in April 1875. She was the wife of storekeeper Patrick O'Brien who also owned the battery at the Nil Desperandum Mine. After completion of the Etheridge railway in 1910, the town was moved across the Delaney River to the railway terminus. The new town was re-named Forsayth.

84. Nil Desperandum Mine, Forsayth.

The gold-bearing Nil Desperandum reef was discovered by Finnigan in 1871 and became known as Finnigan's Camp. He sold out in 1875 and the new owners worked the mine profitably until 1900. The mine was one of several purchased in 1907 and worked by Etheridge Gold Mines Limited, a subsidiary of the Chillagoe Company. The mine was linked to the Etheridge railway and closed after the Chillagoe Company was restructured in 1914. Little evidence remains of the early mine operations. The brick foundations of an ore loading stage are located alongside a railway formation running from the mine site across the Delaney River to the Forsayth railway siding.

85. Etheridge Railway, Almaden to Forsayth.

The Etheridge railway was constructed to provide the Chillagoe Company with adequate ore supplies after the Chillagoe reserves proved less than expected. The line was to be financed by the company and constructed by the Government which would eventually purchase it. The terminus was changed from Georgetown to Charleston (re-named Forsayth), when the company decided that the mines in the southern section of the Etheridge field offered better prospects. The first ore train from Charleston to Chillagoe, via Almaden junction, ran in January 1910. The Etheridge railway was taken over by the Government along with the Chillagoe Company's assets in 1919 after the collapse of the company. Reconditioning of the line was carried out in 1951 and locomotives hauled substantial livestock loads until 1980. The line remains open to Forsayth for the Savannahlander tourist rail motor.

86. Former Railway Stationmaster's House, Forsayth.

The Chillagoe Company's chief engineer, A.S. Frew, designed this building and similar residences on the company's Etheridge railway, completed in 1910, between Almaden and Forsayth. The distinctive triple-gabled roof form was used for the company's stationmaster residences at Mungana, Havelock, Einasleigh, Chillagoe and Almaden, but only two houses, including this one, survive. Designed for the climate with an elevated roof and spacious verandahs, the house reflects the stationmaster's importance in this early period. The house is now privately owned.

84. Miners at the Nil Desperandum, c1908.

86. Railway stationmaster's house.

87. Forsayth Hospital.

The first Forsayth Hospital was a small corrugated iron building, opened soon after the arrival of the Etheridge railway in 1911. Funded by patient contributions, it served the mining camps and the new town which had sprung up at the terminus of the Etheridge railway. By the 1930s it was in a dilapidated condition and in 1937 the Government financed construction of a new hospital closer to the town centre. The present cottage hospital was completed in late 1938.

87. Forsayth Hospital.

88. Havelock Battery, near Forsayth.

The Havelock was the most promising of the 'Charleston group' of gold mines purchased by the Chillagoe Company in 1910. A central battery was erected to crush the group's ore and a tramway was constructed to link the mill to the railway at Forsayth. The mill operated intermittently over the next 30 years. The Chillagoe Company over-capitalised on its surface plant and too little was spent on underground mine development. Nevertheless the nearby Havelock Mine was the only one still operating on the field by the 1940s. It closed in 1950. Recent surface mining on the site has removed all trace of early workings.

88. Havelock Battery near Forsayth, c1913. (Courtesy of John Oxley Library)

Einasleigh

90. Einasleigh copper mine, main shaft and mill.

90. Mill foundations at Einasleigh copper mine.

91. Tracker's quarters and police station.

93. Crossing the Copperfield River bridge.

89. Einasleigh Township.

The township of Einasleigh, originally named Copperfield, was laid out in 1900 by the mining warden on a township reserve near the Einasleigh Company's copper mine. Although the Chillagoe Company's subsidiary had only been established the previous year, already two hotels, a store, billiard room, butcher's and baker's shops were being erected and funds were being collected for a school. During construction of the Etheridge railway from 1907 to 1910, the town briefly became the largest centre in the Shire. The township almost disappeared during the 1920s, with the closure of the mine, and was saved from extinction only by its location on the railway.

90. Einasleigh Copper Mine.

Found by Richard Daintree in 1866, the Einasleigh copper deposit was one of the earliest mineral discoveries in north Queensland. However it was initially too remote to develop and was forgotten. The mine was taken up by the Chillagoe Company in 1900 and a smelter was erected in 1902. But operations still proved uneconomical because of high transport costs until the opening of the Etheridge railway in 1910. The mine closed when the Chillagoe Smelters were shut down in 1914. Acquired by the Queensland Government in 1919, it returned to full production the following year, supplying the re-opened Chillagoe Smelters. The mine finally closed in 1922.

91. Police Station, Baroota Street, Einasleigh.

The police station was transported from Port Douglas and re-erected at Einasleigh in 1910. Police trackers replaced the earlier Native Mounted Police detachments and at least one tracker was assigned to Einasleigh and the other major posts in the Cairns and Normanton police districts. The separate quarters for the trackers and their families can still be seen at Einasleigh police station.

92. Einasleigh Railway Station.

The Chillagoe Railway and Mining Company built the Etheridge railway to transport ore to its Chillagoe Smelters. The station buildings, completed early in 1909, reflect the importance of Einasleigh in this scheme. The stationmaster's house was one of several on the line designed by the Company's chief engineer A.S. Frew. The distinctive triple-gable, elevated roofs and spacious verandahs are unique to the district. The stationmaster occupied the house until floods closed the line in 1927. The house is still in use. The Savannahlander rail motor passes through the station on its journey from Cairns to Forsayth.

93. Copperfield River Railway Bridge, Einasleigh.

The Etheridge railway, from Chillagoe to Forsayth, was built for the Chillagoe Railway and Mining Company and completed in 1911. This is one of several low-level timber bridges constructed along the line. Although buttresses were used to help protect the bridge from flood debris, it was destroyed by flood in 1927 and rebuilt. The bridge was again washed away early in 1980 and trains terminated at Mount Surprise until the following year when the bridge was repaired and the line re-opened. The bridge now provides rail passengers with a scenic view of Copperfield Gorge.

94. Kidston Township.

The Oaks Rush in 1907 was Queensland's last major alluvial gold rush. Within 12 months 1,700 people were living at Kidston, the new town for the Oaks Goldfield. By 1909 the town's population had dropped to 100 as the alluvial gave out. The Kidston State Battery erected in 1920 extended its life into the 1930s. Buildings straggled along the bank of the Copperfield River. Still surviving is the police station precinct dating from 1909 and comprising the former police station, lockup, cottage and adjacent house and sheds. The town is now dominated by the Kidston Gold Mine, one of the largest mining operations in north Queensland.

95. Kidston State Battery.

Though alluvial gold was soon exhausted, reef mining kept the Oaks Goldfield alive. Strong representation by northern miners in the new Labor Government led to a State-owned and operated battery being erected in 1920. Although it remained an unprofitable enterprise, the battery's role was to support the small miners on the field. Before its final closure in 1950, the battery worked only intermittently with the unreliability of ore and water supplies. The battery shed, crushing plant and associated buildings including a manager's cottage provide an intact example of an early battery complex.

96. Former Telegraph Office, Mount Surprise

In 1871 Queensland constructed a telegraph line from Cardwell to Normanton in an unsuccessful move to gain connection with the new British cable. A telegraph office was established on nearby Junction Creek. From there in 1872, the explorer William Hann sent off a report on his Cape York expedition and in 1873 the prospector James Mulligan confirmed Hann's alluvial gold find which triggered the Palmer River rush. From Junction Creek the telegraph was extended to the new Etheridge, Palmer River and Hodgkinson goldfields. The telegraph building was moved to Mount Surprise on the new Etheridge railway in 1910. During World War II Mount Surprise was equipped with a telephone carrier system. With the introduction of the broadband microwave system in the 1970s, the early open-wire stations were closed down in the early 1980s. The former telegraph office now houses a local history museum.

97. Greenvale Mine Railway.

The railway was built to convey large tonnages of high-grade nickel ore from the Queensland Nickel Mine at Greenvale to the Yabulu nickel refinery near Townsville. Construction commenced in 1972 and the line was opened for traffic in 1974. It finally closed in March 1993 after a fall in nickel prices. The Greenvale railway set new standards in Queensland for narrow-gauge rail construction. It incorporated 35 substantial bridges built of pre-stressed concrete spans. The railway also involved an ascent of Herveys Range, north of Townsville, requiring the construction of three unlined hard-rock tunnels. Although an economic failure, the Greenvale Mine railway still demonstrates the magnitude of its engineering achievements.

98. Greenvale Township.

A modern and fully self-contained township was built from scratch during 1973-74 to service the new Queensland Nickel Mine. The mine owners, Metals Exploration and Newport Mining, designed the town around a commercial centre. It contained 85 brick veneer houses and 16 townhouses set on shady allotments with trees and gardens. At its peak the town held 500 people and was equipped with sports ovals, a swimming pool and a golf course. The rich deposit of high-grade nickel laterite was worked out by 1992 when a fall in nickel made further mining unprofitable. Despite the setback the town survived and is a thriving community of 300 people.

94. Battery manager's house at Kidston.

95. Ore elevators at the State Battery.

96. Former telegraph office at Mount Surprise.

Map 6: Atherton Tablelands

99. Mount Garnet copper smelter, c1902. (Courtesy of John Oxley Library)

101. Bucket dredge superstructure, Nettle Creek.

99. Mount Garnet Copper Mine and Smelter.

Copper was first located at Mount Garnet in 1882. Approval of the Chillagoe development in 1897 encouraged Victorian investors to provide the capital for the mine, smelter and a railway. The smelter began operations in January 1901 before the rail link was completed. Thereafter, the mine was beset by metallurgical and financial problems. The smelters closed in 1902 and the smelting plant was sold. The mine re-opened in 1915, but did not operate after World War I. The smelters have been removed but the blast furnace mounts remain alongside the brick foundations of the powerhouse.

100. Mount Garnet - Lappa Junction Railway.

Constructed by the Mount Garnet Freehold Copper and Silver Mining Company, the line linked Mount Garnet Smelter with the Chillagoe railway at Lappa Junction. The smelters, closed in 1902, the year that the railway was opened. The Queensland Government purchased the railway in 1914 and continued the train service until 1961. After the line closed, the rails and rail bridges were removed. The rail formation was converted to a road. At Lappa Junction the former Espanol Hotel, railway office and stationmaster's house remain. The hotel and house are now privately owned.

101. Nettle Creek Tin Dredge,

The Nettle Creek tin dredge was built in New Zealand in 1937. The dredge was purchased by the Ravenshoe Tin Dredging Company in 1954. Rebuilding was completed in 1957, and it operated continuously with a staff of 70 working four shifts. Dredging of Battle Creek finished in 1965. The dredge was then moved onto Nettle Creek. Until 1992 the dredge worked down Nettle Creek to its present location. The Nettle Creek tin dredge is the last electrically-driven bucket dredge on the Queensland tin fields and the earliest surviving electric powered dredge to have been built. Pollution from large-capacity bucket dredges in the Herbert River catchment near Mount Garnet led to introduction of the *Mining Act Amendment Act 1948*, the first piece of Queensland legislation specifically concerned with environmental protection. The dredge is best viewed from the creek bank.Visitors must not climb on the dredge.

102. Herberton Township.

In 1879 prospectors, Newell, Jack, Brandon and Brown were guided to the area by a local pastoralist John Atherton who had noted the occurrence of tin. In April 1880 further prospecting led to the discovery of a rich tin lode outcropping on what was to become the site of the Great Northern Mine. As news of the find spread diggers from the struggling Palmer and Hodgkinson goldfields flocked to the new field. The settlement that sprang up was named Herberton because of its location on the headwaters of the Herbert River. By 1881 new mining camps were springing up nearby at Newellton, Watsonville and Coolgarra. Rations ran low throughout the district during the wet seasons and, after much lobbying a railway was commenced from Cairns to Herberton in 1886. When the line finally reached Herberton in 1910, the tin boom was over. More recently, a collapse in world tin prices in the 1980s has contributed to the virtual demise of the industry in the area.

103. Great Northern Mine, Herberton.

Discovered in 1879 by a group of prospectors including future trading partners William Jack and John Newell, the Great Northern Freehold Mine became north Queensland's first lode tin producer. Within a year, more than 150 mines were being worked in the area and the town of Herberton had become the thriving commercial centre for the tin field. The Great Northern Mine remained profitable for investors for many years until mining operations finally ceased in the early 1950s. Today the mine is of significance because of the rarity and intactness of its original steam haulage plant. The Great Northern Mine has a significant place in Queensland mining history for its central role in the development of the mining industry on the Atherton Tableland and the development of Cairns as the major port for far-north Queensland. The mine is privately owned and visitors should obtain permission for entry.

104. Former Gordon's Assay Office, Grace Street, Herberton.

This building was constructed pre-World War I as a mineral assay office. It replaced the Sydney Hotel on the same site. What was once Gordon's Assay Office has since served in a number of roles, the most recent as a real estate office. Though the assay laboratory and retort furnaces have long since been removed the exterior of the building remains little changed.

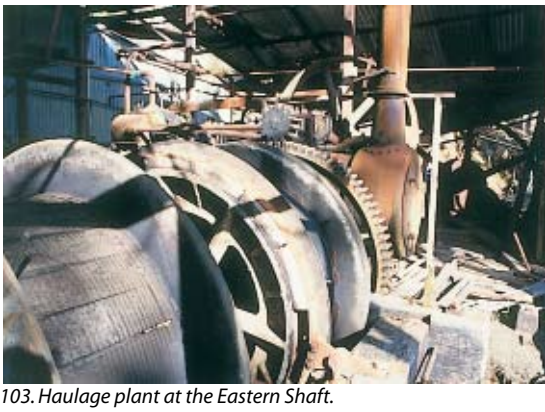
105. Royal Hotel, Grace Street, Herberton.

The first hotel on this site was constructed in 1880 by Hides and McColl who established the first Hides Hotel in Cairns in 1885. Extensive renovations in 1914 saw the addition of a second storey. The upper-floor interior of the hotel remains historically intact. The Royal is now the only early survivor of the many hotels that formerly lined Grace Street. Because of its size and prominence, the building contributes significantly to Herberton's heritage appeal.

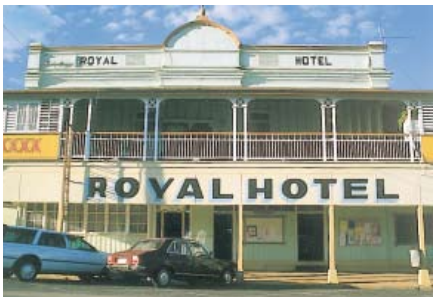
106. School of Arts, Grace Street, Herberton.

An open air meeting was held in December 1880 to discuss the establishment of a school of arts. A collection of £50 was made to purchase land in the centre of the new settlement and a public hall was erected during 1881. The present School of Arts was erected in 1912 with timber provided by the Herberton Council. The building was used for early local council meetings and has been used since as a school, church and theatre. It has recently been used as a library and gallery.

103. Eastern Shaft at the Great Northern, c1906.



103. Haulage plant at the Eastern Shaft.



105. Royal Hotel, Herberton.

106. Herberton School of Arts hall.

107. Former Jack and Newell general store.

110. Carrington Falls on the Herberton line.

111. Chinese temple of Hou Wang.

107. Jack and Newell General Store,
Grace Street, Herberton.

William Jack and John Newell were members of the prospecting team that made the discovery of tin on the Wild River. The partners purchased a mineral freehold at Herberton which they named the Great Northern Mine. A store was established in 1881 and in 1882 the trading company of Jack and Newell was formed. The company soon became the largest merchant house north of Townsville. The Herberton premises expanded in 1895 with the construction of an adjacent shop. The Herberton store remained the firm's headquarters until about 1960, finally changing hands in 1977. The original building still retains its early shelving, exposed timber trusses and long timber counters.

108. Police Station and Court House,
William Street, Herberton.

The mining warden's office, court house, police station and living quarters are housed in a large rambling timber complex mainly built in the 1880s. The court house and sergeant's residence were constructed in 1882 by a local builder, James Miller, to replace the original tent office established in 1881. Mounted police patrols extended as far as the Beatrice River, Gunnawarra Station and the Mount Garnet district. The mining warden's office has since been transferred to Mareeba and the court house is no longer used for sessions.

109. Herberton Railway Station,
John Street, Herberton.

The Cairns railway finally reached Herberton in October 1910, almost 30 years after the line was first proposed. The present station building was erected in 1937 using pre-cast concrete slabs as a variation of a standard timber design. The line beyond Atherton, including the Herberton section, was closed by Queensland Rail in September 1990. The Atherton–Herberton section has since been re-opened as a scenic railway by the volunteer-operated Railco organisation.

110. Herberton Range Railway Ascent,
Atherton – Herberton Railway.

Discovery of tin at Herberton was the catalyst for the construction of the railway from Cairns in 1886. Construction stopped at Granite Creek (Mareeba) as funds ran out in 1893. The line was extended to Atherton as the new agricultural and timber-getting districts on the Tablelands provided better markets than tin mining. Construction past Herberton to Tumoulin was approved in 1908 and the line opened in 1911. The construction of the Herberton Range ascent was a substantial engineering achievement. The decision to commence the Herberton railway from Cairns established Cairns as the commercial capital of far-north Queensland.

111. Hou Wang Miau Temple and Chinatown Site,
Herberton Road, Atherton.

During the 1870s more than 17,000 Chinese arrived in Cooktown and other northern ports on the route to the rich Palmer River Goldfield. By the 1880s as restrictions on Chinese took effect, many turned to tenant farming, principally market gardening and maize growing. A large Chinese community became established at Atherton. The temple of Hou Wang was built in 1903 using iron and timber because bricks, the traditional building material, were unavailable. The cedar was painted to simulate bricks and traditional Chinese murals were painted along the tops of the walls. From the 1920s the local Chinese population declined. In 1980 local businessman John Fong On donated the temple and adjoining land to the National Trust of Queensland.

112. Lancelot Battery, near Herberton.

The Lancelot Mine, developed in 1891, yielded tin, copper, bismuth and silver but was worked only intermittently during the 1890s. In 1900 the Lancelot Company headed by Franz Clotten, then the world's largest bismuth producer, re-opened the mine. By 1903 a 10-head battery was operating on the bank of the Dry River. A process was introduced for re-concentrating the complex ore employing advanced German technology, and making the Lancelot Battery more efficient that Moffat's Loudoun Mill at Irvinebank. Over-capitalisation and lack of ore finally defeated the German company which sold to Moffat in 1911. The battery was reconstructed and used briefly in the early 1950s before being dismantled.

113. Ivanhoe Tin Mine and Stannary Hills Tramway, Stannary Hills.

The tin mine, discovered in 1883 high above Eureka Creek, was purchased by John Moffat in 1889. He sold it in 1898 to a South Australian syndicate which became the Stannary Hills Mines and Tramway Company in 1901. Despite the difficulties associated with the steep terrain, the Ivanhoe Mine was worked successfully until 1920 when mining in the area ceased. The privately-built tramway, a major construction achievement, linked the company's Rocky Bluff Battery to the Chillagoe railway at Boonmoo. While no evidence remains of the Ivanhoe Mine's headframe and boiler house, shafts, earth benches and concrete engine mounts can still be seen. On the creek are the remains of a breached concrete dam. The mine's spectacular yet almost inaccessible location highlights the enterprise and ingenuity needed for its development.

114. State Treatment Works, Irvinebank.

John Moffat's Glen Smelting Company purchased the Irvinebank tin lodes in 1883. Moffat named the settlement Irvinebank, after his birthplace in Scotland. The Loudoun Mill began operation in December 1884. By the early 1900s, the mill was the largest tin battery and smelter in Australia and Moffat the leading tin exporter. After Moffat's death in 1918 the Queensland Premier E.G. Theodore, a former Irvinebank miner, arranged for purchase of the mill, tramways and mines as a State-owned enterprise. The mill became known as the Irvinebank State Treatment Works. To maintain a service for the Tablelands tin mining community, State governments funded progressive modernisation of the mill. Eventually it became an electric powered treatment plant based around a rod mill. It was leased privately in 1983 and still treats small quantities of local ore. The mill is not open to visitors.

115. Irvinebank Railway Station.

The Irvinebank tramway was completed in March 1907 as an extension of the Stannary Hills tramway, which joined the Chillagoe railway at Boonmoo Siding. The tramway maintained Moffat's interests at Irvinebank and was an economical way of obtaining the vast amounts of firewood required for the Loudoun Mill and for accessing the district's ore supplies. After 1919, the tramway was operated as part of the Government's Irvinebank State Treatment Works. It closed in 1939 and the rails were sold. The railway station and large goods shed located above the mill have been restored. The adjacent cottages were used by train and maintenance crews and treatment works staff.

113. Ivanhoe Mine and tramway ore bin, c1906.

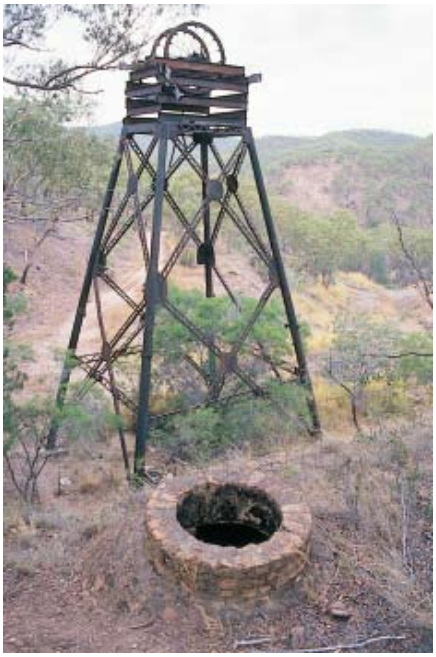
114. Mule team after packing ore to the works.

114. Ore bins at the State Treatment Works.

116. John Moffat's house museum.

117. Irvinebank School of Arts hall.

119. Vulcan tin mine, c1913.



119. Vulcan headframe and water tank.

116. John Moffat's House Museum, Irvinebank.

In 1883 mining entrepreneur John Moffat purchased the newly discovered Irvinebank tin lodes for development. Loudoun House was built in 1884 as the Moffat family home and office. Loudoun was John Moffat's mothers' family name. An elegant house, around which the mill works grew, its main rooms are lined in red cedar. The house became the centre of Irvinebank's social life. In 1912 Moffat retired with his family to Sydney and died in Toowoomba in 1918. Loudoun House has been restored and is now a museum dedicated to Irvinebank and John Moffat.

117. School of Arts, McDonald Street, Irvinebank.

The School of Arts opened in 1901, a gift from John Moffat, mining entrepreneur and founder of Irvinebank. Two smaller schools of arts had been built previously on different sites but Irvinebank's rapid expansion required a much larger building. During the town's prosperous years it held a lending library, and card evenings, concerts and dances were regular events. Receptions were held for visiting dignitaries, including Queensland governors Chermside in 1903 and Chelmsford in 1908. As the only public hall in Irvinebank it remains the community centre for the district.

118. Former Queensland National Bank, Jessie Street, Irvinebank.

The Queensland National Bank was constructed about 1900. One of two banks established in Irvinebank during its heyday, it is now the only brick building in the township. At the turn of the century production from the rich Vulcan Mine was at its height and John Moffat's undertakings had made the town Queensland's principal tin-mining centre. Now a private residence, the two-storey brick building comprises the former banking chamber on the ground floor and the manager's residence above. Internal cedar and glass partitioning has been retained in the office.

119. Vulcan Tin Mine, Irvinebank.

Discovered in 1888 by Italian charcoal burners, it was one of the few mines to remain profitable through the 1890s depression. For 15 years, it was a mainstay of Moffat's Irvinebank empire. In 1907, assay levels and output fell and tin prices declined. During this period, Vulcan miner E.G. Theodore founded the Amalgamated Workers Association in Irvinebank. He was later elected to Parliament and became Queensland Premier. The Queensland Government purchased the mine and supported it through the 1920s, but it was closed down in the early 1930s. Towering over the main mine shaft, the headframe with 18 metre high tubular steel legs is one of the earliest surviving in north Queensland.

120. Montalbion Silver Smelter, near Emuford.

There were hopes of a new Broken Hill when silver was discovered at Mount Albion in 1883. John Moffat developed the mines and in 1886 erected two reverberatory furnaces. Although the smelter initially made a profit, declining silver prices led to repeated restructuring of the company. Installation of new smelting plant from Ravenswood in 1891 brought a profitable result, but a strike closed the mines in 1893. Re-opened early in 1894, the smelters produced a record output in four weeks before they were closed at the end of the year. Little survives of the extensive smelter operations. The concrete bases of two Linkenbach buddles from Totley, installed in 1891, are significant.

121. Emuford Tin Battery.

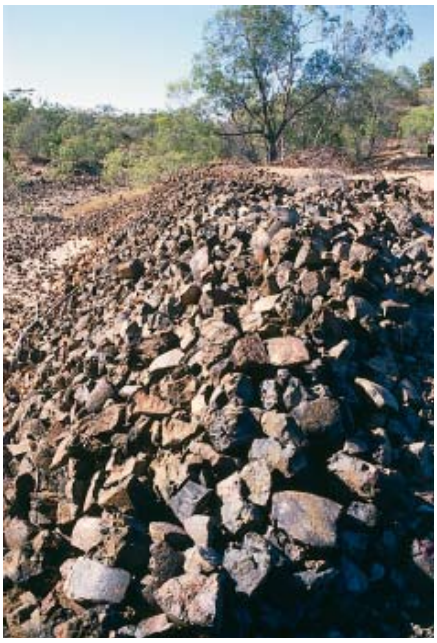
Tin mining had taken place along the Emu and Gregory creeks since the early 1880s. A battery , installed at the nearby Great Boulder Mine on Reids Creek in 1903, was purchased by Green and Marvell in 1911 and moved to the present site at Emuford. The battery operated throughout World War I and the 1920s. In 1930 the battery was acquired by the Emuford Tin Mining Company. By 1940 the battery was owned by J.W. Green and was operating as a public battery. The battery continued to operate as a family business for the next four decades. However, when the world tin market collapsed in October 1985, the battery closed as tin was unsaleable. The Emuford Battery is the most intact early crushing plant in Queensland. The Battery is privately owned and is off-limits to visitors.

122. Bamford State Battery, near Petford.

Bamford Hill is a tin and wolfram mining area named after F.W. Bamford, the first Federal member for the electorate of Herbert. There were two phases in Bamford's early life — the first culminating in a pre-World War I boom in wolfram prices as the mines became the centre of competition for Sydney and overseas wolfram buyers to supply the European armaments industries. The second phase commenced when the Queensland Government stepped in to assist local miners after the sale of ore to foreign buyers was prohibited under wartime legislation. The Bamford State Battery was constructed during 1916 as part of this package. Wolfram regained value with the outbreak of World War II and the battery returned to wolfram production, finally closing in the early 1950s.

121. Jaw crusher and ore bins, Emuford Battery.

120. Montalbion silver smelter, c1889. (Courtesy of John Oxley Library)



120. Slag dump at Montalbion.

121. Emuford tin battery, c1918.

122. Bamford State Battery, c1916.

124. Almaden railway station.

125. Pouring slag at Chillagoe Smelters, c1930s. (Lee Hardaker Collection)

125. Brick chimneys at the Chillagoe Smelters.

126. Chillagoe railway station and goods shed.

123. Chilagoe Railway, Mareeba to Chillagoe.

The Chillagoe railway was a privately financed and operated line connecting the new Chillagoe Smelters with the port of Cairns through Mareeba. Construction commenced in 1898 and the railway was opened in March 1901. More than 500 immigrant workers including Italians, Finns and Norwegians were employed. Stone culverts, steel bridges and heavy gauge rail provided a stable and comparatively low maintenance line. The railway and smelters were taken over by the Government in 1919 as part of the assets of the Chillagoe Company. Post-World War II rail traffic comprised mainly livestock and lime. Although a popular tourist railway, regular services were suspended in 1992.

124. Almaden Railway Station.

With the completion of the Etheridge railway line in 1910, Almaden became an important junction which handled the ore trains from the Etheridge railway as well as traffic on the Chillagoe line. It was the second most important station after Chillagoe on the private mining railway network west of Mareeba. The line was taken over by the Government in June 1919 following the collapse of the Chillagoe Company. The station retains the original water tank from the steam locomotive period together with elements of coaling facilities and mechanical signalling — items which are becoming rare.

125. Chillagoe Smelters.

Chillagoe Company's smelters employed more than 1000 workers at the peak of production in the early 1900s. Chillagoe dominated the economy of north Queensland for more than 40 years. The smelters were opened by the Chillagoe Company in 1901 following the completion of the privately constructed railway connection to Mareeba. By 1904, over-capitalisation and lack of ore supplies brought financial problems. A fire in 1911 badly damaged the smelters. With no further capital forthcoming, they closed in 1914. Reopened in 1915, they were acquired by the Queensland Government in 1919 as part of the bankrupt Chillagoe Company's assets. The price of copper fell in the 1920s and Chillagoe remained an unprofitable Government undertaking throughout the remainder of its operating life until its eventual closure in 1943. During their long operating life the smelters produced copper, lead, silver and gold, and more than one million tons of slag was poured onto the dump. Remaining buildings and plant were removed in 1952. Today only the slag dump, smelter flues and chimneys remain to convey the scale of the operations.

126. Chillagoe Railway Station.

Although huge quantities of coal, ore and processed metals passed through Chillagoe station to and from the smelter sidings where the railway workshops, engine sheds and stores were located, the station was intended for passengers and was laid out on a modest scale. The railway was acquired by the Government in 1919 as part of the Chillagoe Company's assets. Though the 50-ton weighbridge and most of the sidings have been removed, the station building, goods shed, and the track connecting to the smelters site remain. The station is still officially open.

127. Chillagoe Hospital.

During the 1930s, the State Government took over financial responsibility for hospitals throughout Queensland. In 1939, a new open-plan timber hospital was opened to replace an 1899 hospital. The need for the new hospital was apparent as soon as it opened with all wards, including the maternity wing, full to capacity with smelter workers and miners. Unfortunately for Chillagoe the smelters closed in 1943 and residents soon began leaving the town. For many years, the Flying Doctor Service held regular clinics at the hospital which now functions principally as an out-patients centre.

128. Chillagoe Cemetery.

Almost 500 burials are registered for the cemetery. The majority of them occurred between the 1900s and 1930s. As with other mining towns, the headstones testify to the high number of deaths among children and mine workers.

129. Court House and Police Station, King Street, Chillagoe.

As the population of Chillagoe expanded in the early 1900s with the opening of the railway and smelters the district's police strength was increased. In 1902, the police station was re-erected on a new site and new cells were constructed. One room in the building was set aside as a court room. In 1921 the court room became the scene of the inquest into the Mount Mulligan Coal Mine disaster, and in 1929 it became a major venue for the royal commission hearings into accusations of Government corruption, known as the Mungana mines scandal. The building remains in use as a police station.

130. Former State School, Frew Street, Chillagoe.

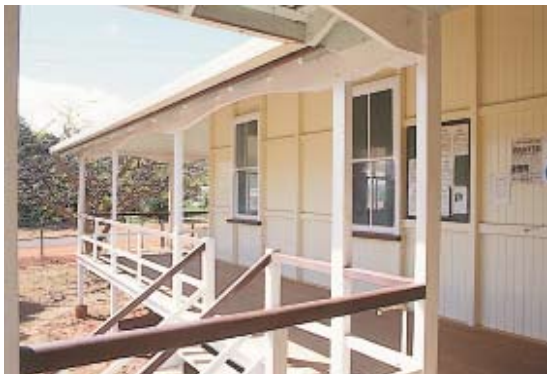
Chillagoe had more than one thousand residents after the smelters opened in 1901. As families of railway workers also began to settle in the town, public demand for a local school intensified. By the time the state school opened in 1902, it was already too small for the number of children enrolled. Extensions were added the following year and again in 1909. By 1912, there were 250 pupils, but many left when the smelters closed in 1914. The Catholic school closed in 1927. Despite the fluctuating operations of the smelters, which finally closed in 1943, the state school remained open. In 1977, a new school building was opened. The early school building is now privately owned.

131. Chillagoe Caves.

The Chillagoe geological formation is around 400 million years old. Its limestone mountains were formed from a coral reef on the bed on an inland sea and marine fossils can be seen in the walls of the limestone towers or karsts. Caves inside the towers were discovered in 1888 by William Atherton of Chillagoe Station who was lost in them for two days before finding a way out. In the Donna Cave is the name of his daughter, Essie Lillian, carved on her first birthday in 1891.

132. Mungana Township, near Chillagoe.

With the completion of the railway from Chillagoe in 1901, the Girofla settlement was moved to the new terminus, officially re-named Mungana. The town developed rapidly as the centre for nearby mines and had a school, church, post office and six hotels. Mungana was a major centre on the Chillagoe field but its survival depended largely on the nearby Redcap and Chillagoe mining operations. When these declined and eventually closed down, the town struggled on as a cattle trucking centre, but by the 1960s it was all but abandoned.

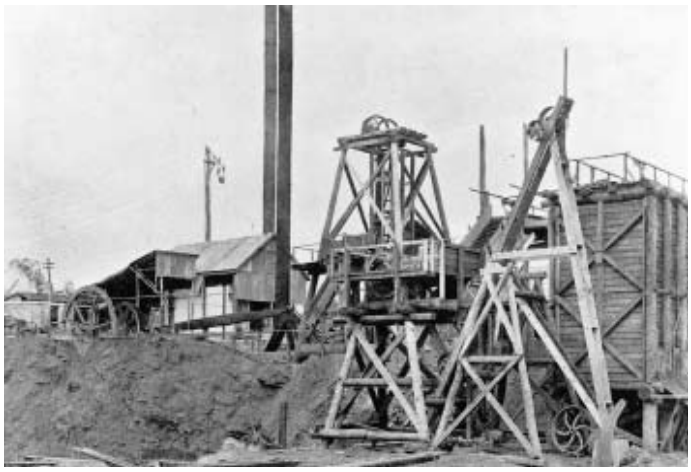


129. Court house and police station, Chillagoe.

130. Former state school.

132. Explosives magazines at Mungana.

132. Mungana railway station and township, c1909.



133. Girofla Mine main shaft, c1911.

133. Pump arm at the Girofla Mine.

134. Lady Jane Mine, c1909.

136. Former Canton Hotel.

133. Girofla Copper Mine and Smelter, Mungana near Chillagoe.

In 1897, mining entrepreneur John Moffat erected a second smelter on the Chillagoe field at Girofla. The smelter treated ore from the Mungana and Redcap group of mines. Girofla Smelter ceased operation in 1902 and Mungana ore was railed to the new Chillagoe Smelters. However the Girofla Mine, which had been registered in 1888, continued to produce copper ore for the Mungana Mining Company which, in 1911, installed a large pumping plant. The mine closed when the company went into liquidation in 1914. It was purchased by the Chillagoe Company in 1918 before being acquired in 1922 as an asset by the Queensland Government, which operated it as a State enterprise until its closure in 1926. During this period, it was associated with the Mungana Mines 'scandal' which ruined the political careers of Queensland Premiers E.G. Theodore and William McCormack.

134. Lady Jane Copper Mine, Mungana.

The mine had been part of John Moffat's Mungana holdings taken up in 1888. New machinery was installed in 1909 but the same year an underground fire closed down operations and a cyclone in 1920 destroyed the buildings of the mine. In 1922 the mine was re-opened. Surface plant, headframe and shafts had to be rebuilt and the mine de-watered. The Lady Jane was closed about 1926 at the same time as the neighbouring Girofla Mine.

135. Court House Site, Thornborough, near Dimbulah

The Woothakata Divisional Board was established at Thornborough in 1879. The brick court house, built in 1878, is now little more than foundations. However the decision to build in brick illustrates Thornborough's importance as the principal town for the Hodgkinson Goldfield until the 1890s when the administrative centre shifted to Mareeba on the new railway from Cairns. The court house was demolished in the early 1930s.

136. Canton Hotel, Thornborough.

By 1878 Wah Lee's Canton Hotel was one of 19 hotels in Thornborough, the centre of the Hodgkinson Goldfield discovered in 1876 by James Mulligan. Up to 2,000 Chinese miners were then on the Hodgkinson but by 1880 many had left for other fields. Those remaining worked the mine tailings, but also set up a range of small businesses including extensive market gardens. Of the five hotels still open in 1902, only the Canton survived after 1924. The hotel continued trading until 1931. The Canton Hotel still stands, a relic of the once thriving mining town where for many decades Chinese people were a part of the business community. The building is privately owned and visitors should not enter onto the property.

137. Tyrconnel Mine and Battery, near Thornborough.

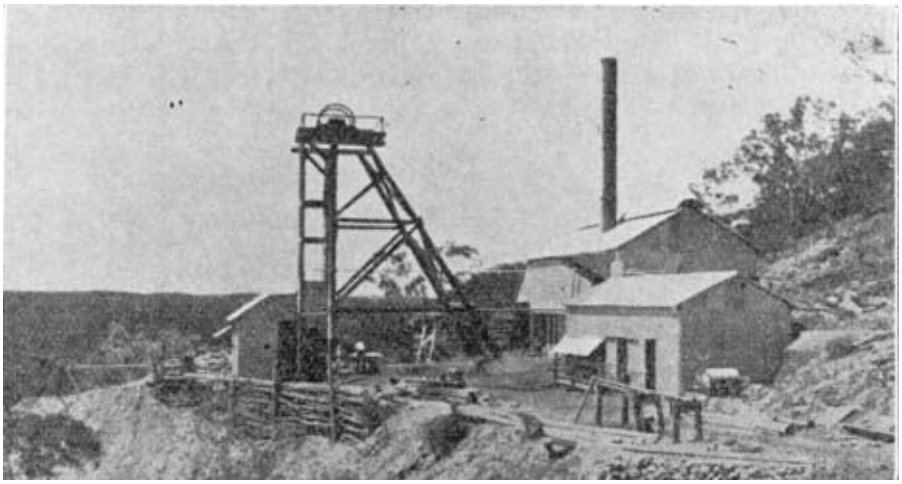
One of the richest producers on the Hodgkinson Goldfield, the Tyrconnel Mine was first taken up by Redmond and McVeigh in 1876. The mine was worked by William Keating from the mid-1880s. Keating formed the Tyrconnel Gold Mines Limited in 1912 and re-opened the mine. The present battery shed was established in 1913 and a local battery was installed. In 1917 the General Grant Battery was re-erected at the Tyrconnel and a cyanide treatment plant was built. The Queensland Gold Development Syndicate acquired the property in 1935 when the battery shed was extended and the present 10-head battery was installed and a new headframe erected. The mine was shut during the 1940s and finally closed in 1984 after fire destroyed the headframe and haulage plant. The Tyrconnel is one of five intact batteries in Queensland and the stamps are now operated as part of a gold mine tour. Intending visitors should contact the owner.

137. Tyrconnel Mine headframe, c1922.

137. Tyrconnel battery shed.

138. General Grant Mine, near Thornborough.

From 1878 to 1910, the mine was the major producer of reef gold on the Hodgkinson field. The use of cyanide treatment improved production returns but it was the British Cecil Syndicate's unprecedented capital investment in 1897 that made the General Grant's reputation. The mine shaft was deepened and a battery and cyanide plant erected. Gold output escalated but returns failed to cover the huge capital costs. The mine closed and, despite later attempts to access the deep reefs, production remained too small to be economical. The mine winding shed houses an intact early steam haulage plant.



138. General Grant Mine, c1930s.

138. Winding engine at the General Grant.

139. Rope tramway from pit head to the colliery.

139. Cokeworks chimney and Mount Mulligan.

140. Miner's grave-marker at the cemetery.

141. Foundations of the Corporation's mill.

142. Former assay office at Mareeba.

139. Mount Mulligan Coal Mine and Township.

The site of Queensland's worst mining disaster when a coal dust explosion killed all 75 men working underground on 19 September 1921. The coal deposits discovered under Mount Mulligan in 1907 were of great importance in the early development of north Queensland. Completed in 1915, the new colliery was one of the most technologically advanced in Australia at the time. After the fatal explosion in 1921, the mine continued to supply the railways and the Chillagoe Smelters. The mine and township were taken over by the Queensland Government in 1923. A local miner's co-operative operated the mine on tribute from 1929 until 1947 when it reverted to the State Government. In the 1950s local coal demand fell leading to the closure of the mine in 1957. Most of the buildings were sold or removed to Collinsville.

140. Mount Mulligan Cemetery.

The cemetery provides an enduring memorial to the 75 miners who died in the Mount Mulligan mine disaster in September 1921. Mount Mulligan had no established cemetery at the time of the explosion and the new cemetery reserve was hurriedly marked out. The ground was so rocky it had to be broken up with explosives. The burials continued for a week. Explosion victims graves were originally identified with metal markers, each with a name painted on it. Many graves still contain these markers though the names have long since faded. Graves of other victims are identified by headstones.

141. Thermo Electric Ore Reduction Corporation Mill, Wolfram Camp, near Dimbulah.

Wolfram was discovered in the area in 1894 and molybdenite and bismuth in 1900. As world prices rose the Irvinebank Mining Company invested heavily in developing the Wolfram Camp mines, but the operations failed following closure of the German market. Fixed prices and British capital investment in a state-of-the-art ore processing works revived mining at Wolfram during World War I. The British Corporation's new reduction and concentrating plant was eventually completed in 1918. Despite innovative methods such as common haulage systems for groups of mines, it failed to survive post-war market conditions. Operations ceased after 1920 and the mill was dismantled.

142. Government Assay Office, Constance Street, Mareeba.

The building with the chimney was erected by the Government in 1916 as a mineral assay laboratory. It was located near the court house which at that time also served as the mining warden's court. The assay office was closed in 1921 due to the general decline in mining in the Mareeba district. With the outbreak of war in the Pacific and construction of Mareeba airfield in 1942, the building became an American PX store. In 1943 it served as the district headquarters for the Australian Women's Army. Following the war the building was used by the Forestry Department until the 1960s.

143. Cairns–Kuranda Railway.

The Cairns–Kuranda railway was built as a link between the Herberton tin fields and the new seaport at Trinity Bay (Cairns). Although it took a quarter of a century to reach Herberton it established Cairns as the principal port city in far-north Queensland. The contract was awarded to the Melbourne engineering firm of John Robb in 1887. Hundreds of men including many Italians were involved on the project. The work was extremely hazardous as extensive cuttings and 15 tunnels had to be blasted through. Twenty-three men died building the railway line. The engineering contract was extended by three years and cost almost £1 million, the most expensive line in Queensland. The section to Kuranda was opened in June 1891. The extension to Mareeba was completed in August 1893.

144. Stoney Creek Railway Bridge, near Kuranda.

The Stoney Creek Bridge is one of the most outstanding structural features on the Cairns–Kuranda Railway. It was built by the contractors John Robb Engineers. The bridge was the site of a picnic lunch for governor Sir Henry Norman during a visit in April 1890. He arrived by rail and lunch was spread on the bridge in a decorated tent with open sides. The bridge design is an early example of an engineering solution with environmental considerations.

145. Mount Molloy Mine Timber Mill.

At the entrance to Mount Molloy township stands a boiler and steam engine, part of a timber mill constructed in 1904 by the Mount Molloy Copper Mining Company. The brick boiler mounting contains an intact Stirling boiler alongside a rare Marshall centre-flywheel compound engine. The mining company survived on the timber trade after lack of ore placed its future in doubt. In 1914, the mining company went into liquidation and all operations closed down. The timber mill was rebuilt and continued to operate until recently. The mill manager's house, now a private residence, is located between the smelter and the mill.

143. Kuranda railway station.

144. Stoney Creek railway bridge.

145. Timber mill engine at Mount Molloy.

Palmer River Goldfield

Map 7: Palmer River Goldfield

146. Chinese oven, Palmer Goldfield.

146. Chinese grave-marker.

147. Market garden on Dog Leg Creek.

146. Palmer River Goldfield.

Gold was discovered in a tributary of the Palmer River in August 1872 by a prospecting expedition led by William Hann. With the publication of Hann's report in February 1873, several parties of prospectors set out for the Palmer including a party led by James Mulligan who returned in September 1873 to confirm that the new field contained payable gold. Mulligan's report encouraged an initial rush of prospectors from the Etheridge and this soon sparked the largest gold rush in Queensland. The Palmer became legendary for its hardships and for its Chinese population, which peaked at 17,000 in 1877, most having been shipped out from southern China to Cooktown. It is impossible to assess the amount of gold won by the Chinese alluvial diggers as large quantities were smuggled back to China. Reefing for gold by Europeans commenced in 1876, but the rush to the Hodgkinson in 1877 ended the Palmer's heyday. The Palmer Goldfield is a place of national heritage significance that is rich in the artefacts of early Chinese mining and lifestyle, and the relics of pioneer technology and settlement. Metal detecting is prohibited on the Palmer River Goldfield Reserve R16. Penalties apply for breaches of this restriction.

147. Dog Leg Creek Garden, Palmer River Goldfield.

Chinese had a profound effect on the Palmer River Goldfield and on the cultural landscape of the district. After the first discoveries in 1873 Chinese steadily occupied the main alluvial areas until in 1877, with the rush to the Hodgkinson Goldfield, the whole of the Palmer was virtually left to them. As well as mining the Chinese engaged in cartage, storekeeping and market gardening. Early divisional board records list a market garden and hut at Dog Leg Creek in 1883, owned by Ah Yow. Records indicate that several gardens were located in the area by the late 1880s.

148. Alexandra Mine and Battery, Palmer River Goldfield.

Reef mining began on the Palmer in 1876 and production commenced from the Alexander P.C. (one of the earliest prospecting claims) in 1878. Crushings of selected ore enabled the mine to average a spectacular eight ounces of gold per ton during the 1870s. However cartage and crushing costs were high as the ore had to be packed to the nearest battery. Small-scale production went on intermittently until 1895 when Edwin Field erected a battery at the Alexandra. Crushing began in 1897. Although operations continued on a small scale for nearly two years, the reef yielded just over one ounce to the ton. At the end of 1898 the mine closed. The mine was never worked again and the battery was dismantled in 1940.

149. Queen of the North Mine, Palmer River Goldfield.

One of the earliest reef mines on the Palmer Goldfield, opened in 1874. By 1878 the mine had been equipped with steam haulage plant and a battery had been erected. By 1880 the mine was in the hands of the Queensland National Bank and was later let to tributers. The mine was flooded by 1887. There were unsuccessful schemes to re-work the mine in the early 1900s and in 1939 the battery was removed. Surviving machinery dates from the 1870s and is comparatively intact.

150. Ida Mine, Palmer River Goldfield.

The Ida was registered as a prospecting claim in 1874 although the first recorded mining occurred in 1876. In 1879 the Ida Mine became the scene of the Palmer Goldfield's first fatal mining accident. The same year one of the earliest incidents of industrial action in Queensland occurred at the Ida when miners went on strike over weekly wage cuts. The mine was taken over by the Queensland National Bank and in 1880 powerful pumping machinery was installed. However, the mine was closed in June 1883. The Ida Mine never re-opened despite many attempts to revive it. Its machinery was progressively scavenged for use on other mines.

148. Portable steam engine at the Alexandra.

Today the site resembles a scrap metal yard with a vast collection of plant and equipment indicative of 19th century gold mining technology.

151. Mabel Louise Battery, Palmer River Goldfield.

The battery was erected by the Cooktown Quartz Crushing Company in 1877. The company went into liquidation in 1879 and the battery was purchased by Jens Jensen who refused to crush ore from mines employing Chinese. Mary Purdie acquired it in the mid-1890s after which it fell into disuse. In 1937 Cyril Denman took five head of stamps to construct his Perseverence Battery alongside. The Robey portable engine at the site was manufactured pre-1876 and is one of the earliest in the region.

152. Maytown Township, Palmer River Goldfield.

The rush to the Palmer River was under way by August 1873 and for the next three years an estimated 30,000 people, including 17,000 Chinese, made their way to the field. In May 1875 Maytown became the administrative centre of the goldfield. Originally called Edwardstown after the local butcher Jack Edwards, the town was surveyed in 1875 by A.C. MacMillan who named it after his daughter. It supported 12 hotels, six stores, three bakers and other businesses. Many European departed for other rushes after 1876 and Chinese dominated the population. By 1882 the number of hotels had dropped to six and there were 10 Chinese stores and only two European stores. By World War II, the town was abandoned.

149. Cornish boiler at the Queen Mine.

152. Stone kerbing on Leslie Street, Maytown.

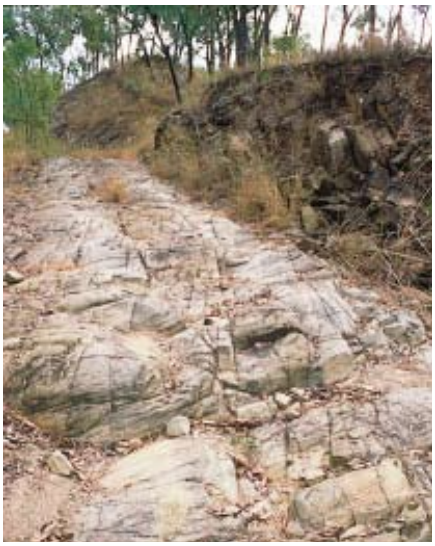
152. Maytown township, Palmer River Goldfield.

Palmer River Goldfield

153. Cornish boiler and stone bed at the Comet.

154. Diesel engine installed at the Louisa, 1915.

154. Enterprise Battery and plant.



155. Coach road on the Conglomerate Range.

153. Comet Battery, Palmer River Goldfield.

A recently built shed covers a large Cornish boiler and a single cylinder steam engine with flywheel. Although the earliest quartz claims on the Palmer River Goldfield were registered in 1874, the first recorded crushings for the Comet Battery occurred in 1880. In 1885 the property was taken up by a new company which purchased the Cannibal Creek Tin Mining Company's battery, south of Maytown. The engine, boiler and 10 head of stamps were relocated to the Comet Battery and the mine was re-opened. The two years from 1887 to 1889 were the Comet's heyday. In 1889 the mine was flooded in the wet season and closed. The battery continued to crush stone for local miners until at least 1915.

154. Louisa Mine and Enterprise Battery, Palmer River Goldfield.

The Louisa group of mines was first developed in 1876. Water was an immediate problem. The Louisa Gold Mining Company purchased the property and installed a pump in 1881, but production decreased as the water and costs continued to rise. The company was declared bankrupt in 1884. The Palmer Gold Mines Company of Cooktown acquired a large M.A.N. diesel engine from Wolfram Camp in 1915 to pump out the water, but abandoned it in 1917. During the 1920s and 1930s a number of unsuccessful attempts were made to pump the shaft. Finally in 1939 a local miner, later federal Minister, C.E. Barnes succeeded in beating the water using a turbine pump, but he found the quartz was unpayable and abandoned the mine in 1941. In 1939, C. Denman, the owner of the Perseverance Battery at nearby Butcher Creek, decided that the promised output of the Louisa justified relocating his plant to Thompson Gully. In July 1940 Denman erected a 10-head steam powered battery cannibalised from other plant on the goldfield. For two years the Enterprise Battery was the mainstay of the Palmer Goldfield crushing for the Louisa and for other small miners. Following the failure of the Louisa, Denman abandoned the Enterprise Battery and plant in late 1942.

155. Laura - Maytown Coach Road, Palmer River Goldfield.

MacMillan's track from Cooktown to the Palmer was blazed in October 1873 and opened to dray traffic by July 1874. However miners and storekeepers demanded a more direct route to the goldfield. In April 1874 Roads Inspector McKenzie identified a deviation off a new track that was intended to shorten MacMillan's dray road. During survey of the Palmerville telegraph route in October 1874 foreman Longland negotiated McKenzie's deviation to the Palmer River. The new track branched south at Red Bluff, ascending and descending the dividing range and Jessops Range before crossing the Palmer River at Maytown. McKenzie's deviation later became the Maytown–Laura coach road. Visitors are discouraged from using the road to travel between Maytown and Laura. The road is not maintained and the surface is extremely rough. Vehicles attempting to traverse the steeper sections are likely to damage the early hand-cut stone formation which is a significant feature of the road.

156. Cooktown – Laura Railway.

By 1882 with the alluvial and reef gold failing and the Palmer River Goldfield in decline and eclipsed by later rushes, a railway survey was carried out from Cooktown to Maytown to provide all-weather access to the field and make reef mining economical. Construction of the first section commenced in February 1884. Construction of a further two sections followed and the line was opened to Laura in October 1888. Although a bridge over the Laura River was completed in October 1891 the railway never continued beyond Laura. The bridge was destroyed by floodwaters in 1940 and the line was finally closed in 1961.

157. Old Laura Homestead, Lakefield National Park.

In 1879 McDermott and O'Beirne applied for one of the earliest runs on the Laura River to establish Laura Station. The partners had begun a butcher's business in Cooktown to profit from the Palmer River gold rush. The present homestead was built by the O'Beirne family in 1902. The station was sold to the United States-owned Lakefield Cattle Company in 1966. The homestead was not used after 1973 and became part of Lakefield National Park declared in 1978.

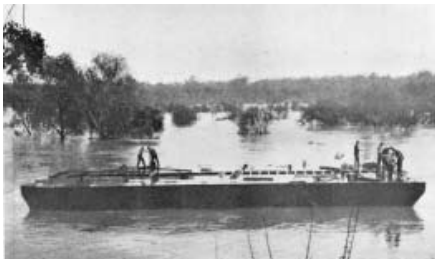
158. Palmer River Gold Dredge, Palmer River.

The bucket dredge was built for the Palmer River Gold Company by Charles Ruwolt, Engineers, of Melbourne. The dismantled dredge was shipped to Cooktown then railed to Laura in mid-1929. From there the parts, weighing 350 tons, were carted by trucks to the company's leases on the Palmer River. The dredge was assembled and commenced dredging at the end of 1930. However by 1932 it had been submerged and damaged by floodwaters and was subsequently abandoned where it came to rest. The dredge is on a pastoral lease and visitors should obtain permission of the lessee before entry. All gates should be left as they are found.

Map 8: Cape York Peninsula

156. Railway bridge ruins, Laura River.

157. Old Laura Homestead.



158. Launch of the Palmer River dredge, 1929.

158. Gold dredge pump and bucket drive.

159. Horse whim at the Great Northern Mine c1896. (Courtesy of John Oxley Library)

159. Great Northern Mine, Coen.

Alluvial gold was first discovered on the Coen River by a prospecting party from Cooktown in 1876. The town was deserted by 1879 but revived in the 1880s. The Great Northern reef was discovered in 1893 and the Coen Quartz Enterprise Battery was erected at the junction of the Coen River and Lankelly Creek. The remains of the battery can still be seen. The Great Northern Mine was opened up in 1894. New steam haulage plant was installed at the mine in 1903, replacing the original whim and windlass. The mine operated until 1916. The plant was reconditioned in the late 1940s.

160. Black Cat Mine, Wenlock Goldfield, c1937.

160. Babcock & Wilcox empire mill.

160. Wenlock Goldfield, Wenlock River.

Gold was discovered in the area by William Baird in 1892. In 1910 a gold find was made at Top Camp (Plutoville) by an Aborigine name Pluto. However, not until 1915 was the nearby Lower Camp goldfield discovered by an Aboriginal woman, Kitty Pluto — the only woman recorded as discovering gold in Queensland. Known as the Batavia Goldfield, the Wenlock became the most productive field on the Peninsula during the Depression years. The goldfield was all but abandoned by the early 1950s. Wenlock Goldfield contains the largest assemblage of historic mining plant on northern Cape York. These historic items are eligible for protection under the *Queensland Heritage Act* and should not be disturbed or relocated.

161. Mango trees at Wenlock Lower Camp.

161. Wenlock Lower Camp Settlement

A settlement was established on the bank of the Wenlock River about 1922 after discovery of the Lower Camp goldfield. By the mid-1930s there was a population of about 160 people and several boarding houses were operating. The settlement site is still recognisable by the stands of mature mango trees and the grave of Thomas Power, who is said to have died in a gunfight in 1930.

162. Gordon's Mine and Mill, Iron Range National Park.

In 1934 Jack Gordon discovered the Iron Range reef on Gordon's Creek, a tributary of the Claudie River. Within two years the district was a hive of activity. In 1936 a grinding mill and gas production plant were erected by Gordon at the Iron Range Mine, after great difficulty in transport. By 1938 a cyanide plant had been installed and 29 men were employed. The mill was still operating in 1956. Today the mine is on Iron Range National Park and the mill site has been reclaimed by regrowth.

162. Gordon's Battery at Iron Range, c1937.

163. Annan River Bridge, near Cooktown.

One of only two such bridges still surviving in original condition, the "Big" Annan Bridge was the third longest metal girder bridge in Australia when completed in 1888. The bridge was built to span an important crossing on the route from Cooktown to the Palmer River in the years when the promise of gold brought thousands of miners to the district. Previously when the Annan River was in flood, the goldfields went without vital supplies, often for months at a time. It also provided the transport link to the Annan or Cooktown mineral fields when tin mining became important.

163. Annan River bridge.

162. Empire mill in rainforest regrowth.

164. Lion's Den Hotel, Helensvale, near Cooktown.

Built about 1880, the hotel was an important stop on the supply route from Cooktown to the Annan River Tinfield. Even in the 1920s, goods brought by truck from Cooktown had to be off-loaded at Helensvale and carted the rest of the way by pack horse. One story has it that the hotel was a general store and packing station and took its name from Daniel the packer. He was the son of the original proprietor, Mrs Watkins, who ran the business for more than 40 years. Shaded by flourishing mango trees nearly a century old, the hotel is the only commercial premises remaining in Helensvale. It was a registered assay office for the nearby tinfields.

164. Lion's Den Hotel, Helensvale.

165. Cooktown Township.

Cooktown was founded in October 1873 as the closest port to the promising Palmer River Goldfield. Within months the Endeavour River settlement contained more than 50 stores and restaurants. By April 1874 more than 90 publican's licenses had been issued for the Cooktown-Palmer River district. The town was declared a municipality in April 1876. A railway was constructed from Cooktown to the Laura River between 1884 and 1888. By 1900 the Palmer River Goldfield was declining and Cooktown's significance decreased. The town suffered damage in a cyclone in 1907 and a devastating fire in 1918. Surviving buildings in the commercial centre of Charlotte Street today contribute to the town's historical streetscape.

165. Charlotte Street, Cooktown.

Cooktown

167. West Coast Hotel.

169. Cook Shire Council office.

166. Cooktown Cemetery and Chinese Shrine, McIvor Road, Cooktown.

Officially opened in 1875, the cemetery is a microcosm of Cooktown history. The thousands of graves, many unmarked, illustrate the diversity of national, ethnic and religious groups involved in the region's development over several generations. By the late-1870s 17,000 Chinese were on the Palmer River Goldfield and between 1877 and 1920 they accounted for approximately one-sixth of the cemetery's burials. The shrine erected by Cooktown's Chinese community in 1877 is well preserved and is a rare example of its type. Chinese characters on the shrine proclaim qin ru zai — 'to respect as if present'.

167. West Coast Hotel, Charlotte Street, Cooktown.

Built in 1884, the hotel is the sole survivor of the 33 hotels trading in Cooktown at the height of its prosperity. In the main bar of the hotel a series of murals cover the walls Painted in the 1920s by Queensland artist Garnet Agnew, they depict the events of the gold rush era.
A later mural painted about 1963 by James Bains presents a colourful parade of Cooktown characters and scenes from the same era.

170. Cooktown powder magazine.

168. Former Bank of North Queensland, Charlotte Street, Cooktown.

The Bank of North Queensland was established in Townsville in 1888. Such was investors' confidence in north Queensland that seven branches, including the Cooktown branch, were opened within six months. Even as the new building was opened, Cooktown's fortunes were waning. Output from the Palmer River Goldfield declined and Cooktown's importance as the principal supply port to the interior diminished accordingly. The Cooktown branch of the Bank of North Queensland finally closed in 1908.

169. Cook Shire Office, Charlotte Street, Cooktown.

This was Cooktown's first purpose-built post and telegraph office. Built to a standard Queensland post office design developed by the noted Government Architect F.D.G. Stanley, it was completed in 1877 and replaced the unofficial post office built in 1874. As the town's importance as a commercial centre grew during the 1880s, a new post and telegraph office was built next door. The Cooktown Municipal Council moved its offices into the old building after a fire destroyed the town hall in 1892. Its present use as the Cook Shire Council Office dates from 1932 when Cooktown became the administrative centre for Cook Shire.

170. Cooktown Powder Magazine, Webber Esplanade, Cooktown.

The powder magazine was built in 1875 to a standard design by the Government Architect. It was commissioned by the Ports and Harbours Department which was responsible for providing safe gunpowder storage at Queensland ports. As the amount of explosives shipped in for use on the Palmer River Goldfield increased, a secure gunpowder store located well away from the town centre was essential. The magazine was constructed of brick. Wooden pegs were used instead of nails for the interior timberwork and metal fastenings were of copper.

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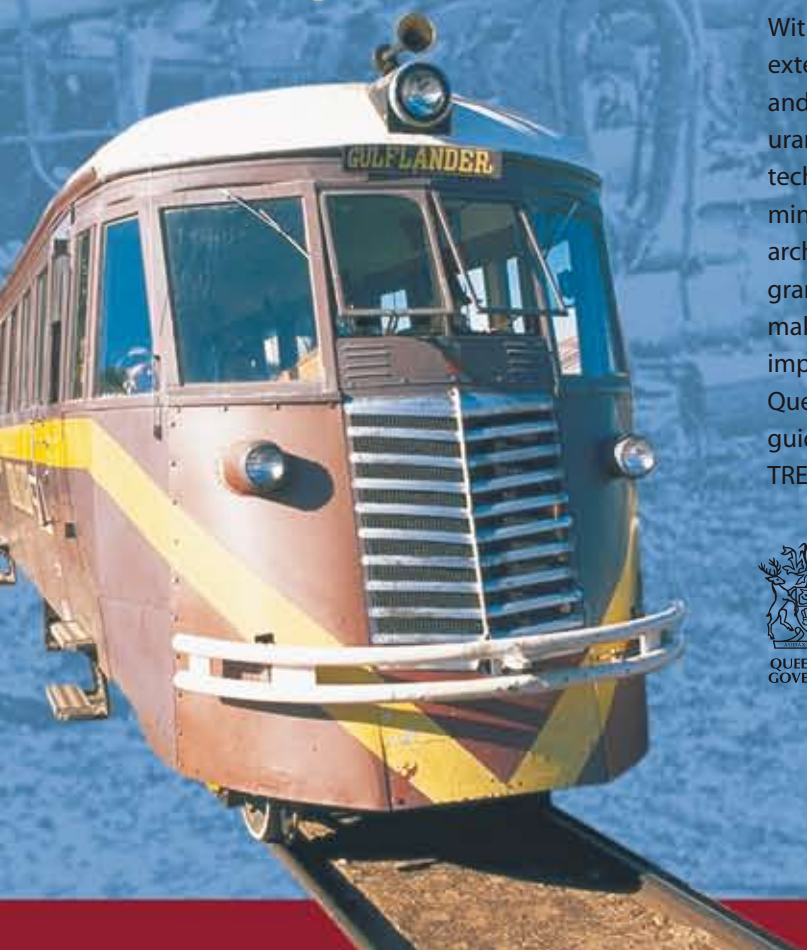
Mining Treasure Trail

Mining has had a profound and unique impact on the social and economic development of Australia. This was never more so than in north Queensland where the early industry created new wealth, changed whole landscapes and left fascinating examples of past mining technology lying forgotten in the small settlements, green rainforests and vast savannah plains of the region.

Geographically, this guide takes the day-tripper on informative tours from the major north Queensland destinations of Cairns and Townsville, to the easily accessible hinterland gold mining towns of Ravenswood and Charters Towers and on to the tin and copper towns of Herberton, Irvinebank and Chillagoe. Travellers with more time can 'go west' from Townsville to the rich red country of the Selwyn Ranges and the historic copper mines of the Cloncurry and Mount Isa district. Others may follow the route from Cairns through the tin fields of the Atherton Tablelands to the Hodgkinson, Etheridge and Croydon goldfields, or take the Cape York trail through Mareeba or Cooktown to the fabulous Palmer River Goldfield.

With information and pictures the guide tells a story extending from the 1870s gold rushes, through the tin and copper booms of the late 19th century to uranium mining in the 1950s. It features the technology of mines, stamp batteries, smelters and mining railways and encompasses a range of architectural styles from simple miners huts to grandiose public buildings. This diversity combines to make **North Queensland's Mining Heritage Trails** an important contribution to the published record of Queensland's heritage - a colourful and fascinating guide to your own journey along the MINING TREASURE TRAIL.



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