Commemorative Plaque Nomination Form

6 August 1995

Bendigo Group Committee Suite 348 16 Strath Hill Centre BENDIGO VIC 3550



VICTORIA DIVISION

Commemorative Plaque Sub-Committee
The Institution of Engineers, Australia
Engineering House
11 National Circuit
BARTON ACT 2600

The following work is nominated for a:

Historic Engineering Marker

Name of work:

Bendigo Gasworks Weeroona Avenue Bendigo, Victoria Australia

Owner:

The Bendigo Trust - trustees for the City of Greater Bendigo.

The owner has been advised of the nomination of the work and has indicated their willingness to accept and display a commemorative plaque. Refer to attached letter.

Normal vehicular and pedestrian access to the site is available from Weeroona Avenue.

The Bendigo Trust is responsible for the care and maintenance of the Gasworks assisted by various grants and employment schemes made available through the City of Greater Bendigo. There is scope for increased technical assistance.

Name of Sponsor:

Bendigo Group The Institution of Engineers, Australia

Chairman of Nominating Committee

Chairperson of Division Heritage Committee

ADDITTIONAL SUPPORTING INFORMATION

Basic details

Name of work:

Bendigo Gasworks

Year of construction:

1859

Period of operation:

1859-1974

Physical condition:

Fair to good

Actual operation of the Gasworks would not be an

impossibility

Technological/Scientific Value

It is a complete, rare, surviving provincial gasworks.

Historical Value

Demonstrates the process of gas manufacture particularly during the time of 1930 - 1960.

Social Value

The Gasworks is a major surviving service industry installation in Bendigo.

Landscape Value

Significant at a regional level for the maturity of the pepper and oak trees and the timber and brickwork fences.

Rarity

The Gasworks contains the only gas producing horizontal retorts in Australia. At the State level comparable sites are devoid of plant, equipment and buildings representative of stages in the process of gas manufacture.

The Gasworks contains rare examples of:

- 1. double-ended horizontal retorts
- 2. a spirally guided gas holder
- one of the oldest detarrers still existing

Representativeness

Fully represents a once common provincial gasworks.

Contribution to the nation and region

Regionally, the Gasworks provided gas for domestic and industrial purposes and employment from 1960 to 1974.

On a national level, the gasworks contributed to Australia's defence effort during the Second World War by supplying gas to the Ordinance Factory Bendigo.

Contribution to Engineering

The provision of a community need in the form of a public utility - gas.

Persons associated with the work

Alexander Kennedy Smith was a noted engineer responsible for the design of other gas plants in Victoria during the midnineteenth century. Retained as the consulting engineer during 1859-1860 to provide a "turn-key" installation within 6 months.

WA Simco, general manager from 1922 to 1939, presided over the plant during a period of reconstruction and growth.

Integrity and Authenticity

The buildings and plant are representive of provincial gas production from 1859 - 1974.

Conservation measures undertaken to date are very sympathetic with the various periods of construction.

Comparable works

Australia

Wagga Wagga, NSW Launceston, Tasmania

International

Two sites in Britain

Statement of significance

Refer to Section 5 of the Bendigo Gasworks Conservation Analysis by Graeme Butler and Associates, 1993.

Citation

BENDIGO GASWORKS

THE ORIGINAL WORKS WERE CONSTRUCTED DURING 1859-1860 UNDER THE DIRECTION OF ENGINEER, ALEXANDER K. SMITH. UNDER THE LEADERSHIP OF W.A. SIMCO, GENERAL MANAGER 1922-39, THIS BECAME THE MOST EFFICIENT GASWORKS IN VICTORIA. COAL GAS WAS MANUFACTURED FROM 1860 UNTIL 1973. THE WORKS WERE OPERATED BY THE BENDIGO GAS COMPANY UNTIL PURCHASE IN 1958 BY THE GAS & FUEL CORPORATION. THE SITE IS A RARE EXAMPLE OF AN ENTIRE PROVINCIAL GASWORKS.

Attachment to submission:

Letter from the Bendigo Trust.

Bendigo Gasworks Conservation Analysis by Graeme Butler and Associates, 1993.

[Proposed location of plaque to be on-site.]



THE BENDIGO TRUST

A.C.N. 005 014 175

07.08.95

Mr Peter Bowman Chairman Heritage Sub-Committee Bendigo Group Suite 348 16 Strath Hill Centre BENDIGO, VIC. 3550

Dear Mr Bowman

The Bendigo Trust has no objections to your organisation erecting a plaque at our historic Gas Works site. We appreciate the interest of The Institution of Engineers of Australia in recognising this early industrial area, particularly as the site has been able to be prepared for visitors.

The charter of The Bendigo Trust encourages preservation of significant areas for presentation and the Gas Works is our most recent endeavour.

Many thanks for the interest of your members.

Yours sincerely

(Mrs) Myra Potter

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EXECUTIVE OFFICER

MP:DS

Bendigo Gasworks awarded Historic Enginee

On Thursday 21st September 1995, the President of the Institution Australia, Dr. Ian Mair unveiled an Historic Engineering Marker at the bendigo Gasworks.

Following the discovery of gold, Bendigo quickly grew into a thriving provincial centre. The gasworks were built before the railway from Melbourne, so all construction materials and black coal had to be hauled in by horses. On the 1st April 1860 manufactured coal gas from this plant first lit Bendigo. Word soon spread and a crowd gathered to marvel at the new wonder for Bendigo.

The gasworks and reticulation system was re-furbished in the 1920s to improve the efficiency of the plant and the quality of the gas. By the 1930s the quality of gas was superior to that available in Britain. The gasworks were purchased by the Gas and Fuel Corporation in 1958 and in 1966 two of the horizontal retorts were altered to allow catalytic conversion of Liquefied Petroleum Gas to increase the capacity of the supply. When the natural gas pipeline to Bendigo was completed and natural gas arrived in Bendigo in August 1973, it spelt the end of the production at the Bendigo Gas Works. On 8th October 1973 the retort was charged with black coal for the last time, the conversion to natural gas had been completed.

In unveiling the Historic Engineering Marker, Dr Ian Mair noted that the historical plant is sufficiently complete to enable the process of gas-making to be easily understood. The sequence of the development of the gasworks from the 1860s to the 1960s is also apparent in the range of buildings and equipment on site. The plant includes, horizontal retorts, condensers, gas holders, boilers, managers office and residence, stables, blacksmith, coal and clicker handling equipment.

The gasworks was purchased by the Bendigo Trust and is being developed as a Gasworks Museum. The Bendigo Trust also proudly displays the many specialised hand tools that were used and retained on the site that further enable the work of the people associated with the gas works to be better understood. The Bendigo Trust also runs the Bendigo Tourist Tram and part of the site now functions as a tram depot.

The Historic Engineering Marker reads as follows:

Coal Gas was manufactured here from 1860 to 1973. The original works were constructed during 1859-1860 under the direction of engineer Alexander K Smith and developed in a period of growth by W A Simco, General Manager 1922-1939. The works were operated by the Bendigo Gas Company until purchased by the Gas and Fuel Corporation in 1958 at which time they were supplying 3500 consumers. The site is an Internationally significant example of an entire provincial Gasworks.

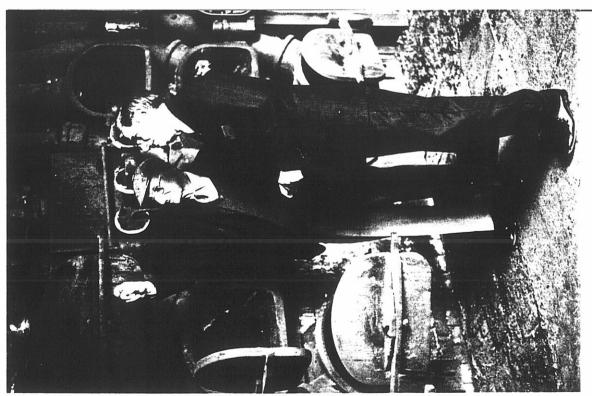
Dedicated by The Institution of Engineers, Australia and the Bendigo Trust, 1995

Photo captions:



Dr Ian Mair, President of the Institution of Engineers, Australia, unveiling the Historic Engineering Marker at Bendigo Gas Works on 21st September 1995.

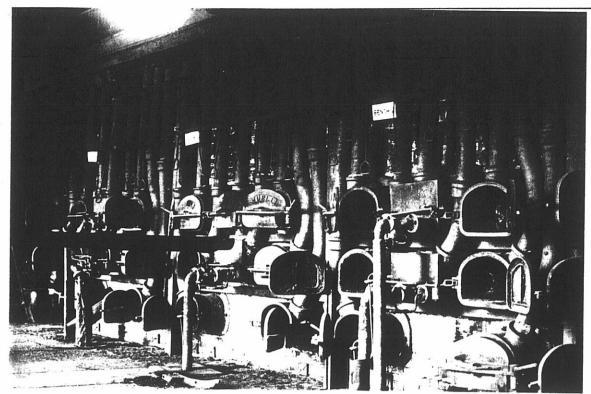
(Photo: Ken McInnes)



The process of producing gas from black coal is explained to Dr Ian Mair, President of the Institution of Engineers, Australia by Edgar Harrison Director of the Bendigo Trust and chairman of its Gasworks Committee.

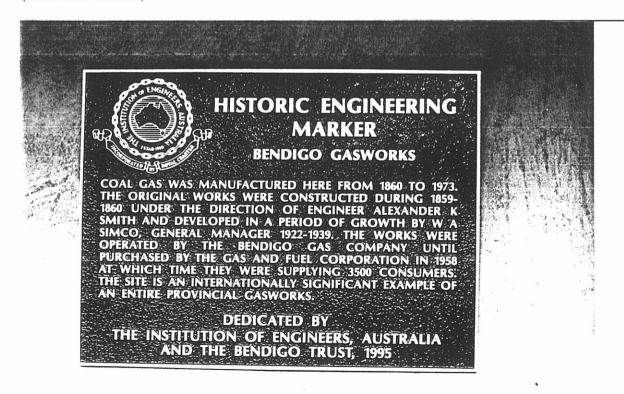
(Photo Ken McInnes)

Photo captions:



The horizontal retorts at the Bendigo Gas Works.

(Photo: Ken McInnes)



The Historic Engineering Marker at the Bendigo Gas Works.

(Photo: Ken McInnes)

The Historic Engineering Marker at Bendigo Gasworks.

AGENDA

- 2.45pm Welcome.
- 2.50pm The plaquing program.
- 2.55pm The history of the gas works.
- 3.05pm Unveiling of the plaque.
- 3.10pm Closing.
- 3.15pm Tour and photographs.

THE STORY OF GAS IN BENDIGO.

JAMES LERK.

In January 1855, an engineer, Mr. Joseph Doody, had his own gas making plant in Bendigo and was using it for lighting. Less than three weeks later, gas generated from mutton fat was used to light the Black Swan Hotel.

In early July 1859, The Bendigo Advertiser reported that a meeting of shareholders of the Bendigo Gas Companion was held. At this meeting shareholders heard that a provisional committee had been setup some six months earlier. Shares had been sold and a site was being sought for the construction of the works.

The gas works site was down stream along the side of the Bendigo Creek in a sparsely populated area called Irish Town. Pipe laying was commenced whilst site preparations were on the way and equipment ordered.

A 30 metre high octagonal chimney for the new gas works was completed on the night of 1 April 1860. In the same month horses had hauled imported coal to Bendigo. On the night of 1 April 1860, the newspaper office of the "Mercury" was lit with gas. Word soon spread and a crowd gathered to marvel at the new wonder for Bendigo. Gas was used for lighting Businesses and selected sections of Bendigo streets. Demand for gas supply increased to such an extent that additional retorts for the works were being considered by May 1861. Eaglehawk was connected to the gas supply in 1867 and in July the large Catherine Reef United crushing battery was lit with gas. In 1870 Bendigo had 102 gas-lit street lights.

New large diameter gas mains were being laid in early 1890 from the Company works, and healthy dividends were being paid to shareholders. A few years later the finances of the Company were not so cosy, as the colony of Victoria was in the grip of a depression and consumption of gas fell off. Gradually economic conditions were to improve in the years ahead and in 1913 the Company purchased a building in Bendigo's main thoroughfare, Pall Mall. This building gave shop front exposure for showrooms, offices and workshops. The competition for lighting had been won by electricity; now the Gas Company had to sell its energy for other purposes.

Gas for cooking and grilling was actively promoted and the advantages of gas heating for washing in coppers was self-evident. There was a decreasing demand for the use of gas for lighting with the largest lighting customer, the Bendigo City Council, not renewing its street lighting contract. By 1922 the gas works was in a decrepit state, and the Company was fortunate in having gas engineer W.A. Simco apply for the position of general manger. Simco set about changing the poor image of the company amongst consumers.

Revival of gold mining by the mid 1930's ensured improved prosperity for Bendigo and extra demand for gas. Simco left for overseas to see how the efficiency of the gas works could be improved. He found that the works he had designed could not be bettered, and the quality of the gas produced was superior to that available in Britain. On leaving Bendigo Simco left an efficient, modern works with the company in a very sound state.

With the establishment of the Commonwealth Ordnance Factory and the advent of the Second World War, there was to be an additional demand for gas. The new factory required gas for a large gun barrel annealing furnace. Storage capacity at the gas works was insufficient to meet this new demand. A new gasometer was built and other improvements were made, increasing the production of gas by 50 per cent. Following the war, no improvements were made, minimal maintenance was carried out and the works became run down.

By 1956 the Bendigo Gas Company was seeking to divest itself of its operations, approaching both the Gas and Fuel Corporation as well as the City Council to take over the works. Through the backroom political work of Bendigo M.L.A., W. Galvin, the Gas and Fuel Corporation was pressured into purchasing the Bendigo Company, taking effect on 1 July 1958.

In 1966 two of the horizontal retorts were modified to allow catalytic conversion of Liquified Petroleum Gas (L.P.G.) to increase the capacity of supply. Bendigo was the only gas works where this innovative system was used to blend L.P.G. with coal gas. In May 1972 Premier Bolte announced the construction of a natural gas pipeline to Ballarat, Castlemaine, and Bendigo. When natural gas arrived in August 1973 it spelt the end of the production at the Bendigo Gas Works. On 8 October 1973 the last retort was charged with black coal to produce gas in Bendigo; the conversion to natural gas had been completed.

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HISTORIC ENGINEERING MARKER

BENDIGO GASWORKS

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DEDICATED BY THE INSTITUTION OF ENGINEERS, AUSTRALIA AND THE BENDIGO TRUST, 1995

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Dr Ian Mair President IEAust. Dr John Webster

Chief Executive Officer IEAust.

Dr Jack Wynhoven John Wilson

Victorian Division Chairman. Chairman, Board of Engineering. National Board of Engineering.

M McKay

Chairman Mechanical College. ×

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Bendigo Group Committee.

Paul Hagenbach Dr Don Fraser

Chairman National Committee of Engineering Heritage. Convenor, Commemorative Plaque Sub-Committee. Chairman Victorian Division Heritage Branch.

Ken McGuinnes Robert Hocking

Chairman Sunraysia Group.

Peter McManamon

Chairman Goulbourn Valley Group.

John Gibcus Bruce McClure Anthony Alsop Glen Reinsch Lyle Tune

Chairman Ballarat Group. Chairman Wimmera Group. Chairman Geelong Group. Chairman Gippsland Group. Chairman South Western Group.

Richard Rodd Robert Breen

Chairman Upper Murray Group.

Richard McGarvie

Associate Director Engineering IEAust National Headquarters.

The HON. Bruce Reid MHR

Victorian Governor General. Local Federal Member for Bendigo.

Max Turner MLA

Member for Bendigo East.

The HON.Ron Best MLC

Member for North Western Province.

Peter Ross-Edwards

Chief Commissioner of the Greater City of Bendigo. Chief Executive Officer of the Greater City of Bendigo.

Myra Potter Simon Desburough

Peter Seamer

Executive Officer Bendigo Trust. Tour Co-ordinator Bendigo Trust.

Egar Harrison

Bendigo Trust.

Chairperson Australian Heritage Committee. Chairperson Heritage Committee Victorian Group.

Chairperson State Heritage Council.

John van Weel John Packer

Manager Gas & Fuel Corporation Bendigo. Chairman Australian Institute of Management.

Daryl McClure

President Bendigo Trust.

David Wright Denis O'Hoy Ken Hessey

Bendigo Trust. Bendigo Trust. Bendigo Trust.

Ray Proudly Dr Joe Petrolito Corporate Affairs Manager, Gas & Fuel Corporation. Head of Engineering LaTrobe University Bendigo.

Graeme Phipps

Group General Manager ADI Engineering.

BARRY GREAR NATIONAL VICE PRESIDENT ENCHERING POLICY GEOFF SUTHERLAND, DIRECTOR VICE DIV.



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Hocal people involved are:

MURRAY PURKISS Charling, Bendings
Group Committee

PETER BOWMAN Bendings Group Group.

PHILLIP HAND Bendings Group Henrage
Sub. Committee

ALSO

PAUL HAGENBACH Chavening, National Committee on Engineering Herringe.

Chairman Rendigo Group and

President Bendigo Trust.

Cordially Invites,



VICTORIA DIVISION

Robert Breen

to the plaque unveiling of the

Sistoric Engineering Marker

by Or Jan Mair President of the

Institution

for the

Rendigo Gasworks

on

Thursday, 21st September 1995 - 2.30 PM

at the

Rendigo Gasworks, Meeroona Ave. Rendigo.

The site is an international example of an entire provincial Gasworks.

R.S.V.P. 19.9.1995 Elizabeth Curnow Telephone 054 402900 Fax 054 402959