

ENGINEERS AUSTRALIA

ENGINEERING HERITAGE AUSTRALIA

HERITAGE RECOGNITION PROGRAM

Nomination Document for

BARCALDINE WATER TOWER



**Barcaldine Regional Council
Central Western Queensland
April 2011**

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Heritage Award Nomination Form

The Administrator
Engineering Heritage Australia
Engineers Australia
Engineering House
11 National Circuit
BARTON ACT 2600

Name of work: **Barcaldine Water Tower**

Engineering Heritage Australia (Queensland) (EHAQ) hereby nominates the above-named work for the award of an **Engineering Heritage Marker**

Location: **Cnr Yew and Pine Streets, Barcaldine Qld 4725**

Owner: **Barcaldine Regional Council, PO Box 191 Barcaldine Qld 4725**

EHAQ, the nominating body, has advised the owner of this nomination and a letter of support is expected (Dec 2010).

Access to site: Controlled by the owner.

Andrew Barnes
Chair, Engineering Heritage Australia (Queensland)

Introduction

The Barcaldine Water Tower is located on the corner of Pine and Yew Streets, Barcaldine and was first commissioned in October 1914. The first proposal by T. Hannay of Gerra, made in 1902, was rejected as beyond Divisional Board means. Due to a large number of buildings burning down in the town a public notice was held inviting volunteers to register as fire fighters before 24 August 1909. Two teams were formed and over £400 worth of equipment was ordered, including hoses, hydrants and a pump on iron wheels known as Gentle Annie. However, a fire brigade could do little without water pressure. Hannay suggested a tank and tower but a poll of ratepayers in October 1910 rejected the scheme a second time. Years of debate and indecision ended in May 1914 when a tender of £3495.5.4d from Barbat and Sons of Ipswich was accepted for the erection of a 45,000 gallon tank on a 100ft tower with legs set 7ft 6 in. into the ground. The Council received a loan of £5000 for the erection of the tower. Campbell Fairley was the supervising engineer. The tank was first filled in November 1914 and has been part of Barcaldine history ever since.

With a second tank set into the ground a bore was allowed to run into it. A Hathorn-Davey pump delivered water through a 6-inch pipe to the tank of the tower. A shed was erected for an electric light plant. When it was first used the pressure was to standard but the amount of water used horrified the councillors. It was measured at 26 gallons per person per hour. The Hydraulic Department suggested that the mains may have been leaking but the Council denied that. Controlling the water became an ongoing problem which resulted in turning the tank on and off, so that residents sometimes had a gush of cold water and sometimes a mere trickle of hot.

A loan of £1000 was taken out with the Queensland National Bank and Gordon Faine of Brisbane was engaged to compile plans for electricity supply. Street lights were turned on for the first time in Barcaldine on Queensland Day in August 1915. The lights were only on between 7 to 11pm at each intersection and in a few places along the main streets. This engine soon proved to be inadequate and an attempt to borrow £5000 for a larger engine was rejected by ratepayers in 1916. During this time until 1918 lights were turned off during the war years and only a few public buildings were supplied with electricity. A loan was eventually negotiated early in 1918 by Engineer EL Wilson to order a large Hornsby engine. On 24 February 1918 the Barcaldine power station was official opened. After this occasion electricity was available to all that could afford to install it.

On the 16th November 2006, Engineering Testing and Research Services (ETRS) carried out on behalf of the Shire Council a Condition Audit on the water tower to update the preliminary one carried out in 1990. The Council had decided to decommission the tower for water storage and retain it for a communications tower. The purpose of the audit was to determine corrosion loss, proof test hold down bolts and provide information to design engineers for the structural suitability assessment for the tower's new life. The audit showed the above ground tank support structure is in good condition with little adherent rust and the four hold down bolts were proof load tested and all passed. The Audit report is submitted separately from this document.

In 2007 an access upgrade quotation was awarded to Steward and Sons for a price of \$?? to comply with Workplace Health and Safety requirements.

HERITAGE ASSESSMENT

1. BASIC DATA

Item name: Barcaldine Water Tower

Other / Former names: Nil

Location: (ABC transm't'r) AMG Ref Zone 55 E322160 N7396718

Address: Cnr Pine and Yew Streets

Suburb/Nearest Town: Barcaldine

Local Government Area: Barcaldine Regional Council

State: Queensland

Owner: Barcaldine Regional Council

Current Use: Communications Tower

Former Use: Town water supply storage until 2006

Designer: JB Henderson

Builder: Barbat & Sons

Year Started: 1914

Year Completed: 1914

Physical Description: 45,000 gallon tank on a 100 ft. tower with legs set 7ft. 6 in. into the ground

Physical Condition: Good at inspection in 2006

Modifications and Dates: Adaptation to current use started in 198?
Water storage use terminated in 20?? .
Access upgrade 2007.

Heritage Listings: None

Engineers Australia recognises that this nomination is of an item carrying parts of a serviceable live system. If the nomination is successful, Engineers Australia will have neither rights nor responsibilities in relation to the operation, maintenance or upgrading of the system/item or any part of it.

2. STATEMENT OF SIGNIFICANCE:

Historical significance

Association with important group

Creative or technical achievement

Social/cultural

Rarity

Integrity/Intactness

Proposed wording for interpretation panel

Design

Construction

Fire protection

Power generation

The Engineers

REFERENCES

Barcaldine Local Authority; 1893-1993; Author Isobel Hoch; page 22 and 27

The Barcaldine Story; 1846 – 2008; Author Isobel Hoch; Page 65-67

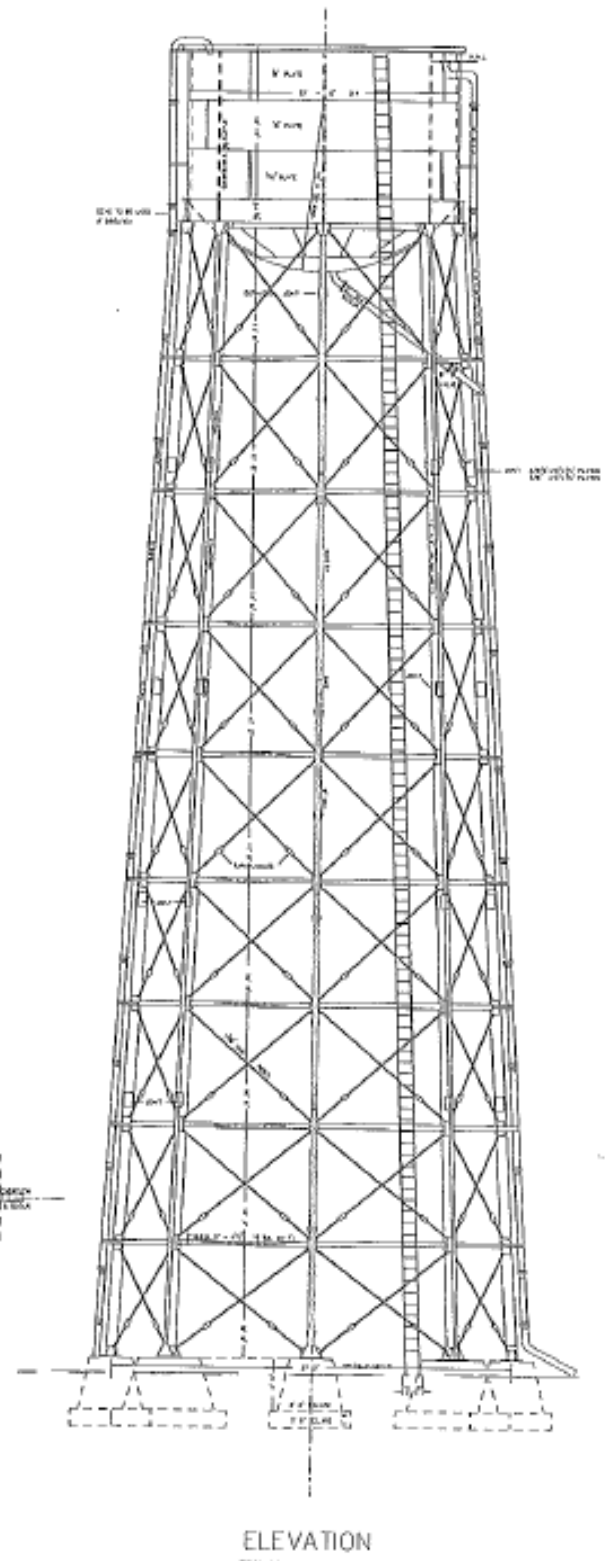
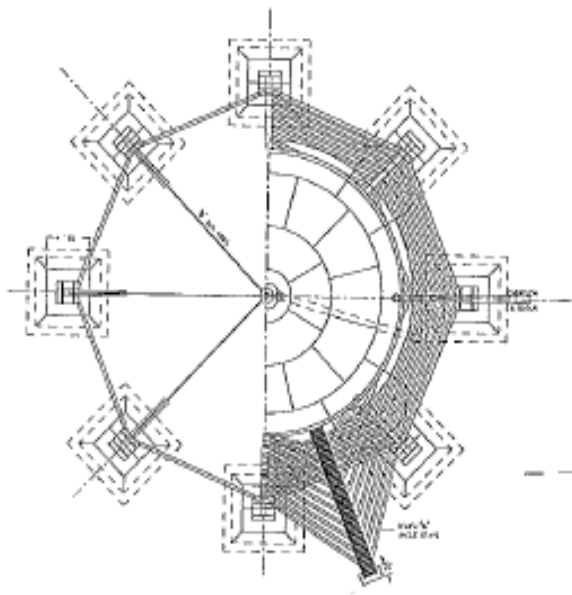
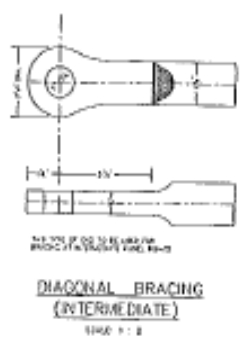
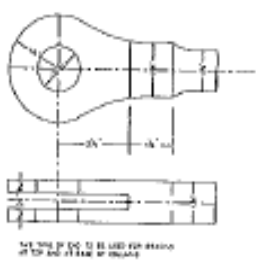
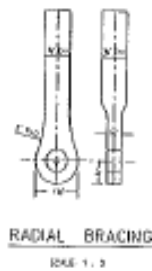
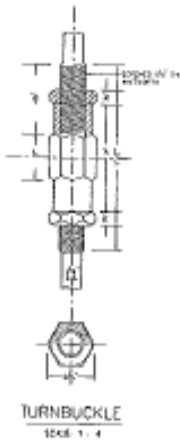
The Brisbane Courier, 7 February 1913, Page 4

The Brisbane Courier; 23 May 1913, Page 10

The Brisbane Courier; 13 April 1914, Page 10

The Longreach Leader; 15 October 1938, Page 22

George Bourne & Associates, 67 Elm Street, Barcaldine – various drawings.



No.	Revised Elevation	By	Eng. J. J. O'Connell	Checked	Eng. J. J. O'Connell
Date	1970/01/19	Scale	As Shown	Drawn	Eng. J. J. O'Connell
BARCOLDINE SHIRE COUNCIL BARCOLDINE WATER SUPPLY WATER TOWER					
66-139					

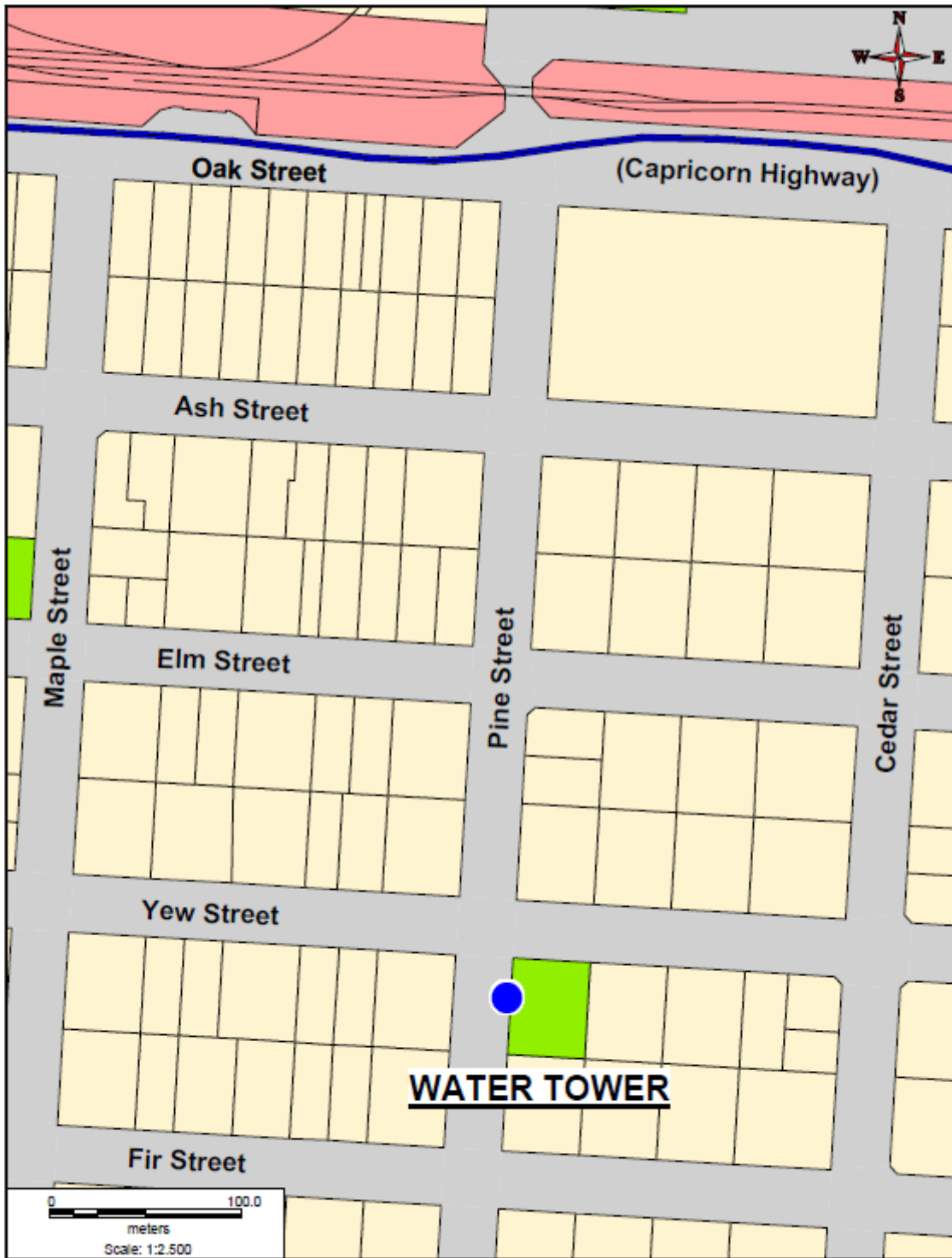


October 1989



Date?

A further, possibly the earliest, surviving photo of the water tower is at the bottom left of page 13 of *The Brisbane Courier (Qld.)* Saturday 27 February 1915. **It shows the totally un-enclosed original ladder, as depicted on the drawing above.**



TOWN OF BARCALDINE
WATER TOWER LOCATION PLAN