

## BIG LIZZIE



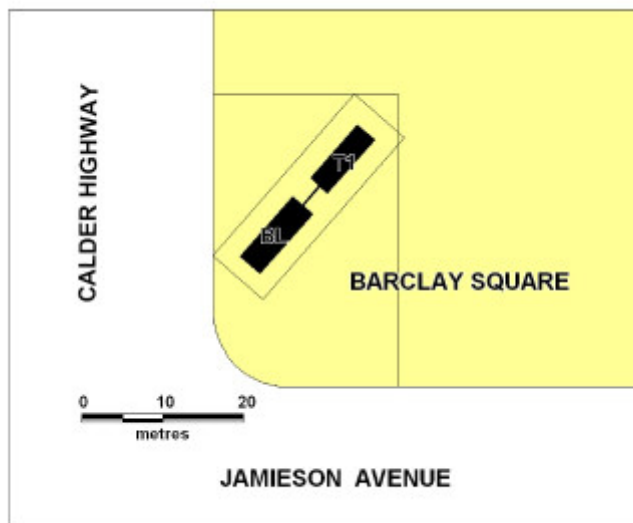
BIG LIZZIE SOHE 2008



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1 big lizzie



big lizzie plan

### Location

NORTH EAST CORNER OF CALDER HIGHWAY AND JAMIESON AVENUE RED CLIFFS, MILDURA RURAL CITY

### Municipality

MILDURA RURAL CITY

### Level of significance

Registered

### Victorian Heritage Register (VHR) Number

H1919

## Heritage Overlay Numbers

HO104

## VHR Registration

March 15, 2001

## Heritage Listing

Victorian Heritage Register

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## Statement of Significance

Last updated on - July 12, 2024

### What is significant?

Big Lizzie is a road train comprising the tractor (Big Lizzie) and one of two original trailers. The tractor and trailers were constructed with dreadnaught wheels designed to a 1906 patent by Frank Bottrill. Bottrill had worked in Broken Hill as a blacksmith in the late 1890s and gained experience with steam engines there. Around the turn of the century attempted to transport wool from stations north of the Murray with a steam traction engine. The failure of this venture, when he had to abandon the engine in deep sand, stimulated him to invent the Dreadnaught wheel, which he patented in 1906. The wheels were developed and proven on a variety of traction engines and road trains in the years before Bottrill commenced work on Big Lizzie. Bottrill planned to use this vehicle for transport of goods between the Murray and outback N.S.W. Construction began in a yard in Richmond in 1915 with close cooperation from the nearby McDonalds Foundry, which made the massive gearing and bearing components.

Big Lizzie terminated its inaugural journey to Broken Hill prematurely at the flooded Murray River in Mildura in October 1917. Big Lizzie was first used to carry a record-breaking load of 80 tons of wheat, and undertook other hauling tasks in the area. Big Lizzie had a number of failings, including a maximum speed of one mile per hour, a huge turning circle and inadequate steering gear. Despite these problems, Big Lizzie was found to be very effective for the land clearing which was going on apace in the Mallee in the 1910s and 1920s. In 1920 the Victorian Government, through the State Rivers and Water Supply Commission, contracted Bottrill to carry out a large scale clearing operation at Red Cliffs to create irrigation blocks for soldier settlement. Clearing in the area was previously largely carried out with small grubbing machines. Big Lizzie was equipped with a number of steel cables for pulling out trees and stumps, and a gang of up to sixteen men worked in a supporting role on the ground.

In 1926, when the work was completed, Bottrill took Big Lizzie to Glendinning to use on a clearing and share-farming operation there. This enterprise soon failed and Big Lizzie was left on the station until reclaimed by the Big Lizzie Restoration and Preservation Committee for the Red Cliffs community in 1971.

### How is it significant?

Big Lizzie is of historical and technological significance to the State of Victoria.

### Why is it significant?

Big Lizzie is of historical significance for its association with land clearing for agriculture in the Mallee and Mildura region. This phase of clearing in the Mallee coincided with the setting up of soldier settlement schemes following

World War One, and with the continuing ideal of closer settlement. There were a number of grazing leases in the Mildura area which could be readily resumed by the government, and irrigation blocks were a favoured means of settling a large number of families on limited supplies of land. The clearing at Red Cliffs in which Big Lizzie was involved is a major example of this development. Big Lizzie is also of historical significance as an attempt to reduce transport costs that were still a burden to primary producers in the inland areas distant from railheads.

Big Lizzie is of technological significance as the only conserved example of the innovative Dreadnaught wheel developed by Frank Bottrill and applied to tractors for land clearing and hauling under difficult outback conditions. While the caterpillar track would ultimately prove the most successful design for the purpose, the dreadnaught wheel proved reliable and effective for its purpose and was widely, if briefly used in Victoria, Queensland and South Australia. The Dreadnaught wheel demonstrates the part played by the individual inventor, experienced in outback conditions, in the development of technology for Australian bush. Though less lasting in its impact, the Dreadnaught wheel was an invention in the same lineage as the stump jump plough and the McKay's harvester.

Big Lizzie is of technological significance as a prime mover for its unusual design and for its sheer size, mass and hauling capacity. Big Lizzie was a one-off design which made use of a hybrid collection of available technologies, designs and materials.

## Permit Exemptions

### General Exemptions:

General exemptions apply to all places and objects included in the Victorian Heritage Register (VHR). General exemptions have been designed to allow everyday activities, maintenance and changes to your property, which don't harm its cultural heritage significance, to proceed without the need to obtain approvals under the Heritage Act 2017.

Places of worship: In some circumstances, you can alter a place of worship to accommodate religious practices without a permit, but you must [notify](#) the Executive Director of Heritage Victoria before you start the works or activities at least 20 business days before the works or activities are to commence.

Subdivision/consolidation: Permit exemptions exist for some subdivisions and consolidations. If the subdivision or consolidation is in accordance with a planning permit granted under Part 4 of the *Planning and Environment Act 1987* and the application for the planning permit was referred to the Executive Director of Heritage Victoria as a determining referral authority, a permit is not required.

Specific exemptions may also apply to your registered place or object. If applicable, these are listed below. Specific exemptions are tailored to the conservation and management needs of an individual registered place or object and set out works and activities that are exempt from the requirements of a permit. Specific exemptions prevail if they conflict with general exemptions.

Find out more about heritage permit exemptions [here](#).

### Specific Exemptions:

General Conditions:

1. All exempted alterations are to be planned and carried out in a manner which prevents damage to the fabric of the registered place or object.
2. Should it become apparent during further inspection or the carrying out of alterations that original or previously hidden or inaccessible details of the place or object are revealed which relate to the significance of the place or object, then the exemption covering such alteration shall cease and the Executive Director shall be notified as soon as possible.
3. If there is a conservation policy and plan approved by the Executive Director, all works shall be in accordance with it.

4. Nothing in this declaration prevents the Executive Director from amending or rescinding all or any of the permit exemptions.

Nothing in this declaration exempts owners or their agents from the responsibility to seek relevant planning or building permits from the responsible authority where applicable.

Exemptions:

\*Cleaning, rust treatment and repainting.

Construction dates	1906,
Heritage Act Categories	Registered place,
Hermes Number	5661
Property Number	

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## Assessment Against Criteria

### Criterion A

The historical importance, association with or relationship to Victoria's history of the place or object.

Big Lizzie is of historical significance for its association with land clearing for agriculture in the Mallee and Mildura region. This phase of clearing in the Mallee coincided with the setting up of soldier settlement schemes following World War One, and with the continuing ideal of closer settlement. There were a number of grazing leases in the Mildura area which could be readily resumed by the government, and irrigation blocks were a favoured means of settling a large number of families on limited supplies of land. The clearing at Red Cliffs in which Big Lizzie was involved is a major example of this development.

Big Lizzie is also of historical significance as an attempt to reduce transport costs that were still a burden to primary producers in the inland areas distant from railheads.

### Criterion B

The importance of a place or object in demonstrating rarity or uniqueness.

Big Lizzie and its trailers are rare and unique as the only known extant examples of the innovative Dreadnaught wheel developed by Frank Bottrill.

Big Lizzie is rare as a prime mover for its unusual design and for its sheer size, mass and hauling capacity

### Criterion C

The place or object's potential to educate, illustrate or provide further scientific investigation in relation to Victoria's cultural heritage.

### Criterion D

The importance of a place or object in exhibiting the principal characteristics or the representative nature of a place or object as part of a class or type of places or objects.

### Criterion E

The importance of the place or object in exhibiting good design or aesthetic characteristics and/or in exhibiting a richness, diversity or unusual integration of features.

### Criterion F

The importance of the place or object in demonstrating or being associated with scientific or technical innovations or achievements.

Big Lizzie is of technological significance as the only conserved example of the innovative Dreadnaught wheel developed by Frank Bottrill and applied to tractors for land clearing and hauling under difficult outback conditions. While the caterpillar track would ultimately prove the most successful design for the purpose, the dreadnaught wheel proved reliable and effective for its purpose and was widely, if briefly used in Victoria, Queensland and South Australia. The Dreadnaught wheel demonstrates the part played by the individual inventor, experienced in outback conditions, in the development of technology for Australian bush. Though less lasting in its impact, the Dreadnaught wheel was an invention in the same lineage as the stump jump plough and the McKay's harvester. Big Lizzie is of technological significance as a prime mover for its unusual design and for its sheer size, mass and hauling capacity. Big Lizzie was a one-off design which made use of a hybrid collection of available technologies, designs and materials.

Criterion G

The importance of the place or object in demonstrating social or cultural associations.

Criterion H

Any other matter which the Council considers relevant to the determination of cultural heritage significance

## **Extent of Registration**

All of Big Lizzie and its trailer marked BL and T1 on Diagram Number 1919 held by the Executive Director

*This place/object may be included in the Victorian Heritage Register pursuant to the Heritage Act 2017. Check the Victorian Heritage Database, selecting 'Heritage Victoria' as the place source.*

*For further details about Heritage Overlay places, contact the relevant local council or go to Planning Schemes Online <http://planningschemes.dpcd.vic.gov.au/>*