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# LIGHT RAILWAYS

Australia's Magazine of Industrial & Narrow Gauge Railways


Light Railway Research Society of Australia Inc.

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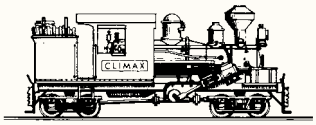
# Editorial

I have received some feedback about the recent changes to the layout of the magazine – from both a positive and negative perspective. I am always happy to receive feedback and I can assure all of our readers that it is taken seriously. On the basis of the suggestions and further consideration of the changes, we have decided to make some further minor tweaks. In particular, for the major articles we will revert back to the font type that was used previously. There will also be some other minor changes to headings and colours.

This edition contains a wide range of articles covering some very diverse topics about light railways across Australia – I trust that you enjoy reading them. *Richard Warwick*







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**Imperial to metric conversions:**

| | |
|---|---|
| 1 inch (in) | 25.40 millimetres |
| 1 foot (ft) | 0.305 metre |
| 1 yard (yd) | 0.914 metre |
| 1 chain | 20.11 metres |
| 1 mile | 1.61 kilometres |
| 1 ton | 1.01 tonnes |
| 1 pound (lb) | 0.454 kilogram |
| 1 acre | 0.405 hectare |
| 1 horsepower (hp) | 746 Watts |
| 1 gallon | 4.536 litres |
| 1 cubic yard | 0.765 cubic metres |
| 1 super foot (sawn timber) | 0.00236 cubic metre |

***Front Cover:*** *Former Sydney steam tram now in New Zealand! Steam tram No.100 was built in 1891 by the Baldwin Locomotive Works in the USA for the New South Wales Government Tramways. It operated at the Bridge Street yard in Sydney until 1905, when electric trams replaced steam services. It was sold to the private Saywell Tramway in Rockdale (Rockdale–Brighton-le-Sands tram line) and used as a back-up. After the Rockdale–Brighton-le-Sands tram was taken over by the state government, it was sold again and went to Wanganui, New Zealand in 1910 for construction of the Gonville and Castlecliff Tramway Board's electric tramway extensions to the Wanganui tram system. It was rarely used after 1912, but famously re-entered service during a three-month failure of the Wanganui power supply in 1920, and commemoratively brought out again during the closing weeks of the system in 1950. It was then acquired by the Old Time Transport Preservation League before moving to the Museum of Transport and Technology (MOTAT) in Auckland and restored between 1971 and 1996. Before Easter 2023 it had its boiler certified and now operates on live-steam days on the third Sunday of each month, taking a small number of passengers inside its cab. Baldwin steam trams were not uncommon in New Zealand, the Christchurch tramway operated similar Baldwin steam trams, as did the Takapuna Tramway & Ferry Co. in northern Auckland. The photograph was taken on MOTAT's Live Steam Day on 21 May 2023 doing shuttles between the MOTAT tram stop at Great North Road and the Aviation Hall tram stop. It is seen here arriving at Aviation Hall. MOTAT volunteers are currently restoring Wanganui tram trailer No.21 to operate with it. Photo: James Chuang*

# Locomotives of the NSW Public Works Department – Part 2

*by Jim Longworth and Garry Allen*

## Introduction

Part 1 of this article appeared in *Light Railways* 290 (April 2023) and covered PWD locomotive numbers 1 to 36. This article continues the descriptions up to locomotive number 83, then discusses several un-numbered locomotives. It also provides some details of locomotives that the PWD hired from other operators, as well as the use of several former steam tram motors.

**No 37**

Built by the Baldwin Locomotive Works as its builder's number 7390 of 1884, 2-6-0, tender, 4 ft 8½ in gauge.
Transferred to the NSWGR on 31 December 1916, when located at Broken Hill-Menindie, to become Z294 class No. 297x.

**No 38**

Built by the Baldwin Locomotive Works, builder's number 7391 of 1884, 2-6-0, tender, 4 ft 8½ in gauge.
Transferred to the NSWGR on 31 December 1916, when located at Broken Hill-Menindie, to become Z294 class No. 298x.

**No 39**

Built by the Baldwin Locomotive Works, builder's 7394 of 1884, 2-6-0, tender, 4 ft 8½ in gauge.
Transferred to the NSWGR on 31 December 1916, when located at Cobar mines, to become Z294 class No. 300x.

**No 40**

Built by the Baldwin Locomotive Works, builder's number 7398 of 1884, 2-6-0, tender, 4 ft 8½ in gauge.
To the NSWGR on 31 December 1916, when located at Condoblin-Menindie (contemporaneous spellings), to become Z294 class No. 303x.

**No 41**

Built by the Baldwin Locomotive Works, builder's number 7395 of 1884, 2-6-0, tender, 4 ft 8½ in gauge.
To the NSWGR on 31 December 1916, when located at Condoblin-Menindie (contemporaneous spellings), to become Z294 class No. 301x.

**No 42**

Built by the Baldwin Locomotive Works, builder's number 7392 of 1884, 2-6-0, tender, 4 ft 8½ in gauge.
To the NSWGR on 31 December 1916, when located at Eveleigh shops, to become Z294 class No. 299x.

**No 43**

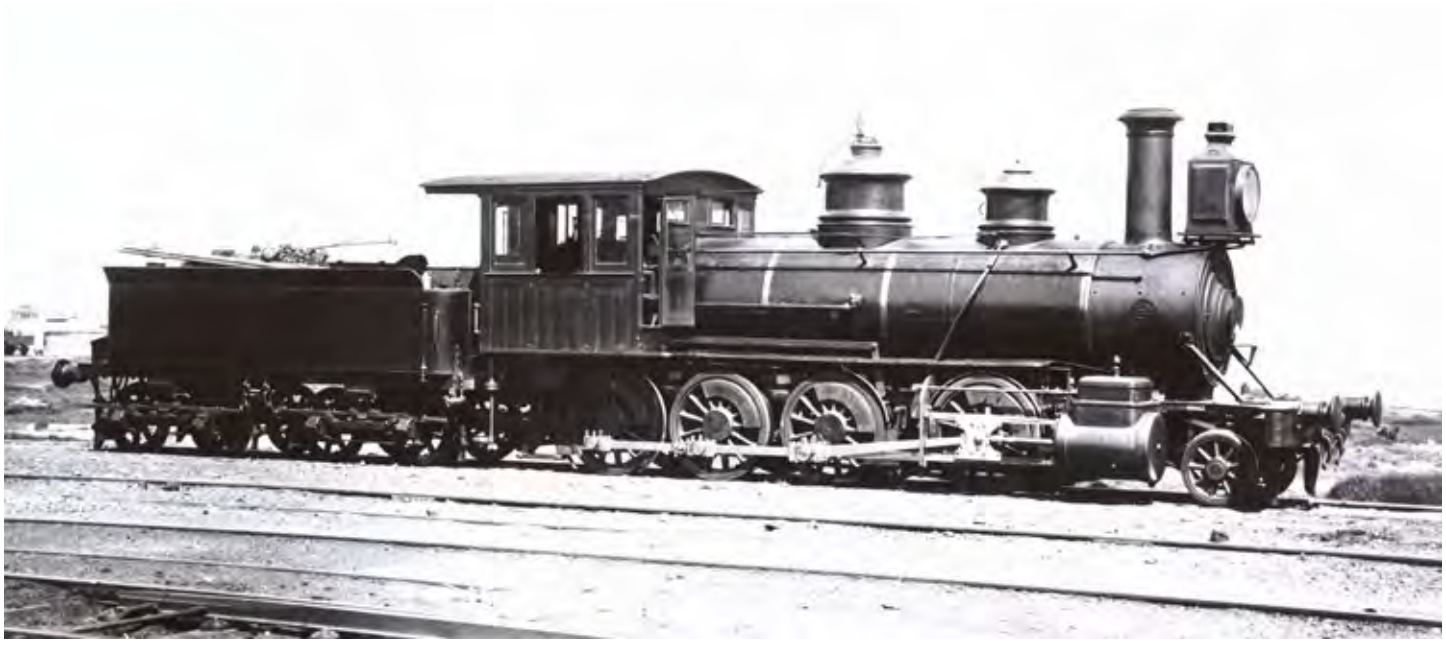
Built by the Baldwin Locomotive Works as its builder's number 4533 of 1879, 2-8-0, tender, 4 ft 8½ in gauge.
Forwarded to the PWD in 1916.
To the NSWGR on 31 December 1916, when located at Denman-Merriwa, to become Z131 class No. 140x.

**No 44**

Built by the Baldwin Locomotive Works as its builder's number 7396 of 1885, 2-6-0, tender, 4 ft 8½ in gauge.
To the NSWGR on 31 December 1916, when located at Forbes-Stockinbingal, to become Z294 class No. 302x.

**No 45**

Built by the Baldwin Locomotive Works, builder's number 7389 of 1885, 2-6-0, tender, 4 ft 8½ in gauge.
To NSWGR on 31 December 1916, when located at Condoblin-Menindie, to become Z294 class No. 296x.



*Undated view of PWD locomotive No. 43 later as NSWGR 140. Photo: ARHSnsw collection no 854291*

**No 46**
Built by the Baldwin Locomotive Works, builder's number 4529 of 1879, 2-8-0, tender, 4 ft 8½ in gauge.
Forwarded to the PWD in 1916.
To the NSWGR on 31 December 1916, when located at Dubbo, to become Z131 class No. 137x.

**No 47**
Built by the Baldwin Locomotive Works, builder's number 4414 of 1878, 2-8-0, tender, 4 ft 8½ in gauge.
Forwarded to the PWD in 1916.
To the NSWGR on 31 December 1916, when located at Humula-Tumbarumba, to become Z131 class No. 132x.

**No 48**
Built by the Baldwin Locomotive Works, builder's number 4528 of 1879, 2-8-0, tender, 4 ft 8½ in gauge.
Forwarded to the PWD in 1916.
To the NSWGR on 31 December 1916, when located at Murrurundi, to become J131 class No. 136.

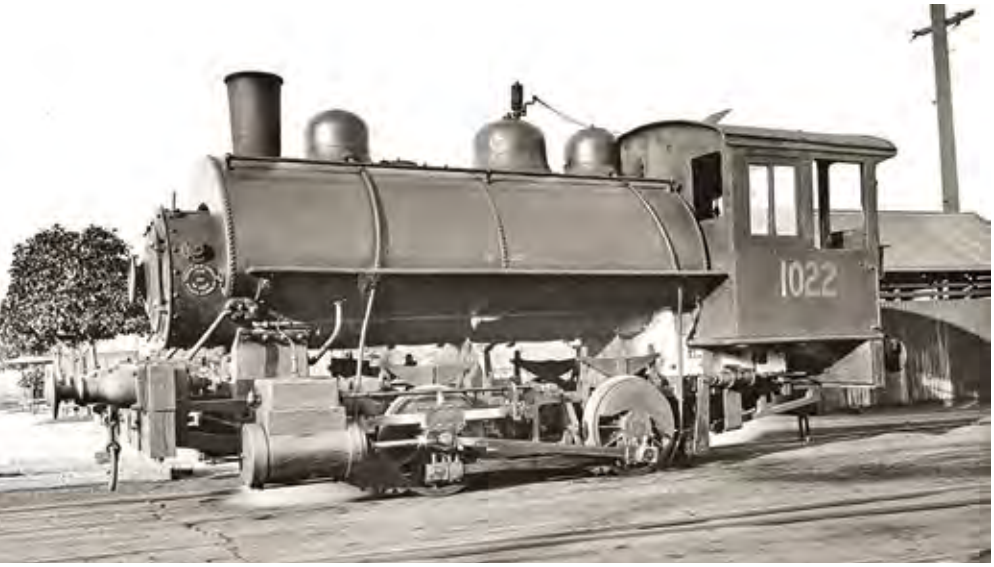
**No 49**
Built by the Baldwin Locomotive Works, builder's number 4530 of 1879, 2-8-0, tender, 4 ft 8½ in gauge.
Forwarded to the PWD in 1916.
To the NSWGR on 31 December 1916, when located at Condoblin-Menindie, to become Z131 class No. 138x.

**No 50**
Built by the Baldwin Locomotive Works as its builder's number 4526 of 1879, 2-8-0, tender, 4 ft 8½ in gauge.
Forwarded to the PWD in 1916.
To the NSWGR on 31 December 1916, when located at Forbes-Stockinbingal, to become Z131 class No. 134x.

**No 51**
Built by the Baldwin Locomotive Works, builder's number 4405 of 1878, 2-8-0, tender, 4 ft 8½ in gauge.
Forwarded to the PWD in 1916.
In 1917 transferred to the NSWGR, when located at Murrurundi, to become J131 class No. 131.

**Nos 52, 53, 54 and 55;**
Probably all built by the Baldwin Locomotive Works in 1879 but the builder's numbers are not known, 2-8-0s, tenders, 4ft 8½ in gauge. Available material is too confusing to suggest substantive conclusions.

**No 56**
Built by Wearne and NSWGR at Eveleigh in 1893, 2-8-0, tender, 4 ft 8½ in gauge.
Forwarded to the PWD in 1916.
To the NSWGR on 31 December 1916, when located at Murrurundi, to become Z131 class No. 522x.




***Left:*** *Undated view of No. 57 which was later re-numbered 1217, as re-re-numbered NSWGR 1022. Photo: Author's collection* ***Below left:*** *No. 58 as later re-numbered 1218 re-re-numbered NSWGR 1023 date unknown. Photo: ARHSnsw collection Ref 215516.* ***Below:*** *No. 59 later as NSWGR 1021 at Cardiff, 22 October 1970. Photo: N W Munro, ARHSnsw collection Ref No 462576.*

***Above:*** *No. 60 probably at Coffs Harbour – date unknown. Photo: ARHSnsw collection ref No 005076.* ***Below:*** *No. 61 probably at Coffs Harbour – date not known. Photo: Bart Wiles.*

**Nos 57 and 58**
Built by the Vulcan Iron Works, USA as its builder's numbers 2505 and 2513[1] respectively of 1916, 0-4-0, saddle tank, 4 ft 8½ in gauge.
Probably acquired new during 1916.
To the NSWGR on 31 December 1916, when located at Wagga-Tumbarumba and at Nimmitabel-Bombala respectively, to become V class No. 1217 and 1218 respectively.

**No 59**
Built by Manning Wardle, builder's number 1896 of 1916, 0-4-0, saddle tank, 4 ft 8½ in gauge.
Acquired new during 1916.
To the NSWGR on 31 December 1916, when located at Kempsey-Macksville, to become F class No. 1212.

**No 60**
Built by Manning Wardle, builder's number 1897 of 1916, 0-4-0, saddle tank, 4 ft 8½ in gauge.
Acquired new during 1916.
To NSWGR on 31 December 1916, when located at Coffs Harbour-Glenreagh, to become F class No. 1213.
Returned to the PWD in 1917.

**No 61**
Built by Manning Wardle as builder's number 1900 of 1916, 0-4-0, saddle tank, 4 ft 8½ in gauge.
Acquired new during 1916.
To the NSWGR on 31 December 1916, when located at Glenreagh-Dorrigo, to become F class No. 1214.
Returned to the PWD in 1917.

**No 62**
Built by Manning Wardle, builder's number 1898 of 1916, 0-4-0, saddle tank, 4 ft 8½ in gauge.
Acquired new during 1916.
To the NSWGR on 31 December 1916, when located at Sydney-Botany, to become F class No. 1215.
Returned to the PWD in 1917.

**No 63**
Built by Manning Wardle, builder's number 1899 of 1916, 0-4-0, saddle tank, 4 ft 8½ in gauge.
Acquired new during 1916.
To the NSWGR on 31 December 1916, when located at Coffs Harbour-Glenreagh, to become F class No. 1216.
Returned to the PWD in 1917

**Nos 64 and 65**

Built by the Davenport Locomotive Co as its builder's numbers 1595 and 1596 of 1917, 0-4-0 saddle tank, 2 ft gauge. [Which Davenport carried which builder's number is confused.

Singleton (1938) gave No. – (probably No. 64) as builder's number 1513 of 1917 and No. 65 as builder's number 1595 of 1917.

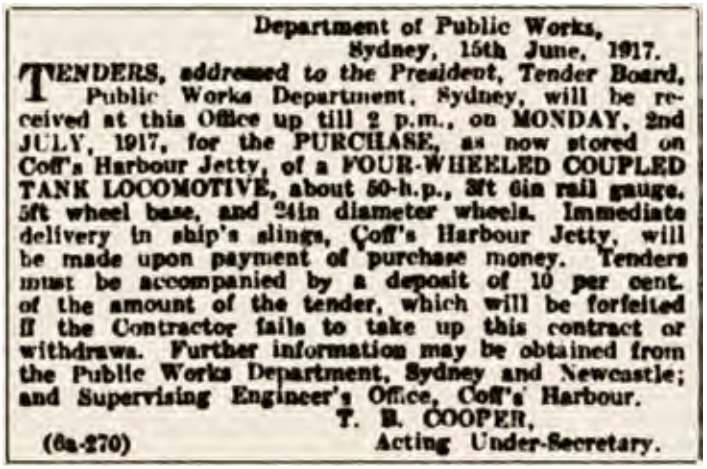
Eardley (1970) gave No. 64 b/n 1596 and No. 65 b/n 1595. McCarthy (1973) gave one of the locomotives as b/n 1517 of – McCarthy (1976) and (1983) gave No. 64 as b/n 1595 of 1917 and No. 65 as b/n 1596 of 1917.[2]

Worked on the construction of Cordeaux Dam.[3]

Sold to the Menangle Sand Co in 1929.

**No 66**

Built by Orenstein & Koppel as builder's number 4365 of 1910, 0-4-0 side tank, 3 ft 6 in gauge. Worked on Coffs Harbour jetty 1911-c.1917. Sold to State Rivers and Water Supply Commission c.1921.[4]



Department of Public Works,
Sydney, 15th June, 1917.

TENDERS, addressed to the President, Tender Board, Public Works Department, Sydney, will be received at this Office up till 2 p.m., on MONDAY, 2nd JULY, 1917, for the PURCHASE, as now stored on Coff's Harbour Jetty, of a FOUR-WHEELED COUPLED TANK LOCOMOTIVE, about 50-h.p., 3ft 6in rail gauge, 5ft wheel base, and 24in diameter wheels. Immediate delivery in ship's slings, Coff's Harbour Jetty, will be made upon payment of purchase money. Tenders must be accompanied by a deposit of 10 per cent. of the amount of the tender, which will be forfeited if the Contractor fails to take up this contract or withdraws. Further information may be obtained from the Public Works Department, Sydney and Newcastle; and Supervising Engineer's Office, Coff's Harbour.

T. B. COOPER,
Acting Under-Secretary.

(6a-270)

**No 67**

Built by the Vulcan Iron Works as builder's number 3055 of 1920, 0-4-0, saddle tank, 3 ft gauge.

Acquired new.

Worked on constructing Hume Dam.

Sold to W Adams in October 1936.[5]

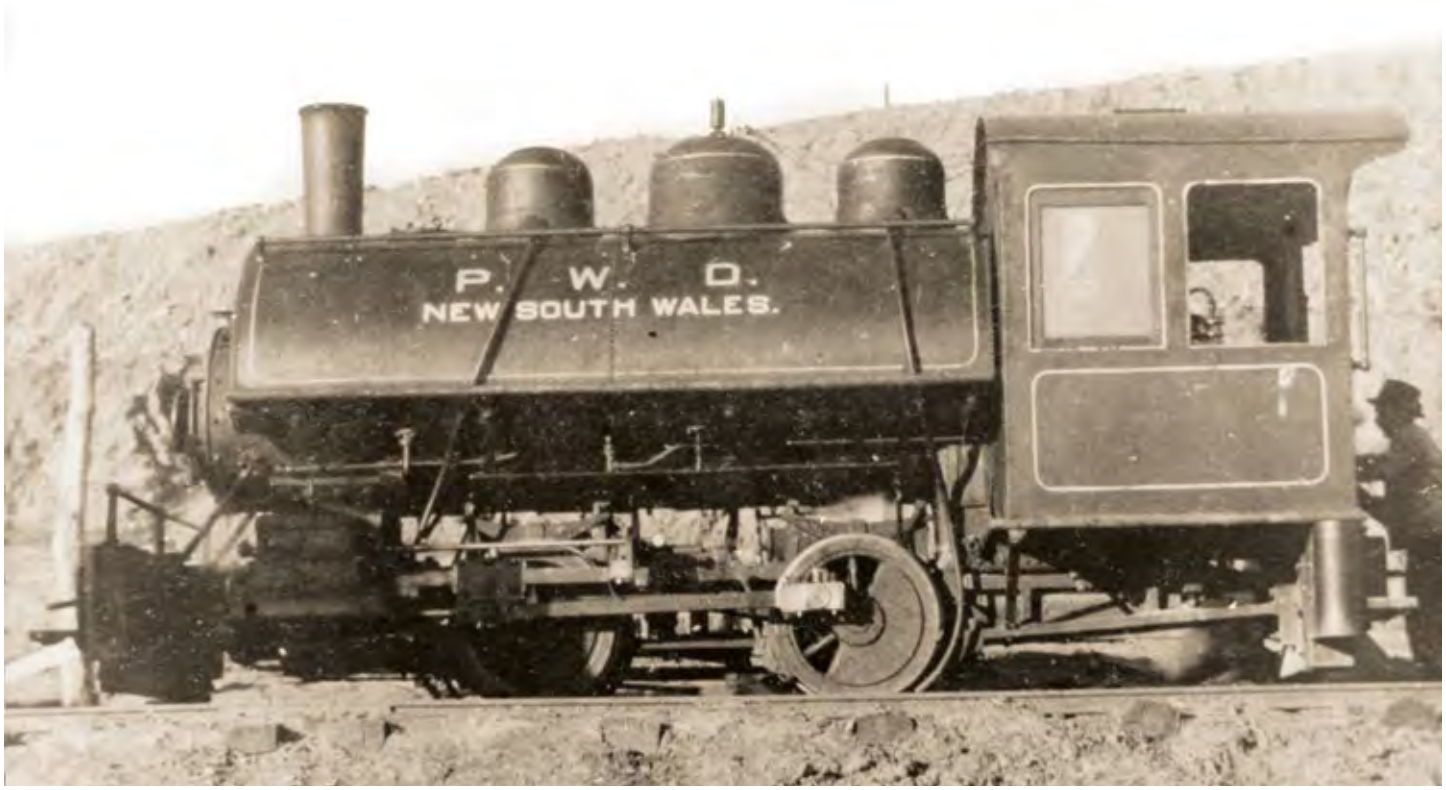
**No 68**

Built by the Vulcan Iron Works as builder's number 3232 of 1922, 0-4-0, saddle tank, 3 ft gauge.

Acquired new.

Worked on constructing Hume Dam.

Sold to W Adams in October 1936.[6]




***Top right:*** *PWD No. 64 or No. 65 hauling blue metal wagons along and beside the Mount Kiera Road between the ropeway-tramway interchange (across the river from the Douglas Park railway station) and dam site – date not known. Photo: Unknown.* ***Top left:*** *Advertising No. 66 for sale by PWD,* Sydney Morning Herald, *23 June 1917.* ***Above:*** *No. 67 and/or No. 68 were/was beautifully lined out. The lining out had been applied by the builder prior to delivery, as was a common practice. Photo: M Park*


***Left:*** *No. 67 or No. 68 probably at the Hume Dam construction site. Photo: unknown.* ***Middle left:*** *A 2ft gauge Simplex at work on the Chichester River dam site, 18 April 1923. Photo: Hunter District Water Board collection.* ***Bottom left:*** *Builder's photograph of b/n 16130, 1924. Photo: Fowler collection, Museum of English Rural Life, University of Reading.* ***Bottom right:*** *A BEV battery electric locomotive removing spoil excavated from the Northern Suburbs Ocean Outfall Sewer tunnel. While described as: 'One of the five-ton locomotives', we understand there to have been only one. Photo:* The Sun, *4 June 1925*

**No 69**

Hypothetically the number could possibly have been allocated to a small Simplex – builder's number 1859 of 1919, 0-4-0, petrol, 2 ft gauge [unidentified so unsubstantiated].

If so, it worked on constructing the Chichester River Gravitation Scheme both at the dam site and laying the water supply pipeline to Newcastle.[7]

**No 70**

Built by Fowler & Co, Leeds as builder's number 16130 of 1924, 0-4-0, side tanks, 3 ft gauge.

Acquired new.

Worked on constructing Hume Dam.

Sold to the Warburton Timber Co in October 1936.[8]

**No 71**

Built by British Electric Vehicles as builder's number 559 of 1925[?], 0-4-0, electric storage batteries, 2 ft gauge.

Acquired new.

Worked on removing excavated spoil from the Northern Suburbs Ocean Outfall Sewer tunnel in Sydney.[9] [A small 4-wheel internal combustion locomotive was also used on the work. However, being home-made it probably was never allotted an official PWD locomotive number].[10]

No. 71 was noted stored in the PWD Leichhardt Depot during 1928 and 1938.[11]

ONE OF THE FIVE-TON locomotives of the British Electric Vehicles Ltd., used to haul trucks of rock and earth from the tunnels driven through the hills for the outfall sewer.

***Left:*** *No. 72 at Newcastle, c.1939. The number 72 on the side does not look like original NSWGT lettering, so is taken to be the PWD number. Photo: ARHSnsw collection Ref No 005940.* ***Below left:*** *Nepean Dam locomotive being tested on a rolling road inside the Purcell workshops in Auburn – date not known. Photo: Bruce Macdonald collection.* ***Below middle:*** *No. 73 builder's photograph. Photo: Bruce Macdonald collection.* ***Below right:*** *No. 73 at Nepean Dam during construction with the number 73 on the rear buffer beam. Photo: Bruce Macdonald collection.*

**No 72**
Built by the Baldwin Locomotive Works, builder's number 6390 of 1883, 0-4-0, steam tram motor, 4 ft 8½ in gauge.
Acquired from the NSWGT in 1926, where number was 19A (2nd 19).
Worked on Nobby's breakwater at Newcastle.

**No 73**
Built by Purcell Engineering Co Ltd, 0-4-0, petrol, 4 ft 8½ in gauge.[12]
Acquired new, post-1920.
Worked on hauling standard gauge wagons between the interchange at Bargo railway station and the dam site during construction of the Nepean Dam.[13]
Probably transferred to the MWS&DB when construction work on the dam was handed over in 1928.

***Above:*** *No. 74 builder's photograph, 1927. Photo: R Horne collection.*
***Above right:*** *No. 75 at Port Kembla. The ex-NSWGR number of 1802 on the side tank can still be faintly seen. Photo: Bruce Macdonald collection.* ***Right:*** *No. 75 partly dismantled at the Reids Hill depot. 'PWD 75' on the side of the rear coal bunker can still be faintly seen. Photo: ARHSnsw Ref No 217014*

**No 74**
Built by Andrew Barclay as builder's number 1900 of 1927, 0-4-0, side tanks, 3 ft gauge.
Acquired new.
Worked on constructing Hume Dam.
Sold to A Johnston's Foundry, South Melbourne during October 1936.[14]

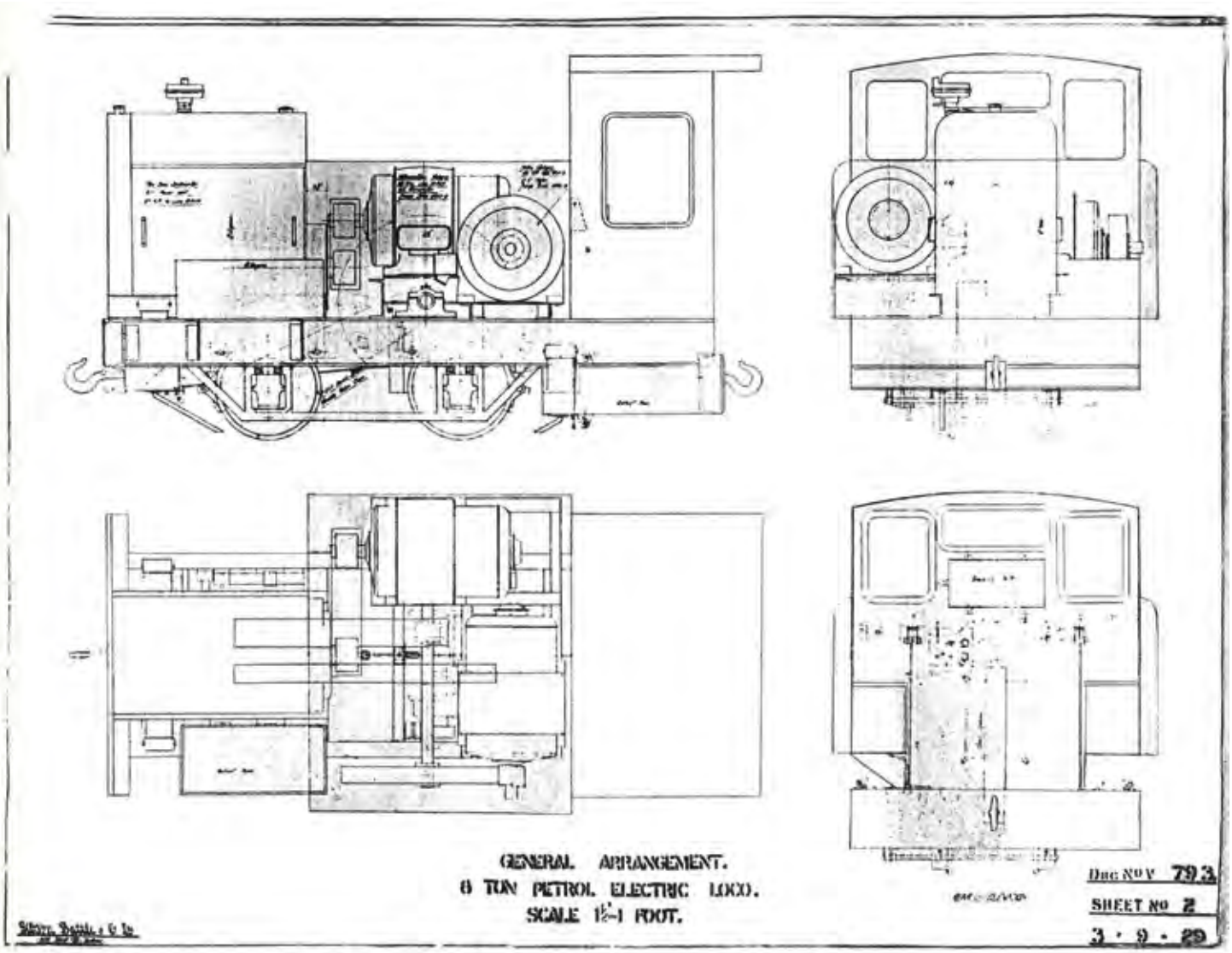
**No 75**
Built by Vulcan Foundry Ltd, England as builder's number 993 of 1884, 0-6-0 side tanks, 4 ft 8½ in gauge.
Started with the PWD in 1927 and worked at Port Kembla.

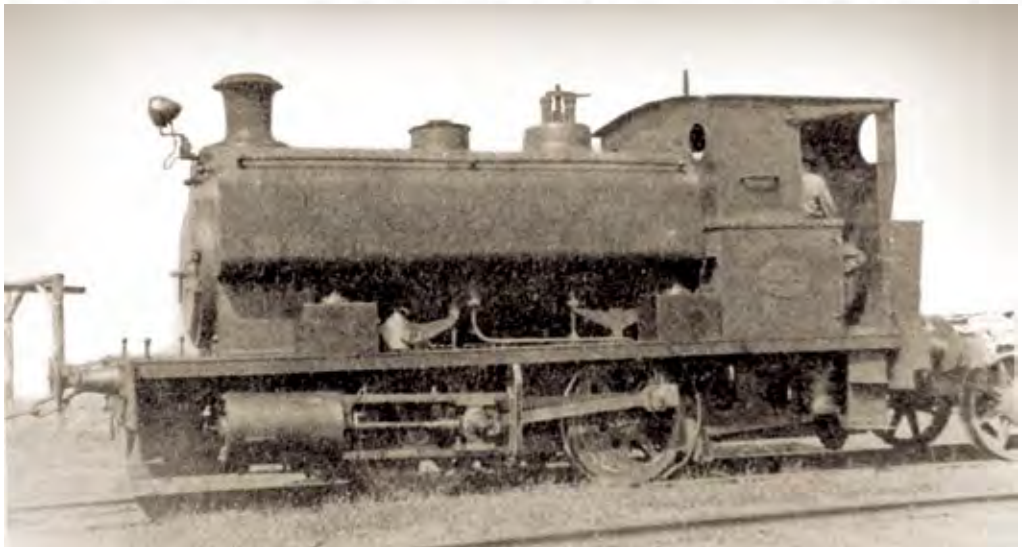
***Left:*** *Purcell locomotive and train of double-stacked brick boxes at the State Brickworks – date unknown Photo: Bruce Macdonald collection.*
***Left below:*** *Purcell locomotive, out of use but apparently intact, at the State Brickworks – date unknown. The remains of the locomotive, on right, are reputed to be of the Gibson Battle locomotive (PWD No. 77[?]).*[16] *Photo: Bruce Macdonald collection.*

**No 76**
[Suggested identities for PWD Nos. 76 and 77 are confused. Our proposals may be interchangeable].
Built by Purcell Engineering, Auburn, builder's number not known, 0-4-0, petrol, 2 ft gauge.
Acquired new, post-1920.
Worked at the State Brickworks, Homebush Bay.[15]

**No 77**
[cf No. 76]
Built by Gibson Battle and Co, builder's number and date of manufacture not known, 0-4-0, petrol electric, 2 ft gauge.
Acquired new.
Probably worked at the State Brickworks, Homebush Bay, and in the Kiama blue metal quarry.[17]

**No 78**
Built by Andrew Barclay as builder's number 1973 of 1929, 0-4-0, saddle tank, 4 ft 8½ in gauge.
Acquired new in 1930.
Sent first to Coffs Harbour improvement works.
In February 1940 sent to Port Kembla to replace No. 25 on Gillan's Hill quarry rock extraction work.
During August 1947 No. 78 was transferred from Port Kembla to Moruya River entrance works.[18]
1954 returned to Port Kembla and offered for sale by tender.



***Above:*** *Gibson Battle General Arrangement Drawing for what may have been the locomotive at Kiama, 3 September 1929. Photo: late P Simpson collection.* ***Left:*** *No. 78 at Port Kembla – date unknown. Photo: J L N Southern*

**No 79**
Built by Hunslet Engine Co Ltd as builder's number 1825 of 1938, 0-6-0, saddle tank, 4 ft 8½ in gauge.
Acquired new during 1938.
The connecting rods were painted crimson so it was named *Plum*.

**No 80**
Built by Beyer Peacock/Eveleigh as builder's number 1677 of 1877/09, 2-6-4, side tanks, 4 ft 8½ in gauge.
PWD purchased it from the NSWGR on 24 June 1940.
Back to the NSWGR on 1 January 1949, to become ex PWD class tank type.

**No 81**
Built by Beyer Peacock, builder's number 3335 of 1891, 4-4-2 side tanks, 4 ft 8½ in gauge.
Acquired third hand from South Maitland Railways in September 1940, entering service at Port Kembla on 18 November 1941.
Working at Port Kembla was not satisfactory.
In 1954 it was offered for sale by tender.

***Top:*** *ex-PWD NSW No 79 at Port Kembla 16 Jan 1962. Photo: Weston Langford image 101084.* ***Above:*** *No. 80 at Port Kembla – date unknown. Photo: G H Eardley.* ***Right:*** *No. 81 at Steelhaven scrap yard awaiting scrapping by AIS on 11 February 1955. Photo: J L N S Southern.*

***Top:*** *No. 82 at Yamba, 1969. Photo: A Grunbach.* ***Left:*** *With its Plant No. on the back buffer beam obliterated, No. 82 (probably) and a rake of 4-wheel side- and end-tipping stone trucks sits underneath the 40-ton gantry crane in the Ilarwill quarry on Woodford Island in the Clarence River in 1971. The gantry crane straddled the pre-cast concrete block storage yard and loaded the stone punts which carried the blocks downstream to the breakwater constructions. Photo: A Grunbach.* ***Below:*** *No. 83 at Yamba, 1969. Photo: A Grunbach.*

**No 82**

Built by Ruston & Hornsby as builder's number 310085 of 1952, 0-4-0 diesel mechanical.

Received new in Sydney during June 1952, and moved to the Clarence River breakwater works by June 1954.[19]

Purchased by B&H Disposals of Silverwater in February 1973.

**No 83**

Built by Ruston & Hornsby as builder's number 313393 of 1952, 0-4-0 diesel mechanical.[20]

Received new in Sydney during 1952, and moved to the Clarence River breakwater works by June 1954.

Purchased by B&H Disposals of Silverwater in February 1973.

## Un-numbered locomotives

As well as numbering its locomotives, the PWD seems to have left some of its locomotives un-numbered, eg:

- Built by R Stephenson as its builder's number 1547 of 1866, 0-6-0, tender, 4 ft 8½ in gauge. Bought off the NSWGR in February 1901, where it had been No. 20 of the E17 class.
- Built by Canada Works as builder's number 77 of 1858, 2-2-2, tender, 4 ft 8½ in gauge. Possibly worked at Swansea[21] [having large diameter single driving wheels makes this seem highly unsuitable, therefore unlikely, for use on construction work].
- Built by Manning Wardle, builder's number 182 of 1865, 0-6-0, saddle tank, 4 ft 8½ in gauge. Worked on excavating Sheas Creek Canal.
- Built by Manning Wardle, builder's number 1780 of 1911, 0-4-0, saddle tank, 4 ft 8½ in gauge. Worked on constructing North Coast line. To the MWS&DB for constructing Potts Hill reservoir.
- Built by Manning Wardle, builder's number 1781 of 1911, 0-4-0, saddle tank, 4 ft 8½ in gauge. Worked on constructing North Coast line. To MWS&DB for constructing Potts Hill.
- Built by Vale & Lacy, thought to have been built in 1875, builder's number not known, 0-6-0, tank, 4 ft 8½ in gauge. Acquired off R G Watkins, date not known. To the NSWGR pre-March 1904.
- Built by Kitson, builder's number 2118 of 1877, 0-6-0, tender, 4 ft 8½ in gauge. Named Gang Forward.
- Built by Morts Dock, b/n ? of ? , 0-4-0, saddle tank, 2 ft 6 in gauge. Worked at the Botany Sewerage Farm.
- *Kate* built by John Fowler as builder's number 8767 of 1902. Purchased second hand. Worked on constructing Cataract Dam then Burren Jack Dam.[22]
- *Dulce* built by Krauss as builder's number 5869 of 1907, 0-4-0, tank, 2 ft gauge. Worked on constructing Burren Jack dam.[23]
- *Robin* built by Krauss as builder's number 5870 of 1907, 0-4-0, tank, 2 ft gauge. Worked on constructing Burren Jack dam.[24]

- *Archie* built by Krauss as builder's number 5945 of 1907, 0-4-0, tank, 2 ft gauge. Worked on constructing Burren Jack dam.[25]
- *Jack* built by Krauss as builder's number 6063 of 1908, 0-4-0, tank, 2 ft gauge. Worked on constructing Burren Jack dam.[26]
- The third 2 ft gauge locomotive at the State Brickworks at Homebush Bay, which was supplied by A Saunders.
- Built by Gibson Battle, 0-4-0, 4 ft 8½ in gauge. Seen abandoned in the Kiama quarry during August 1938.[27]
- Built by Baldwin, as a class 4-16-C100, probably builder's number 11687 of 1891; with the number 110 stamped on the boiler. The ex-NSWGT tramway motor, was seen leaving the tramways Randwick Workshops in 1906 for the PWD construction works on the North Coast.[28] [Where we are unable to determine if it was owned by the PWD or by a contractor working on PWD works]. Probably worked on constructing the Maitland-Dungog section of the North Coast railway, where photographed on 25 August 1911, and near Taree.

### Hired locomotives

As well as owning locomotives, the PWD also seems to have hired locomotives from the NSWGR and other organisations, during which time the locomotives seem to have retained their owner's numbers, eg:

- 67
- 70
- 131
- 133
- 135
- 139
- 141. Locomotives numbered 67-141 were all located at Murrurundi when transferred to the NSWGR in 1917.
- 523 was located at Enfield when transferred to the NSWGR in 1917.
- *Five Islands,* Andrew Barclay & Co, builder's number 790 of 1897, was hired from the Australian Smelting Corporation c.1907-1908.[29]
- 355 was hired to the PWD in August 1947 to work at Port Kembla, and later returned.
- 1310 was loaned to the PWD to work at shunting at Port Kembla, nd.
- 1806 was loaned to the PWD to work at shunting at Port Kembla, c.1 August 1955.
- 2019 was loaned to the PWD to work at shunting at Port Kembla, c.May 1948.


***Above:*** *Un-numbered and stripped-down ex-steam tram motor towing a 4-wheel tender working on the North Coast of NSW. The central driving position suggests it was of an early design. Photo: Unknown.* ***Top:*** *Australian Smelting Corporation Ltd locomotive, Andrew Barclay & Co, builder's number 790 of 1897, while on hire to the PWD near the eastern breakwater – date unknown. Photo: R T Horne collection.*

### Steam Tram motors

Published listings of steam tram motors allegedly disposed to the PWD, include steam tram motor numbers:[30]

Steam Tram & Railway Pres Soc (undated):

- 26 – sold to Norton Griffiths then PWD
- 28 – sold J Newlands then to PWD
- 33 – sold J Newlands then to PWD
- 44 – sold PWD
- 46 – sold PWD.

Chinn & McCarthy (1976):

- 22A – sold PWD
- 19A – sold PWD
- 26A – sold PWD
- 33A – sold PWD
- 69A – sold PWD.

Macdonald (2018):

- 19 – sold to PWD for £500, and on 22 April 1926 delivered to Port Waratah for shipping to Manning River.
- 44 – sold PWD 1923
- 46 – sold PWD 1926.

### Notes:

1. For the NSWGR locomotives, our primary sources were: Lucy E E, 27 August 1917, Circular No 3829, Construction Branch Engines; Forsyth J H, July 1974, Steam Locomotive Data, PTC. Articles in railway enthusiast magazines and books have been treated as secondary sources.
2. Several government departments, apart from the PWD, ran locomotives carrying their own departmental locomotive or plant numbers, which can cause confusion with and seeming duplication of PWD numbering. Some private railways, likewise, numbered their locomotives.
3. Many distinguished light railway historians have produced unpublished lists, eg: Macdonald B and Buckland J, 10 May 1981, Public Works Department, New South Wales; Wright H, pre-17 January 1992, Public Works Department, NSW; Ellis R and Buckland J, nd, Public Works Department; Fleming G, February 1995, NSW Public Works Department Steam Locomotive Listing; Eardley G, File 193, NSW PWD Locomotives, Mitchell Library collection; Allen G, nd; Anon, nd, Locomotives of the NSW Public Works Department; etc. Unfortunately, none of them left written references for subsequent researchers to follow up.
4. This listing does not attempt to trace a detailed history of where and when the locomotives worked. Hopefully this listing will inspire others to research and subsequently publish their research.


### Acknowledgements

Considerable assistance by Ian Dixon; Jon Henry; Richard Horne; Bill Phippen; and Phil Rickard is appreciated.

Jon Henry is developing a comprehensive website covering NSW construction locomotives including both government and contractors' locomotives. Look out for its forthcoming publication.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## Trawled from Trove

From the pages of *The Advocate*, Burnie, Friday 19 April 1940 (page 8), under Rosebery news, is the revelation that in future, Sunday football matches at Tullah will be played according to the railway time table.

**FOOTBALL TRANSPORT.**

Owing to the Emu Bay Railway Company and the management of the Farrell mine deciding to run the means of transport for Sunday football to a definite time-table, it will be necessary in all matches in which the Tullah team is engaged to start at 1.30 p.m. It is understood the rail motor will leave Barker's Siding on Sunday at 9.30 a.m. to connect with the train which leaves Farrell Siding for Tullah at 10 a.m. The train will leave Tullah on return at 4 p.m., and the rail motor will leave Farrell Siding at 5 p.m. This time-table must be strictly observed, and the Association appeals to the clubs to impress upon players to adhere to these conditions.

*Ex-Western Australian A class engine hauling sawn timber towards Noojee along the Goodwood Tramway. Noojee & District Historical Society*

# The Goodwood Timber Tramway

*by Nick Anchen*

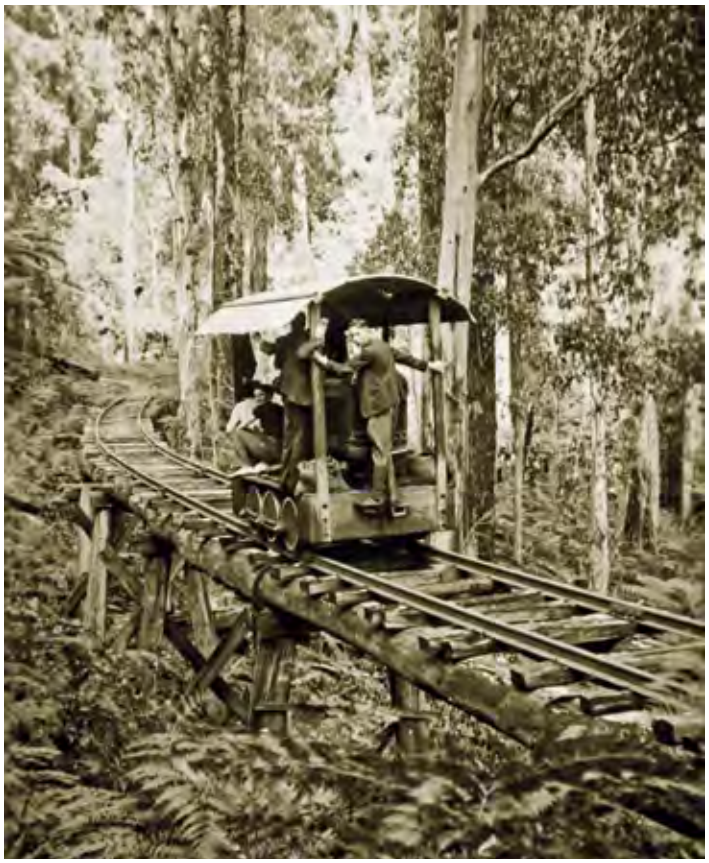
In 1923, the Goodwood Timber Company built a 14-mile, 3 foot 6 inch gauge tramway, west from Noojee through the Latrobe River valley deep into the bush. The line connected Noojee with the sawmilling settlement of Goodwood, also known as Millswyn, which had a population of about 200 at the time. The tramway was laid with steel rails and ballasted with river gravel.

It was used to cart sawn timber from the Goodwood sawmill and other mills to the Victorian Railways line at Noojee, connecting at a location known variously as 'Goodwood siding' or the 'Noojee Timber Siding', a quarter of a mile from the terminus, where transhipment was performed by an electric gantry crane.

Initially, three ex-South Australian Railways V-class 0-4-4 tank locomotives worked the line. The company then obtained an ex-Western Australian Railways A-class 2-6-0 engine, built by Beyer-Peacock in 1882. In 1902 this engine was sold to the Kalgoorlie-Boulder Firewood Company where it was named 'Kurrawang', and it arrived at Noojee in about 1925.

The Goodwood tramway was noted for its rough track and frequent derailments. The worst of these was in April 1936 when the engine derailed on a bridge and overturned, killing the driver and badly injuring the fireman.

This accident spelt the end for steam locomotive operations on the line, and from this time motive power was provided by a rail tractor obtained from the W. Day and Sons engineering firm in South Melbourne. This machine continued running until closure, following the 1939 bushfires. Soon after, the rails were taken up, with the formation rapidly returning to nature, and today barely a trace remains of this interesting, ramshackle old tramway.



*In 1938, a Days-Fordson rail tractor whisks a group of thrill seekers along the very scenic Goodwood tramway. Wal Larsen, National Library of Australia*

*By March 1936, the old Beyer-Peacock engine (b/n 2245/1882) was looking decidedly battered after a hard working life. It is seen here at Goodwood Siding, Noojee. Note the odd-looking handmade tender. John Buckland, National Library of Australia*

## A visit to the Goodwood line

***Renowned railway photographer and historian John Buckland visited Noojee in March 1936 and witnessed the rough and ready Goodwood tramway in full flight...***

It had long been an ambition to make a journey on the Goodwood line, and the nearest I had to achieving this was an occasion while hiking up the line towards the sawmill at Millswyn.

An old English bell whistle was heard echoing down the valley, and in due course, heralded by a tremendous ground shaking roar, appeared the strangest apparition on flanged wheels under a cloud of smoke. It literally tore past our party, which had taken refuge behind a stout tree, just in case she decided to do a waltz through the undergrowth; by no means an uncommon occurrence!

The engine was an old and very dilapidated 2-6-0 tender engine of unmistakable Beyer Peacock origin, originally employed on the WAGR and still carrying its brass No. 5 plates. Behind her home-made 'tender' were half a dozen timber bogies with wide treads and deep flanges, loaded high with sawn timber. On top of them passengers clung precariously to their belongings and the timber, all of which appeared imminently likely to come to a sticky end at the bottom of the gully! In short, from most reliable witnesses who have made the terrifying trip, it was a most hazardous experience.

Having recovered from our astonishment, we shakily followed the track back to town, but this time avoided the trestle bridges by keeping to terra firma. We then found No. 5 shunting its trucks for transhipment. No. 5 was in deplorable condition, equipped with a 'tender' of primitive type, consisting of a four-wheeled timber framed truck with tramway contour wheels, carrying firewood fuel and two square 500 gallon iron water tanks.

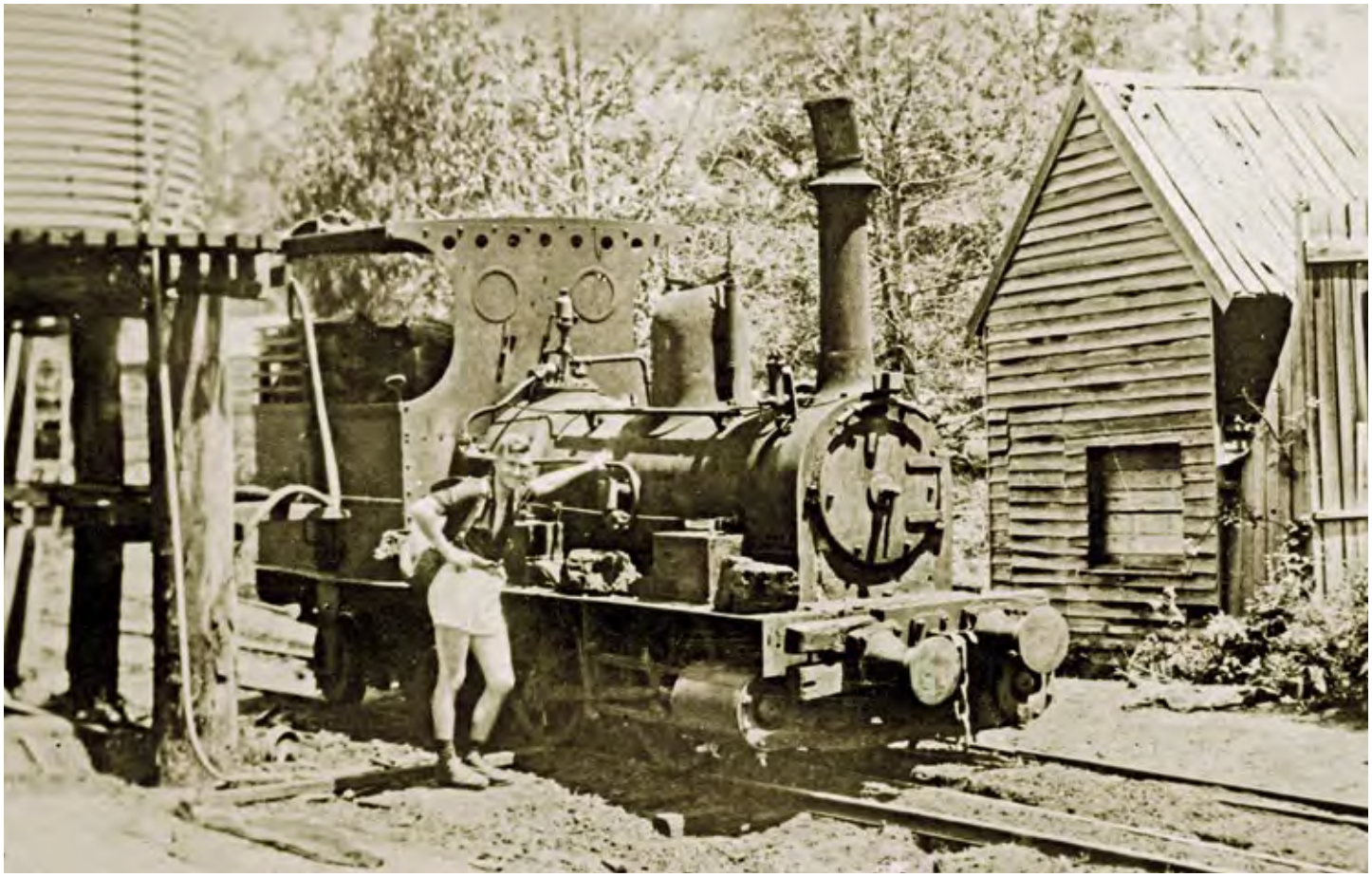
The regulator had become permanently stuck open, and the driver showed considerable skill in running with only the reversing lever and hand brake! Words cannot adequately describe the sensation of riding upon this ancient engine during shunting operations, which included use of a tail rope, since there was no loop at the Noojee end of the line.

The usual procedure was for the tram to make a daily trip in from the mill at about lunchtime, then shunt the empties ready for the return journey, which was run tender first as there were no turning facilities along the line. As the return journey was never made without a visit to the nearby pub, many of these trips were made at night without lights, and I can state from experience that the line was neither level nor straight. With little or no braking power and no throttle, some of these journeys must have been somewhat nerve-wracking.

Unfortunately, a month later, in April 1936, the inevitable happened and No. 5 plunged to destruction off one of the timber trestle bridges spanning a deep gully. The load of timber crushed the driver (a Mr. Daniel) to death, and severely injured the fireman.

The assistance of Mike McCarthy and Frank Stamford is acknowledged in the preparation of this article.

*As part of his research for his forthcoming new book 'Whistles Through the Tall Timber' which will cover the Warburton, Noojee and Powelltown railways, along with the associated timber tramways, Nick Anchen found the material covered in this article. The book is expected to be published in November this year and will be available from the LRRSA shop.*

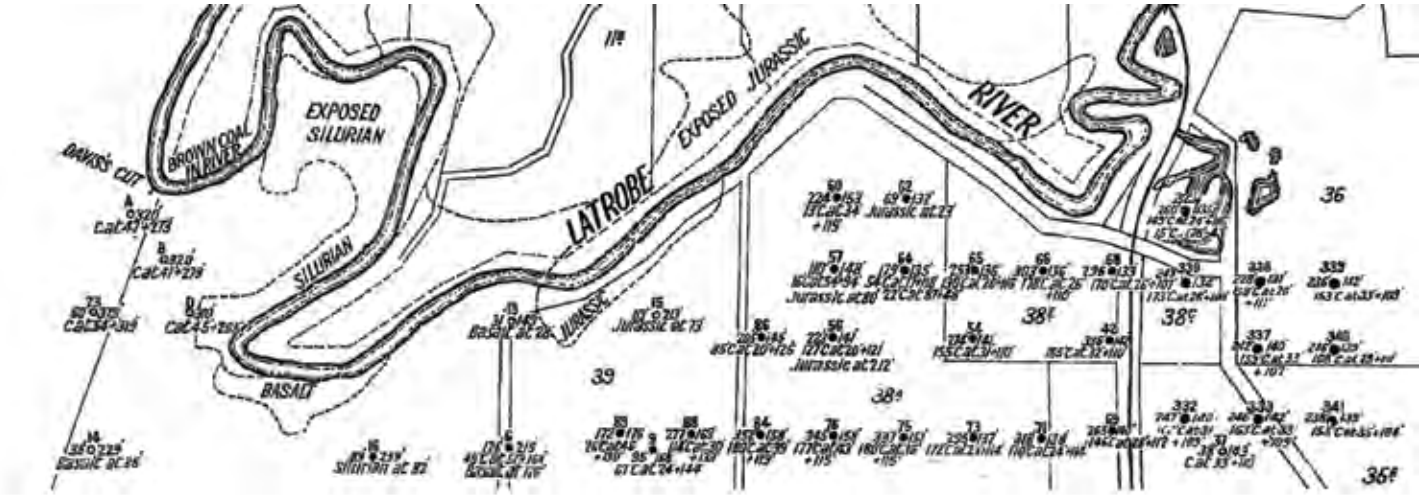



***Top:*** *Ex-South Australian Railways V class at Goodwood mill, c.1933. John Buckland, National Library of Australia.* ***Above:*** *Off the road and in disgrace! In the early 1930s, prior to having its new tender fitted, old No. 5 is seen well and truly derailed on the ramshackle Goodwood tramway. John Buckland, National Library of Australia*

# The Yallourn Basalt Quarry Tramway

*by Peter S. Evans*

The State Electricity Commission of Victoria came into being in January 1919 to develop and utilise enormous deposits of brown coal in Gippsland to generate electricity, free Victoria from dependence on New South Wales' black coal supplies and, by coordinating the fragmented electricity supplies already operating, to take Victoria forward into the modern industrial era. Under the leadership of Sir John Monash, work was soon underway. A site was chosen for a temporary power station at Yallourn to provide both a laboratory on how best to burn the brown coal, as well as providing electricity to power the construction of permanent power stations nearby. The temporary plant was cobbled together quickly using initially two second-hand Babcock & Wilcox boilers and a turbine generator unit from Broken Hill, and brought into operation for power supply on 6 May 1921.[1]




***Top:*** *The temporary power plant at Yallourn provided a testbed for brown coal combustion methods as well as electricity for construction purposes. Amongst the plant it powered was the crusher at the basalt quarry. The temporary power plant was destroyed by fire on 7 September 1924 whilst in the process of being dismantled. Old Brown Coal Mine Museum collection.* ***Above:*** *Map showing the geology of the Yallourn area including the basalt deposit at bottom left. Extracted from Herman, H. (1922).* Brown Coals of Victoria. *Geological Survey of Victoria Bulletin No.45, plate IV.*


***Top:*** *The basalt quarry on 1 December 1922 showing the electrically-powered crusher and the internal track layout. There are three sets of points and at least four turntables, with spalls from the quarry face stacked ready for loading. Note the overhead lighting strung above the outlet tramway. State Library of Victoria image H2009.18/353, James Pinkerton Campbell.* ***Above:*** *Looking west past the crusher with a rake of skips under the loading hopper. State Library of Victoria image H2009.18/358, James Pinkerton Campbell.* ***Right:*** *Loading spalls into the crusher by hand. The skip in the foreground bears a distinctive oval plate showing it to be manufactured by George Fredrick Sewell at his Manchester Ironworks, West Footscray. State Library of Victoria image H2009.18/369, James Pinkerton Campbell.*

In preparation for the extensive works required for the permanent power stations, concrete (and hence a suitable stone aggregate) was needed. A start was made on opening up a quarry in a basalt deposit on the south bank of the Latrobe River under the direction of Jack Padfield of the Victorian Department of Mines.[2] A 2 ft gauge tramway, completed by September 1921, connected the quarry with the site of the permanent power station. Photographs show the horse-worked tramway to be well-constructed, with an even grade, gentle curves and at least one bridge. Crushers were installed both at the quarry and the power house site. Like most other mechanical plant at the works, the crushers were to be operated by electricity. Crushing was commenced in February 1922, only a few months after the half-mile-long tramway was completed. At the quarry, stone was run into the trucks by means of elevators and shoots, and the expectation was that 80 to 100 [cubic] yards would be produced each day. Since this would be insufficient to meet demand, a reserve was being built up in anticipation of future requirements.[3] Concrete would also be required for the foundations of the briquetting plant and for such structures as coal storage bins over the railway sidings. By June 1922 these railway

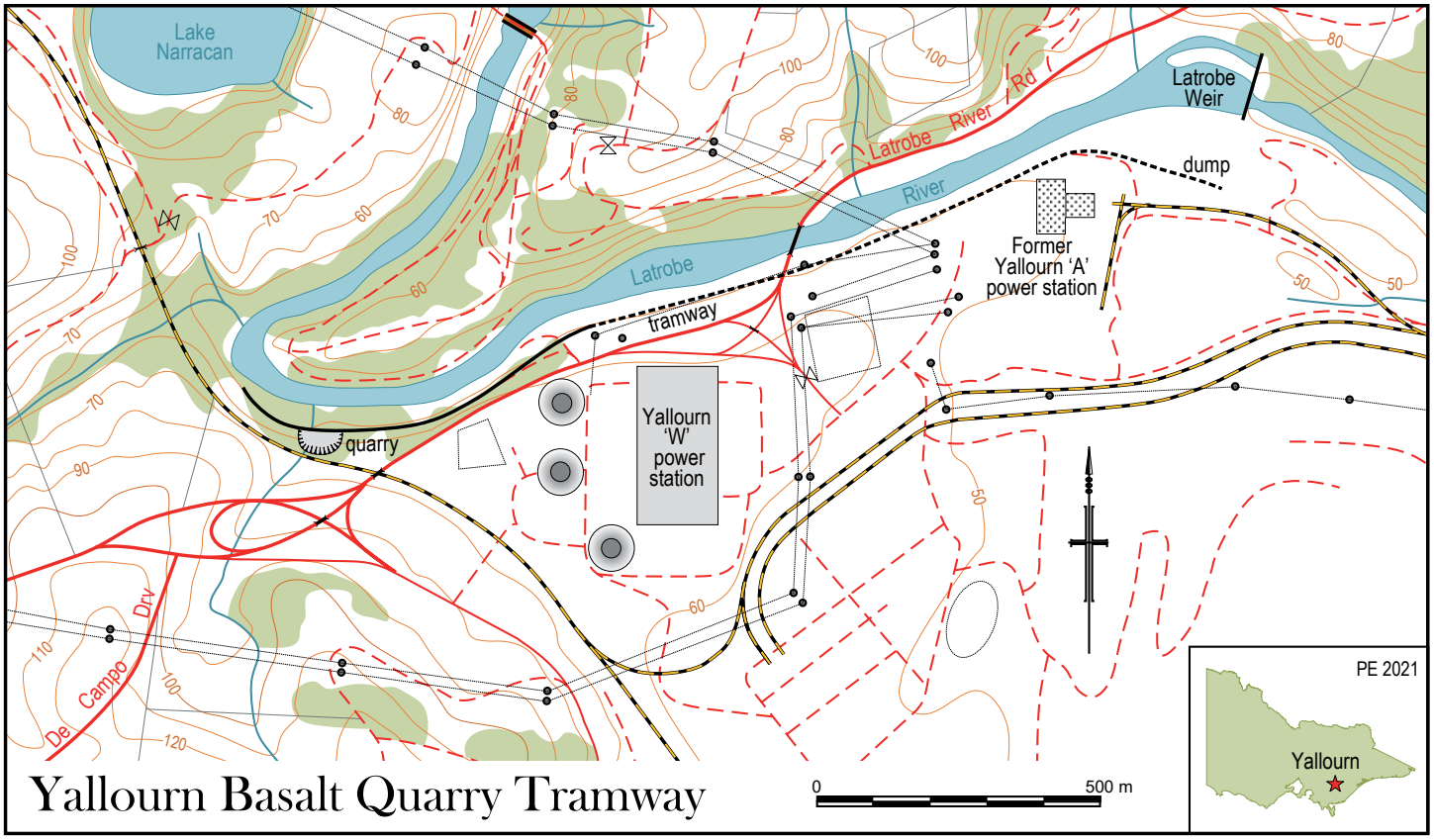
***Top:*** *What is clearly a posed photograph of two horse-drawn rakes each of five empty skips heading in the direction of the power-house construction site. The high standard of engineering for the tramway is evident in the even grade, fully-decked trestle bridge and neat cutting. State Library of Victoria image H2009.18/380, James Pinkerton Campbell.* ***Above:*** *This image, with the Latrobe River visible on the left, perhaps depicts the removal of overburden from the basalt quarry, with spalls already stacked bottom right. Certainly, the presence of well-dressed spectators at upper right suggests a special occasion, possibly even 7 December 1921. State Library of Victoria image H2009.18/370, James Pinkerton Campbell.*

*The incline trestle and stone dump at the tramway terminus, with the line to the quarry disappearing off into the bush to the right. State Library of Victoria image H2009.18/72, James Pinkerton Campbell.*

sidings were under construction, and were completed by June 1923.[4]

On 7 December 1921 a Vice-Regal party inspected the works aboard the first 'passenger' train (three cars hauled by $D^D$ 980) to use the new Yallourn railway station. The party included the Australian Governor General (Henry William Forster, First Baron Forster), the Victorian Governor (the Rt. Hon. George Edward John Mowbray Rous, Third Earl of Stradbroke), his wife (Countess Stradbroke), the Victorian Railway Commissioners (including Chairman Harold W. Clapp), and the State Electricity Commissioners (including Chairman Sir John Monash), plus Sir John's daughter, Iris Bennett. Photographer James Pinkerton Campbell (like Monash, a Gallipoli veteran) was on hand to record proceedings, and several of the photographs accompanying this article were taken on this day. The bulk of the day was occupied with touring the various construction and township sites, with the party returning to Trafalgar at 4.00pm to unveil a war memorial in that town. It would seem the visit included an inspection of the quarry tramway and its branch to the concrete mixing plant at the weir (to be built to provide cooling water to the condensers of the permanent power station).[5]

Photographic evidence suggests that the tramway terminated at an inclined ramp at the rear of the Yallourn 'A' power station site and adjacent to the weir. Trucks would be hauled up the incline (by some




***Top:*** *The special train of 7 December 1921 was hauled by D^D 980 (Thompsons of Castlemaine builder's No.37 of 1916 - the VR Commissioner's locomotive) and consisted of* Melville *(formerly* State Car No.2*), a dining car (one of* Goulburn, Wimmera *or* Campaspe*), and* State Car No.4. *D^D 980 was scrapped in 1951 but the three cars in the train are all happily preserved. Identification by railway historian Peter Medlin. State Library of Victoria image H2009.18/227, James Pinkerton Campbell.* ***Above:*** *With no turntable yet available at Yallourn, D^D 980 has run around its train ready to depart towards Melbourne. A group of SECV dignitaries discuss what they have seen on their tour of inspection. State Library of Victoria image H2009.18/439, James Pinkerton Campbell.*

***Top:*** *Yallourn 'A' and 'B' power stations in 1937. Old Brown Coal Mine Museum collection.* ***Above:*** *Yallourn past and present: contrasting the temporary power station of 1921 (lower) with today's Yallourn 'W' power station (upper, due to close in 2028). Painting by Dennis L. Butcher, Old Brown Coal Mine Museum collection.*

means as yet obscure, but probably an electrically-powered winch) to dump stone in a large heap, from where it could be transported to its final destination by a maze of tramlines.[6]

It is highly probable that the quarry, pinched in as it was between the banks of the river and a new railway, proved insufficient to provide for the needs of the extensive permanent works and, with railway sidings completed to the Yallourn power station by the middle of 1923, it would seem that its life was short-lived. Crushed basalt could now be railed in in quantity from any number of commercially-operated quarries. Yallourn 'A' power station came on line in June 1924. The short-lived basalt quarry and its tramway had done their job.

*Remnant rail with the tramway formation in the background. Photograph by Peter Evans 15 May 2021.*

Today, most of the western portion of the tramway (which runs roughly along the 50 m contour line), has been converted into a bush track. The quarry is almost totally overgrown and all but unrecognisable due to slight infill from the later railway constructed along its southern edge. The tramway extension west of the quarry is on a slight downgrade towards the river, and it is conjectured that this may have been used to store empty trucks waiting to be filled. The eastern end of the tramway has been totally obliterated by works associated with the construction of Yallourn 'W' power station and its transmission lines, and by major roadworks. It seems certain that the bridge and cutting depicted in one of the photographs were in this section. One well-corroded rail of approximately 30 lb/yd weight was seen bulldozed beside the track in 2021; by 2023 it had disappeared, leaving little to remind any onlooker of a short-lived but important component of Victoria's first major state-owned electricity supply.[7]

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6. State Library of Victoria images H2009.18/530, H2009.18/60, and H2009.18/72.
7. Site survey by the author, 15 May 2021 and 20 May 2023.


*Mount Frome station showing its brick-faced gravel-surfaced platform and standard station nameboard in May 1966. Photo: I K Winney, ARHSnsw collection 113134.*

# Mount Frome Lime Ltd, Mudgee

*by Jim Longworth*


*Company advertising promoted its product as 'Frolime'* The Sun*, 11 October 1926.*

## Mount Frome

Mount Frome is located a few kilometres due east of Mudgee in the central west of NSW. The Mount Frome railway station, on the Wallerawang–Mudgee railway line, was opened as Bumberra on 10 September 1884, concurrently with the opening of the Rylstone–Mudgee section of the line. It was renamed Burrundulla on 7 June 1894, and again renamed as Mount Frome on 24 August 1894. The name Mount Frome came from a local mountain. Seventeen chains further west, Wilsonlime was opened on 10 December 1924 as a loop siding on the down side of the line.[1]

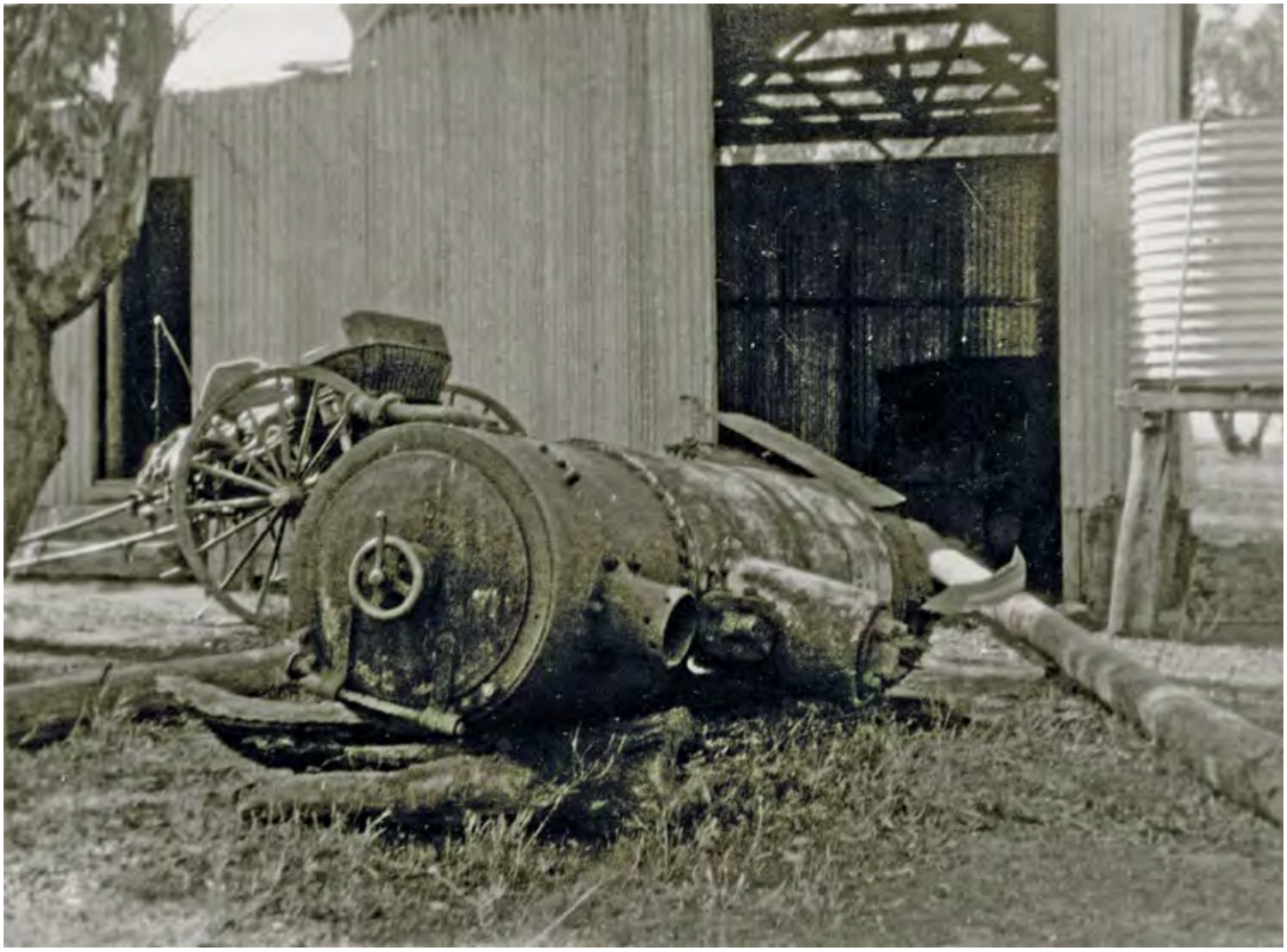
## Mount Frome Lime, Ltd

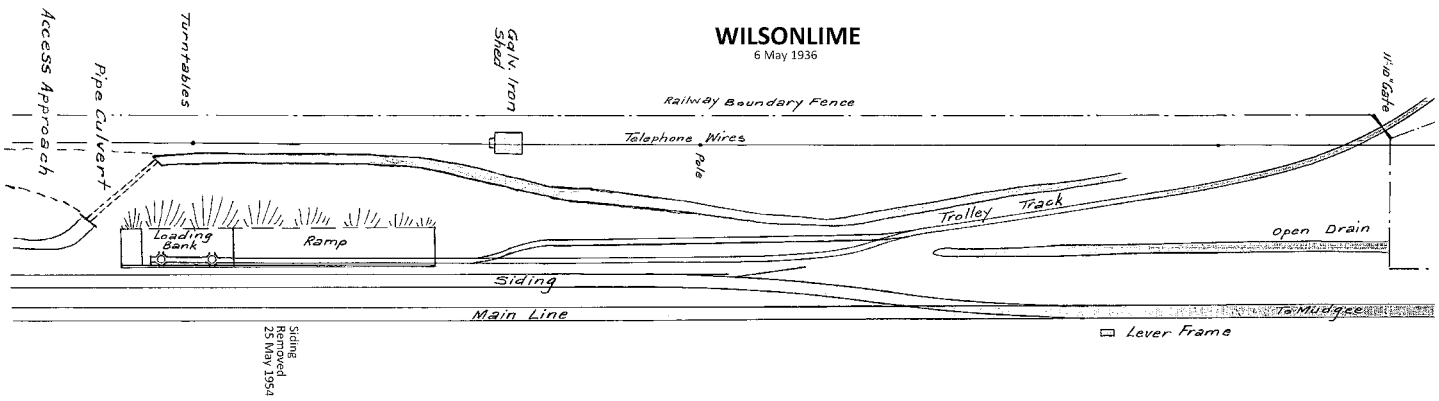
During June 1923, Mount Frome Lime, Ltd was registered and secured a nominal capital of £10,000 in £1 shares. Its business was to acquire and carry on the previous business of the Mount Frome Marble Lime Co to manufacture and deal in lime, cement, plaster, and carbide. Marketing options included to use the limestone as a soil conditioner, and for cement making. During 1920, a cement works was designed, to be located on a Mrs G Rope's property right alongside the Mount Frome railway station; but it never eventuated.

Business boomed and two kilns were operating in May 1920, growing to four kilns in June 1925. They were said to be in continuous operation, and another was being constructed. Sixty tons of lime and large quantities of stone were being despatched each week to the firm's warehouses in Sydney. When the extra kiln was completed, output was expected to reach 100 tons per week. Over 20 men were employed at the works.

## A 2 ft gauge tramway

By July 1925, a 1½-mile-long tramway between Wilsonlime and the limestone quarries was almost complete. Mr M Wenham,






Works Manager, and four employees laid half-a-mile of track in four-and-a-half days. The cost of the siding and tramway was about £2,000; but was said to be more than justified because trucking by road would be eliminated and the cost of carting was then running at about £25 per month.[2]

Essentially, the limestone was blown out of the ground with gelignite, and loaded into skips running on a fan of temporary 2 ft gauge tracks laid across the quarry floor. It was then taken and put into the kilns on-site and burnt to produce lime. Then the lime was loaded into more skips, and hauled along the tramway to the station, where it was loaded into government railway trucks and taken to Sydney.

By mid-April 1929, a second-hand Krauss locomotive, b/n 3444 of 1896, had been acquired and it was subsequently scrapped on site around 1940.[3]

Wilsonline was closed in September 1953. Mount Frome was closed on 17 September 1953, reopened on 18 June 1962, and reclosed on 29 June 1974.

***Top left:*** *The boiler from the Krauss locomotive laying on its side in front of the workshop. Note the buggy in the background without its horse, but with the whip at the ready. Photo: GH Eardley.* ***Middle left:*** *Krauss locomotive in the workshop with its boiler removed showing its frame and under carriage. The locomotive sitting on rails raises the possibility that the building was some sort of locomotive shed. Photo: GH Eardley.* ***Middle right:*** *Abandoned 'V' skip bodies at Mount Frome on 4 March 1983. Photo: A Weston.* ***Left:*** *The Krauss in happier days at Captains Flat,[4] date unknown. The extra tall chimney required an extra tall doorway, like in the shed at Mount Frome. Photo: NSW Department of Mineral Resources.*


*Wilsonlime advertisement* The Sun, *14 Nov 1926*

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# Mort's Dock Reminders

*by David Jehan*

Mort's Dock was the brainchild of industrialist Thomas Sutcliffe Mort and former steamship captain Thomas Stephenson Rowntree. Steam ships had first appeared in Sydney Harbour in 1853 but no repair or maintenance facilities existed to cater for these vessels.

Rowntree and Mort formed the Waterview Bay Dry Dock Company (later Mort's Dock & Engineering Company) in 1853 and built Australia's first dry dock and patent slipway on the site at Balmain. The dock was operational by 1855, one year before Cockatoo Island. The company soon became the largest private employer in the colony, a cornerstone of the union movement and the birthplace of the Australian Labour Party.

This company undertook a large amount of mining, industrial and general engineering work in addition to marine work.

Regarding light and industrial railways, the firm claimed to have received orders for six locomotives of small industrial types between 1878 and 1887, but only four have been identified to date. They also made 125-ton capacity hot metal cars for Australian Iron & Steel at Port Kembla.

Mort's company fell into liquidation in 1959. After the demolition of the works it became a container terminal, until the area finally became a public park in 1989.

Visitors to the site today will find the dock, which has been filled in, and a few plaques giving some historical details. The caisson, and stone retaining walls remain in situ as do the ships bollards, and remnants of the patent slipways and later container wharf. The Dry Dock Hotel, which quenched the thirst of many dock workers, is still open for business and displays numerous photos of the dockyard in the bar.

The surviving company records, including plans and photographs, are held in the Noel Butlin Archives Centre in the Australian National University and Thomas Mort's statue still stands proudly in Macquarie Place, Sydney.

However, these are not the only reminders of this great enterprise that was so important to the country's industrial development, examples known to the author are as follows:

- The 1891 steam wharf crane built by the company remains in place on Cockatoo Island and has been restored to working order.


*Two views of the 1891 steam crane at Cockatoo Island which has been returned to working order by volunteers.*

- One of the 125-ton hot metal cars built by the company is on display at the Port Kembla steelworks visitors' centre.
- The tower crane standing at the Goat Island slipway was originally used at Mort's Dock.
- Some of the cast iron columns in the Carriage Works at Eveleigh were cast by the company.

*Outline of the drydock at Mort Bay Park in Balmain.*

- The tender of NSWGR 4-8-2 locomotive 5711 at the Valley Heights Railway Museum was built by the company and its builder's plate is on display at the NSW Rail Transport Museum, Thirlmere.
- Some of the company's ship builder's plates are on display at the SA Maritime Museum at Port Adelaide as part of the Keith LeLeu collection.
- LRRSA researcher Ross Patterson recently discovered the grave of a company employee in Camperdown Cemetery made from a large propellor blade.

Should any readers know of other surviving examples of Mort's Dock products, please write a note to the Editor and let us know.


*The Dry Dock Hotel in Balmain which is located at the head of the dry dock (top left), some of the cast iron pillars in the Carriage Works at Eveleigh that were cast by the company (above left), the unique grave of John Leys in Camperdown Cemetery , the inscription reads "JOHN LEYS SOMETIME FOREMAN ENGINEER AT MORT'S DOCK, BORN FEB 16 1843 – DIED OCT 11 1883, ERECTED BY HIS FELLOW WORKERS" (above right) and an early shot of the surviving 125-ton hot metal car built by the company which is now on display at the visitors' centre at the steelworks (below). Photos: Hot metal car - Bill Parkinson collection, all other photos by author.*

## OCEAN ISLAND or NAURU?

*Notes by Phil Rickard*

In August 1934, the Rev. Alfred Williamson, the vicar of St John's Anglican church, Cook's Hill, Newcastle, gave a talk to the Wickham Anglican Mothers' Union, illustrated by lantern slides. The subject was Nauru, and Rev Williamson described the island and its phosphate mining, with some emphasis on the work being done by the London Missionary Society. Over the years, the good reverend (a bachelor) travelled widely in the Pacific, visiting Japan, New Guinea, Fiji, Nauru and Ocean Island. Ultimately, Rev Williamson's collection of slides was donated to the University of Newcastle by the Anglican diocese of Newcastle and all the slides taken on both Nauru and Ocean Island were lumped into the 'Nauru' category. Maybe Rev Williamson did not take them all – we cannot be absolutely sure. However, comparing the various scenes with David Jehan's recent book *Tramways, Coconuts and Phosphate,* enables us to separate at least some of them into their respective islands. David's excellent book is available from LRRSA Sales, P.O. Box 21 Surrey Hills, 3127 or www.lrrsa.org.au/sales The four images reproduced here complement David's book. Images created by Archdeacon A. N. Williamson and held by the University of Newcastle Library's Special Collections. Reproduced by courtesy of the university. Reader's comments are welcome.

***Above:*** *Top of an incline, with heavy timber framework and wire-rope running over pulleys. An operator is in the gloom, top, left of centre, looking down the double track 2 ft-gauge incline which is behind the photographer. Two rakes of phosphate trucks await lowering, protected from tropical rain by a roof. Probably Ocean Island, which had a number of such inclines to lower trucks from the upper to lower level. Photo: Special Collections, UoN ref A5051-002.*

***Left:*** *This photo is certainly on Ocean Island. In 1928 Hudswell Clarke & Co, Leeds, England, built a 20 hp petrol-paraffin locomotive (b/n P263) for Ocean Island. There is no evidence the locomotive was ever on Nauru. Seen here hauling what looks like a passenger train for local families, it has been modified with a headlight for night-time running. Photo: Special Collections, UoN ref A5051-011.*

***Above:*** *Captioned by the good reverend as "Building the railway Nauru". May be Ocean Island, date unknown; it is clearly a posed shot. A 2ft-gauge crossover has been fabricated, presumably in the workshops and is now being positioned to enable a new line to cross an existing line. A 'pecking order' seems to be in place – middle, in white hat is the Australian overseer, at left we have an islander, possibly a Banaban or Fijian wearing the local police force's uniform; right, also in hat is an islander wielding an auger to drill a hole in the sleeper, surrounded by eight islanders carefully noting the finer points of shovel work and railway construction. Overhead we seem to have the timbers of a bridge on one of the inclines. Photo: UoN ref A5051-056.*

***Right:*** *The money-end of the phosphate business. In a new quarry, clearly showing the despoliation rendered by phosphate mining. Note the original jungle and tree cover in the background, the depth of excavation and the large coral lumps or pinnacles left behind. Imagine the heat in this hole in the ground, the tropical sun reflecting off every surface. Is this just overburden removal or a mixture of overburden removal and phosphate extraction we cannot be sure. Note the woven scoops at left – are these for scraping fine phosphate from between the coral pinnacles? A network of temporary 2ft-gauge tracks with side-tipping skips completes the scene. What was the significance of the 'w', sometimes seen on the end of Ocean Island skips? Photo: UoN ref A5051-053.*

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**Special thanks to contributors to the *Sugar Cane Trains/Navvy Pics 2ft* Facebook page.**

## QUEENSLAND

**FAR NORTHERN MILLING PTY LTD, Mossman Mill**
(see LR 289 p.30)
610 mm gauge
The Plasser KMX-06 tamping machine (111 of 1976) was working in the mill yard during mid-May.
Far Northern Milling 5/23

**MSF SUGAR LTD, Mulgrave Mill**
(see LR 289 p.30)
610 mm gauge
Com-Eng 0-6-0DM 5 (A1005 of 1955) was outside the loco shed on 22 April. This loco is in almost original condition mechanically and appearance wise with the only appreciable difference being its raised cab. EM Baldwin 0-6-0DH 11 *Maitland* (4413.2 8.72 of 1972) was seen acting as truck shop shunter on 22 April and on 28 May, it was seen stabled with the Plasser KMX-12T tamping machine (432 of 1997) at Bellenden Ker. The next day, Clyde 0-6-0DH 13 *Hambledon* (64-316 of 1964) was working the herbicide spraying wagon through Deeral, Clyde 0-6-0 19 *Redlynch* (65-435 of 1965) took a short rail and sleeper train from the Bruce Highway overpass to the mill and Com-Eng 0-6-0DH 7 *Highleigh* (B1010 of 1956) was on remote control driver training. At the Bruce Highway overpass bridge, a culvert has been installed at one end to give access to a property affected by the rearrangement of roads in the area associated with the reconstruction of the highway.
Luke Horniblow 4/23; William Thomson 5/23

**MSF SUGAR LTD, South Johnstone Mill**
(see LR 291 p.32)
610 mm gauge
Clyde 0-6-0DH 11 (55-64 of 1955) was seen at Dinner Creek Road on 22 April, in attendance at the resleepering job through the Eubenangee Swamp. The rebuild of EM Baldwin B-B DH 25 (6470.1 1.76 of 1976) appeared to be substantially complete on 1 May when it was seen in the final throes of a new paint job in MSF green and yellow. It now has the Mulgrave Mill-style hood and cab carried by the other EM Baldwin bogie locos.
Luke Horniblow 4/23, 5/23

**TULLY SUGAR LTD**
(see LR 291 p.33)
610 mm gauge
EM Baldwin 0-4-0DH 1 *Charlotte* (6/1082.3 2.65 of 1965) was seen outside the loco shed in late May and again on 13 June. It was noted to have a Willison coupler fitted into the rear buffer. Walkers B-B DH 5 (650 of 1969) was with the tree-trimming wagon at the El Arish Depot on 22 April. Com-Eng 0-6-0DH 18 (A060113 of 1977) was with the two newer ballast hoppers at Silky Oak on 1 May. Com-Eng 0-6-0DH 10 (AD1341 of 1960) was seen with the herbicide spraying wagon near El Arish on 6 May and at North Davidson Road on 27 May. Com-Eng 0-6-0DH multi-unit locos 11 (AD1347 of 1960) and 16 (AH4484 of 1964) were repainted in April indicating that this pair will continue in service for some time yet. On 12 May, Com-Eng 0-6-0DH locos 12 (AD1351 of 1961), 15 (AK3574 of 1964) and 17 (AH52100 of 1966) were on the storage line and starting to look rather decrepit. Com-Eng 0-6-0DH 14 (AK2663 of 1963) was there also but not looking so decrepit. Also there was the ex-Mulgrave Mill NQEA bogie brake wagon of 1995 with no sign of it being placed into service yet.
Luke Horniblow 4/23, 5/23; Graeme Daniel 5/23; Crowies Paints 4/23; Nicholas Taifalos 6/23; Doug Witteveen 6/23

**WILMAR SUGAR (HERBERT) PTY LTD, Herbert River Mills**
(see LR 291 p.33)
610 mm gauge
Clyde 0-6-0DH *Perth* (69-682 of 1969) was seen with the ballast train in attendance at a track relay through the western half of Ingham on 14 May. Included in the ballast train was the ballast plough which is built on the frame of Motor Rail Simplex 3717 of 1925. Late in May, the *Perth* was again seen on this job with a rail set in the morning and dropping ballast in the afternoon. The new *Clem*

***Top:*** *Outside the Mulgrave Mill loco shed on 22 April are left to right, Prof B-B DH 22* Aloomba *(P.S.L.25.01 of 1990), Clyde 0-6-0DH locos 13* Hambledon *(64-316 of 1964) and 19* Redlynch *(65-435 of 1965), Com-Eng 0-6-0DM 5 (A1005 of 1955), EM Baldwin 6 wheeled brake wagon 13 (7065.4 6.77 of 1977) and Com-Eng 0-6-0DH 7* Highleigh *(B1010 of 1956). Photo: Luke Horniblow* ***Above:*** *EM Baldwin 0-6-0DH 11* Maitland *(4413.2 8.72 of 1972) in attendance at the Mulgrave Mill truck shop on 22 April. Photo: Luke Horniblow*


***Top:*** *Mulgrave Mill's EM Baldwin 0-6-0DH 11* Maitland *(4413.2 8.72 of 1972) and Plasser KMX-12T tamping machine (432 of 1997) stabled at Bellenden Ker on 28 May. Photo: William Thomson* ***Middle:*** *Tully Mill's Com-Eng 0-6-0DH 10 (AD1341 of 1960) with the herbicide spraying wagon near El Arish on 6 May. Photo: Luke Horniblow* ***Above:*** *On 27 May, Tully Mill Walkers B-B DH 5 (650 of 1969) traverses the Murray River at Lihs Crossing on the Murray Upper line. Photo: Luke Horniblow*

*H.McComiskie,* built on the frame of Walkers B-B DH 630 of 1969 at Pioneer Mill, arrived at Victoria Mill on 25 May with the bogies arriving earlier on 23 May. The original Walkers B-B DH *Clem H.McComiskie* (605 of 1969) left for Pioneer Mill as return loading on the same day. The frame of EM Baldwin B-B DH 5423.1 9.74 has been converted to a brake wagon and was waiting for bogies to be fitted in mid-June. Com-Eng brake wagon VRA 1 (PA101 of 1967) has been converted to original 6-wheel configuration at Victoria Mill and also fitted with maxi brakes. It returned to Macknade Mill on 16 June. Macknade Mill's EM Baldwin B-B DH *Selkirk* (6750.1 8.76 of 1976) was transferred to Victoria Mill by road transport on 5 June and will be the sugar train loco there this crushing season. It is expected to be replaced at Macknade by EM Baldwin B-B DH *Townsville II* (6400.2 4.76 of 1976) from Victoria Mill. By mid-June, no start had been made on assembly of the new 11-tonne bogie bins at Macknade. It is said that there are 30 new sugar bins being constructed and assembled at Wulguru Steel in Townsville. Assembly of the two new Wilmar locos for Victoria and Inkerman mills has proceeded slowly. As of mid-June, both were waiting on bogies, cabs and various internals. The cabs were at Victoria Mill being fitted out.
Luke Horniblow 5/23; Steven Allan 5/23; Editor 5/23, 6/23

**WILMAR SUGAR (INVICTA) PTY LTD, Invicta Mill, Giru**
(see LR 290 p.32)
610 mm gauge
The Plasser KMX-12T tamping machine (255 of 1982) was on loan to Proserpine Mill by 5 June.
Kalamia Mill's Com-Eng 0-6-0DH *Delta* (FD5094 of 1965) was stabled with the ballast train at Clare on 3 June. Walkers B-B DH *Giru* (625 of 1969) which had been rebuilt at Pioneer Mill, first saw use here on 10 June.
Luke Horniblow 6/23; Gary Lewis 6/23

**WILMAR SUGAR PTY LTD, Pioneer Mill, Brandon**
(see LR 290 p.32)
1067 mm gauge
Walkers B-B DH locos *Giru* (625 of 1969) and *Clem H.McComiskie* (630 of 1969) have been rebuilt here for Invicta and Victoria Mills respectively. The former was at Invicta by 10 June and the latter arrived at Victoria Mill on 25 May.
Editor 5/23; Gary Lewis 6/23

**WILMAR SUGAR (KALAMIA) PTY LTD, Kalamia Mill**
(see LR 290 p.33)
610 mm gauge
Com-Eng 0-6-0 DH *Delta* (FD5094 of 1965) was seen with an Invicta Mill ballast train at Clare on 3 June.
Luke Horniblow 6/23

**WILMAR SUGAR PTY LTD, Inkerman Mill, Home Hill**
(see LR 291 p.34)
610 mm gauge
Plane Creek Mill's Plasser KMX-08 tamping machine (415 of 1995) was working at Power Road on 18 April. The new NQEA tippler has been installed on A side. The Wilmar B-B DH loco being assembled at Macknade Mill for Inkerman is to be named the *Alma* rather than *Iyah* as originally planned.
Luke Horniblow 4/23; *canenews* 5/5/2023; Editor 6/23

**WILMAR SUGAR (PROSERPINE) PTY LTD, Proserpine Mill**
(see LR 291 p.34)
610 mm gauge
Invicta Mill's Plasser KMX-12T tamping machine (255 of 1982) was seen at the end of the line south of Bloomsbury on 5 and 7 June.
Luke Horniblow 6/23

**MACKAY SUGAR LTD, Mackay mills**
(see LR 291 p.34)
610 mm gauge
Clyde 0-6-0DH locos *Lacy* (65-439 of 1965), *Seaforth* (61-233 of 1961) and *St.Helens* (61-234 of 1961) have been repainted in the white, green and blue Nordzucker livery this slack season. EM Baldwin B-B DH locos *Foulden* (7220.1 6.77 of 1977) and *Mia Mia* (9815.1 10.81 of 1981) have been used on ballast trains during the slack season this year. Marian Mill's Walkers B-B DH *Calen* (692 of 1972) was on tree trimming duties on the Teemburra line on 3 June in preparation for the coming crushing season.
Steven Jesser 5/23; Paula Fiederling 5/23; Sean Yasserie 6/23; Mackay Sugar 4/23; Zac Zillfleisch 6/23

**WILMAR SUGAR (PLANE CREEK) PTY LTD, Plane Creek Mill, Sarina**
(see LR 289 p.32)
610 mm gauge
A Plasser KMX-12T tamping machine caught fire at Spider Creek on the line to Carmila on 21 May. The fire was extinguished by the crew. The machine is suspected to be 255 of 1982 from Invicta Mill. Plane Creek's Plasser KMX-08 tamping machine (415 of 1995) remained on loan to the Burdekin mills on 18 April when it was seen on the Inkerman Mill system.
Luke Horniblow 4/23; Editor 5/23

**BUNDABERG SUGAR LTD, Millaquin Mill**
(see LR 291 p.34)
610 mm gauge
EM Baldwin B-B DH *Delan* (5800.3 7.75 of 1975) has remained based at Millaquin following its transfer across from Bingera last year. As well, EM Baldwin B-B DH *Vulcan* (5317.1 11.73 of 1973) has remained based at Bingera following its transfer across from Millaquin at the same time. Bundaberg Foundry B-B DH *Booyan* (001 of 1991) remains in storage at Bingera awaiting repairs following an accident in 2020.
Mick Harrip 6/23; Mitch Zunker 6/23; Robert Wiltshire 6/23

**ISIS CENTRAL SUGAR MILL CO LTD**
(see LR 289 p.32)
610 mm gauge
A new three-year deal was struck earlier this year for Isis Mill to continue crushing the cane formerly supplied to Maryborough Mill.
*The Courier Mail* 28/4/2023

**MSF SUGAR LTD, MARYBOROUGH MILL**
(see LR 290 p.34)
1067 mm gauge
It has now been publicly stated that the sale of this mill to Advanced Energy Group has fallen through. MSF Sugar continues to search for prospective buyers.

***Top:*** *Marian Mill Eimco B-B DH 20* Boonganna *(L257 of 1990) with a short rake of fulls trailed by Fairview Engineering bogie brake wagon 7 (built in 2011) between Mirani and Marian on 5 June. Photo: Luke Horniblow* ***Middle:*** *Millaquin Mill's EM Baldwin B-B DH* Delan *(5800.3 7.75 of 1975) at Three Chain on 5 June. Photo: Mitch Zunker* ***Above:*** *Mackay Sugar's Clyde 0-6-0DH* Seaforth *(61-233 of 1961) resplendent in its new livery with Clyde 0-6-0DH Lacy (65-439 of 1965) waiting its turn behind in the shed at Racecourse Mill early in May. Photo: Steven Jesser*

A new three-year deal was struck earlier this year for Isis Mill to continue crushing the cane formerly supplied to Maryborough Mill.
*The Courier Mail* 28/4/2023

## NEW SOUTH WALES

**BLUESCOPE STEEL LTD, Port Kembla Steelworks**
(see LR 290 p.34)
1435 mm gauge
Watco has taken over the internal rail operations and National Railway Equipment Bo-Bo DE PB6 (209-PB6 of 2014) had been branded with Watco stickers by 27 April.
Phil Martin 4/23

**MANILDRA FLOUR MILLS PTY LTD, Manildra**
(see LR 290 p.35)
1435 mm gauge
Goninan Bo-Bo DE MM03 (4970 of 1961), formerly stored here, had been passed on to the Lachlan Valley Railway, Cowra by 11 June.
Bradly Coulter 6/23

## SOUTH AUSTRALIA

**AURIZON, Whyalla**
(see LR 273 p.26)
1067 mm gauge
Aurizon has taken over operation of this rail system for Simec Mining from One Rail Australia with all locos retaining Genesee & Wyoming Australia orange livery. During eight hours of observation on 22 April, four trains were seen with Clyde Bo-Bo DE locos 1301 (56-109 of 1956 rebuilt Morrison Knudsen of Australia 93-BHP-004 of 1995), 1303 (56-122 of 1956 rebuilt Morrison Knudsen of Australia 93-BHP-005 of 1995) and 1304 (61-236 of 1961 rebuilt Morrison Knudsen of Australia 93-BHP-003 of 1995) and Clyde Co-Co DE locos 1907 (72-764 of 1972), 2260 (76-819 of 1976), 2261 (74-789 of 1974), 2262 (74-791 of 1974) and 2275 (73-774 of 1973) all on line work.
Mark Carter 4/23

## OVERSEAS

**FIJI SUGAR CORPORATION**
(see LR 291 p.35)
610 mm gauge
Labasa Mill started crushing on 31 May with the estimate being 634,000 tonnes of cane. Lautoka Mill was expected to start crushing on 24 May while Rarawai Mill was scheduled to start on 13 June. The cane crop for the three mills is expected to total 1.6 to 1.8 million tonnes.
Labasa Mill locos seen out and about during the first half of June have included Clyde 0-6-0DH 18 (58-191 of 1958) on full cane trucks, EM Baldwin 0-6-0DH 14 (4413.3 9.72 of 1972) on full cane trucks, a Clyde DHI-71 0-6-0DH with the mower and Clyde 0-6-0DH 8 (DHI-8 of 1955) light loco.
The Fijian Finance Minister, Professor Biman Prasad, has stated that over the past decade, the FSC and sugar industry have been mismanaged. The rail system has been left to deteriorate and would now cost millions of dollars to repair and this would take time. The Minister for Sugar has undertaken to construct a new mill costing F$221.74 million at Raki Raki.
Ravendra Venktaiya 6/23; FIJI NWZ & Sports Facebook page 5/23; FBC News 1/6/2023, 4/6/2023; *The Fiji Times* 11/5/2023, 5/6/2023



***Top:*** *Millaquin Mill's EM Baldwin B-B DH* Fairydale *(10048.1 6.82 of 1982) shunting in the mill yard on 2 June. Photo: Mick Harrip* ***Above:*** *On the isolated system serving Simec Mining's iron ore mines in the Middleback Ranges, Aurizon Clyde locos Bo-Bo DE 1303 (56-122 of 1956 rebuilt Morrison Knudsen of Australia 93-BHP-005 of 1995) and Co-Co DE 2260 (76-819 of 1976) depart the holding siding and head down to the unloading loop within the Whyalla steelworks complex on 22 April. Photo: Mark Carter*

## Porcupine Hill ballast tramway, Victoria

**Gauge presently unknown**

**by Peter Evans**

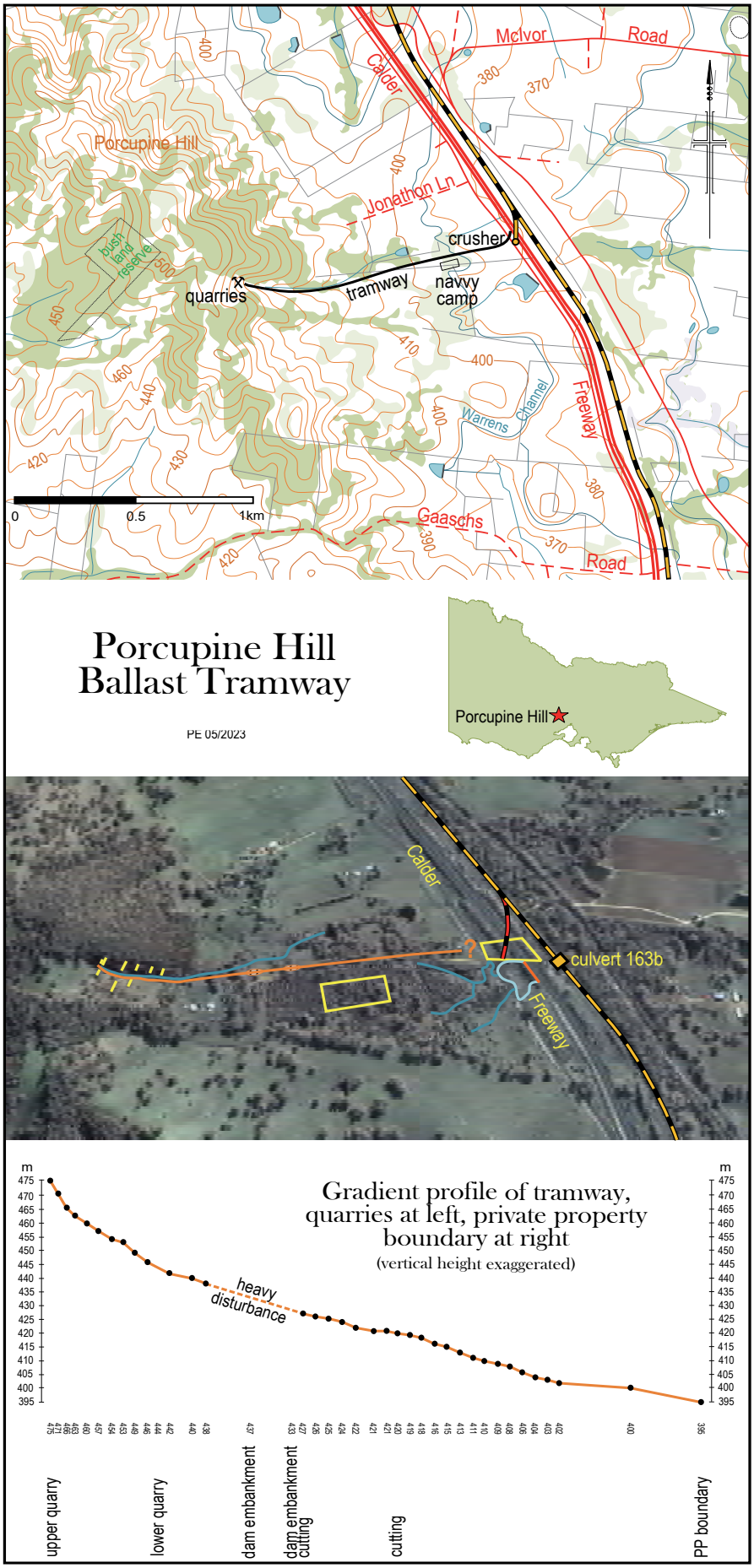
In May 1858, William Crocker Cornish and Johns Van Agnew Bruce were awarded a contract valued at £3,356, 937 to complete the Melbourne, Mount Alexander & Murray River Railway as far as Sandhurst (Bendigo).[1] By December 1858, Donald Leslie & Donald Ross had taken on work as sub-contractors to Cornish & Bruce.[2]

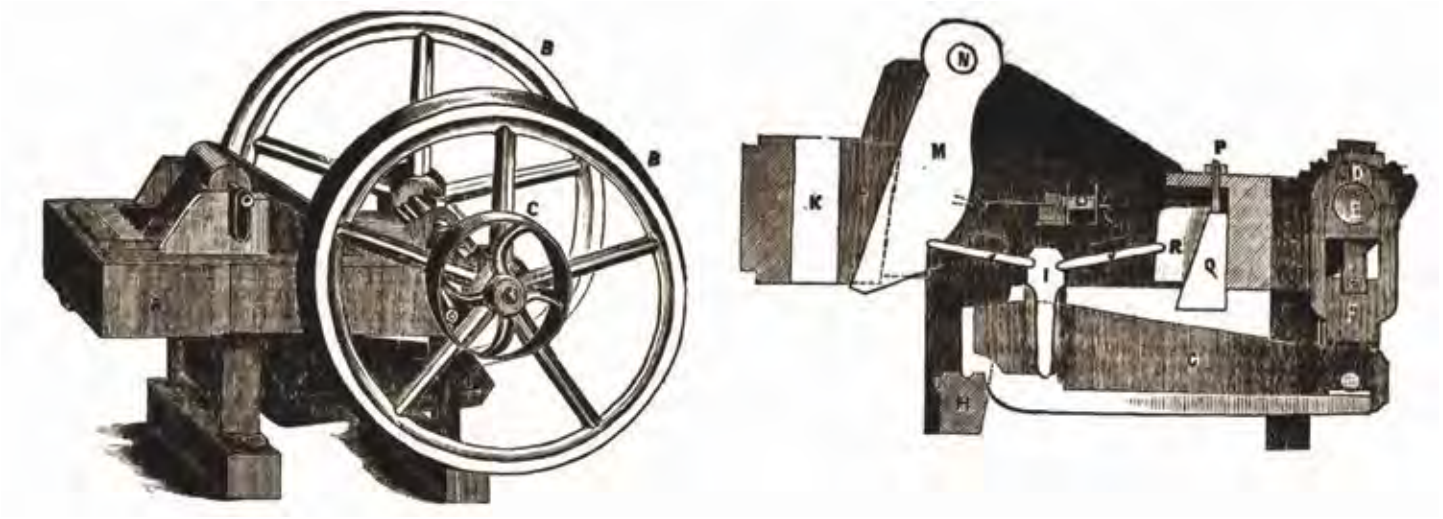
Donald Leslie was born on 4 January 1826 in Bonar Bridge, Creich, Scotland, the son of William Leslie and Isobell Leslie (née Gray). Donald arrived in Melbourne in August 1853, most likely aboard the *Carntyne* (occupation indecipherable), and married Jane Leslie (née McPhee) at Ascot Vale in March 1876.[3] Donald Leslie was in partnership with an Alexander Ross by January 1856 as contractors to the Geelong & Melbourne Railway Company for the section of line between Werribee and Duck Ponds (Lara). Alexander Ross was declared insolvent in January 1859.[4] The dissolution of the partnership seems to have been less than amicable; however, Donald Leslie had already found a new partner in Donald Ross, who he may have known from his birthplace.

Donald Ross was born on Christmas Day 1825 in Creich, Sutherland, Scotland, the son of Hugh Ross (mason), and Elspie Ross (née Munro). He arrived in Australia aboard the *Bourneauf* in September 1852 giving his occupation as 'labourer,' and married Margaret Rose Hannah at Geelong in 1858.[5] Born in the same parish only days apart, Leslie and Ross would lead parallel working lives in Australia and even die in the same year.

One of the Leslie & Ross contracts included a siding, ballast tramway and quarries at Porcupine Hill north of Harcourt. The location took its name from the Porcupine Inn on Bullock Creek, first licensed to Samuel Hawkings in September 1846. By December 1851, the Porcupine Inn had become a landmark on the route to the new gold rush at Sandhurst and by December 1853, the inn had been enlarged to 13 bed rooms plus a bar 40 ft by 40 ft and was 'equal in comfort and accommodation to any inn on the road from Melbourne.'[6] In 1860 the licence for the inn was in the hands of Charles Salisbury,[7] and it would be the closest hotel to a new navvy camp set up by Leslie & Ross. (The site of the inn, west of the old highway at 36 67 36.54°S, 144 14 30.04°E, was totally consumed with the building of the northern ramp of the Calder Highway/ Bendigo railway overpass in the early 1970s).

A siding of 250 yards was installed just to the south of cutting No.164 (the latter made up to 60 ft deep through solid granite), with the points facing 'Up' direction trains.[8] A tramway was constructed from the siding to quarries in a gully on the side of Porcupine Hill. At the siding, a crushing plant was installed under the supervision of a Mr Cameron. Ten 'Appleton patent' jaw-crushers, each with a capacity to break 30 cubic yards of spalls per day, were driven by a Tennent & Coy of Edinburgh steam engine. The engine was rated at 40 or 50 nhp (sources differ) and had a stroke of 48 inches and a flywheel 17½






feet in diameter. Steam was provided by two (almost certainly Cornish) boilers of 40 hp. Screened stone from the crushers was deposited directly into trucks in the siding. The completed plant had cost between £4000 and £5000, and Leslie & Ross had an initial contract to supply 55,000 cubic yards of ballast. The plant was officially opened on 9 September 1862 when a special train headed by the 0-6-0WT locomotive *Cornish* (R.&W. Hawthorn 930 of 1855, ex Geelong & Melbourne Railway Coy) transported around 50 dignitaries to the site for a 'round of stone-breaking and turkey-demolishing'. Johns Van Agnew Bruce personally placed the first stone in the machine.[9]

The railway to Sandhurst was formally opened on Monday 20 October 1862. As part of the celebrations, some 400 workmen crowded into trucks at the ballast pits siding to join a train heading to Sandhurst.[10] In November 1863, Leslie & Ross offered their stone-breaking machinery to the Victorian Railways for the sum of £3500, suggesting that the life of the ballast tramway may have been little more than 12 months.[11]

There was at least one fatal accident at the stone-breaking works when a young man named John Fraser jumped off one of the ballast trucks while the train was in motion. He fell onto the rails and the wheels of a truck ran over him, breaking his leg in several places from the ankle to the hip. Little hope was entertained for his survival and, by midnight, he had succumbed to the injuries, leaving behind his wife and children, who had remained in Scotland.[12]

Leslie & Ross went on to shift sideways from contracting to squatting (perhaps utilising the profits from their Cornish & Bruce sub-contract), purchasing the Kulkyne Station on the Murray River in early 1864 in partnership with Donald Leslie's younger brother, Murdoch Leslie. At this time, any remaining plant on the Porcupine site was sold. From 1866, Castlemaine draper Alexander McInness joined the partnership. After battling scab in their sheep and floods, the partners became insolvent in March 1869.[13] Donald Leslie would continue as a railway contractor, including construction of the Stawell to Horsham Railway, the Boort & Korong Vale Railway, the Daylesford to Creswick Railway; and the Zeehan & Mount Dundas Railway in Tasmania. He completed his working life in Tasmania in somewhat straightened circumstances as Inspector of Works for the North Mount Lyell Copper

**Principal Dimensions of "CORNISH" Engine.**

Diameter of Cylinder, 15 in.
Length of Stroke, 20 in.
Diameter of Driving Wheels, 5 ft.
Distance between the Centres of Front and Hind Wheels, 15 ft.
Length of the Cylindrical part of Boiler, 10 ft. 2 in.
Interior Diameter of Boiler, 4 ft.
Number of Tubes, 205.
Interior Diameter of Tubes, 1¾ in.
Interior Height of Fire Box above Fire Bars, 4 ft. 10 in.
Height of Lower Row of Tubes above Fire Bars, 2 ft. 1 in.
Length of the Fire Box, 4 ft. 5in.
Width of the Fire Box, 3 ft. 10¾ in.
Working Pressure in lbs. per square inch, 110.
Iron Tender, with 1000-gallon Tank.

***Top:*** *Appleton's patent stone breaker as used by contractors Leslie & Ross, full illustration on the left and half-elevation on the right.* The Colonial Mining Journal, Railway & Share Gazette & Illustrated Record*, Thursday 2 August 1860, page 197.* ***Above:*** *Contractor's locomotive* Cornish *was used by Leslie & Ross to transport ballast from their Porcupine Hill quarries. It is shown here (after repairs and modifications by Ballarat's Phoenix Foundry) whilst on construction duties on the Great Southern Railway circa 1891. Image courtesy Mike McCarthy collection.* ***Left:*** *Specifications of the contractor's loco* Cornish*. From* List of Locomotive Engines on Sale by Cornish & Bruce*, published 1863, State Library of Victoria RARELTP; 625.25 C81L.*

***Top:*** *Looking east down the gully along which the ballast tramway ran. From left: Ross Jepson, the son of the property owner (pointing), Chris Wurr, and George Milford (Harcourt Heritage Centre). Photograph by Geoff Winkler.* ***Above:*** *Looking north into the largest of the quarrying cuts at the upper end of the tramway. Photograph by Geoff Winkler.*

Company, where he would die of typhoid on 27 February 1899. His grave lies in Strachan.[14] His former partner Donald Ross outlived him by less than a year, dying of liver cancer at Flemington, Victoria, on 8 September 1899. He is buried in the Melbourne General Cemetery.[15]

On 9 November 2022 a site visit was organised to the Porcupine Hill tramway location. Present were Geoff Winkler, Chris Wurr, Ross Jepson, George Milford from Harcourt Heritage, as well as a budding archaeologist in the form of the son of the property owner. On the accompanying map (showing features superimposed over a Google Earth image), the yellow polygon to the east and across the Calder Freeway indicates the crushing plant site. At this stage, owing to the major disturbance created by the construction of the freeway, this does not warrant further investigation. An historical marker, incorporating a large hewn granite block, believed to have formed part of the foundations supporting the works' engine, has been erected just to the south of the Leslie & Ross water-supply dam. It is situated between Leversha Road and the Calder Freeway, some 150 m south from where it was recovered during construction of the freeway.

The central yellow polygon approximates the site of the Leslie & Ross navvy camp area. Never previously located by professional archaeologists, the property owner's young son (our tour guide for the site visit) recently discovered evidence to identify the site. Extensive planting of Grey Box through this area some 20 years ago has greatly disturbed the ground. The siding from the main line is shown in red, principal gullies are marked in dark blue, the Leslie & Ross water-supply dam in light blue, with orange showing the actual position of the dam wall. Note the area labelled 'bushland reserve' on the far west side of the image is shown on the Walmer parish plan of 1877 as a 'quarry reserve', but may be unrelated to the activities of Leslie & Ross.

A map in the VicRoads report outlining historical values along the freeway corridor delineates the supposed course of the tramway from the plant to the quarries up on Porcupine Hill.[16] We suspect that it had been assumed that the subsequent driveway was built along it. This appears likely for the eastern portion of the tramway, however, there are two obvious extant shallow cuttings, which led the tramway along a more favourable grade to an area now obliterated by a dam. The cuttings are quite apparent using Google Earth's July 2013 satellite view.

Chris Wurr returned to the site on 9 May 2023 to take regular GPS elevations every 20 m or so along the route of the tramway (shown in light brown) to enable a gradient diagram to be produced. Apart from the obvious cuttings in the lower section, as the line entered the upper portion of the gully a slight but discernible side-cutting was observable on the southern side of the gully. The difference in elevation between the foot of the driveway and the uppermost quarry was almost exactly 80 metres, but there was a large difference in gradient. From the property boundary to the lower dam the line rose 38 metres in 671 metres. However, from the lower dam to the top quarry the line rose 48 metres in 425 metres. Some extant ground disturbance suggests that that the steeper section may have contained numerous small curves and, if this was so, it would tend to rule out any form of cable haulage or lowering gear. Additionally, there is no visible evidence of a flat area at the head of the gully where a winder may have been located. It seems reasonable to assume that horses may have hauled the empties up the line, with loaded trucks returning under gravity. Beyond the upper dam to the top quarry, the gradient would have been a real struggle for any draught animal to haul even an empty wagon.

The tramway on leaving the siding climbs through Late Devonian Harcourt Granodiorite, the same source as the fine-grained granite in the railway cuttings. As the tramway begins to steepen towards the area where the quarries are located, the formation changes to what is known as the Castlemaine Group; Ordovician marine turbiditic sandstone, mudstone, black shale, and minor granule conglomerates.[17] The quarries (marked in yellow) bear a marked similarity to the numerous slate quarries surrounding Castlemaine. The narrow, almost vertical layers of much harder metamorphosed sandstone were sought and extracted, leaving a series of parallel slits lying roughly north-south on both sides of the gully. The alignments of these cuts have been fixed reasonably accurately using GPS positioning, but the actual lengths are only approximate.

Site inspection by Geoff Winkler, Chris Wurr and Ross Jepson; archival research by Geoff Winkler; newspaper research by Andrew Gostling; mapping, genealogical research and report compilation by Peter Evans 05/2023.

***Left:*** *The lower of the two cuttings on the quarry tramway (between the 421 and 420 metre elevations), looking east. Photograph by Chris Wurr.* ***Below:*** *This monument erected at the Leslie & Ross crusher site is believed to incorporate a worked stone forming part of the foundations for the machinery. Photograph by Peter Evans.*

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1. *The Argus*, Wednesday 5 May 1858, page 4.
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3. Donald Leslie death certificate 45 of 1899 (Tasmania); PROV, VPRS 7666, Inwards overseas passenger lists (British Ports), August-December 1853, page 491. The 1851 Scottish census gives his occupation as 'railway labourer'. See also https://www.ancestry.com.au/family-tree/person/tree/106954183/person/190055806485/facts?_phsrc=DNs53&_phstart=successSource accessed 15 May 2023
4. *The Argus,* Thursday 31 January 1856, page 1; Monday 13 April 1857, page 7; Monday 31 January 1859, page 7; *Geelong Advertiser,* Thursday 31 March 1859, page 2; *Victorian Government Gazette,* Gazette 39, Wednesday 15 April 1857, page 656.
5. Donald Ross death certificate 9489 of 1899 (Victoria); PROV, VPRS 7666, Inwards overseas passenger lists (British Ports), book 6, page 27.
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7. *Mount Alexander Mail,* Friday 29 June 1860, page 5.
8. *Mt Alexander Mail,* 10 September 1862; PROV, VPRS 429/P0, unit 3, page 89, correspondence 1804, letter dated 19 August 1862 from government engineer J.A. Macarthy.
9. *Bendigo Advertiser,* Wednesday 10 September 1862, page 2; *The Herald,* Wednesday 10 September 1862, page 5; *Mt Alexander Mail,* Wednesday 10 September 1862, page 3. The crushing plant presumably incorporated improvements covered by Cornish & Bruce's Victorian patents V158 of 1858 and V367 of 1860.
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14. *The Riverine Herald* (Echuca-Moama), Tuesday 24 July 1883, page 2; *Leader,* Saturday 4 June 1887, page 31; *The Argus,* Tuesday 10 March 1891, page 6; *The Horsham Times,* Tuesday 21 March 1899, page 2; *The Mount Lyell Standard & Strahan Gazette,* Friday 10 March 1899, page 2; Donald Leslie death certificate 45 of 1899 (Tasmania).
15. Donald Ross death certificate 9489 of 1899 (Victoria).
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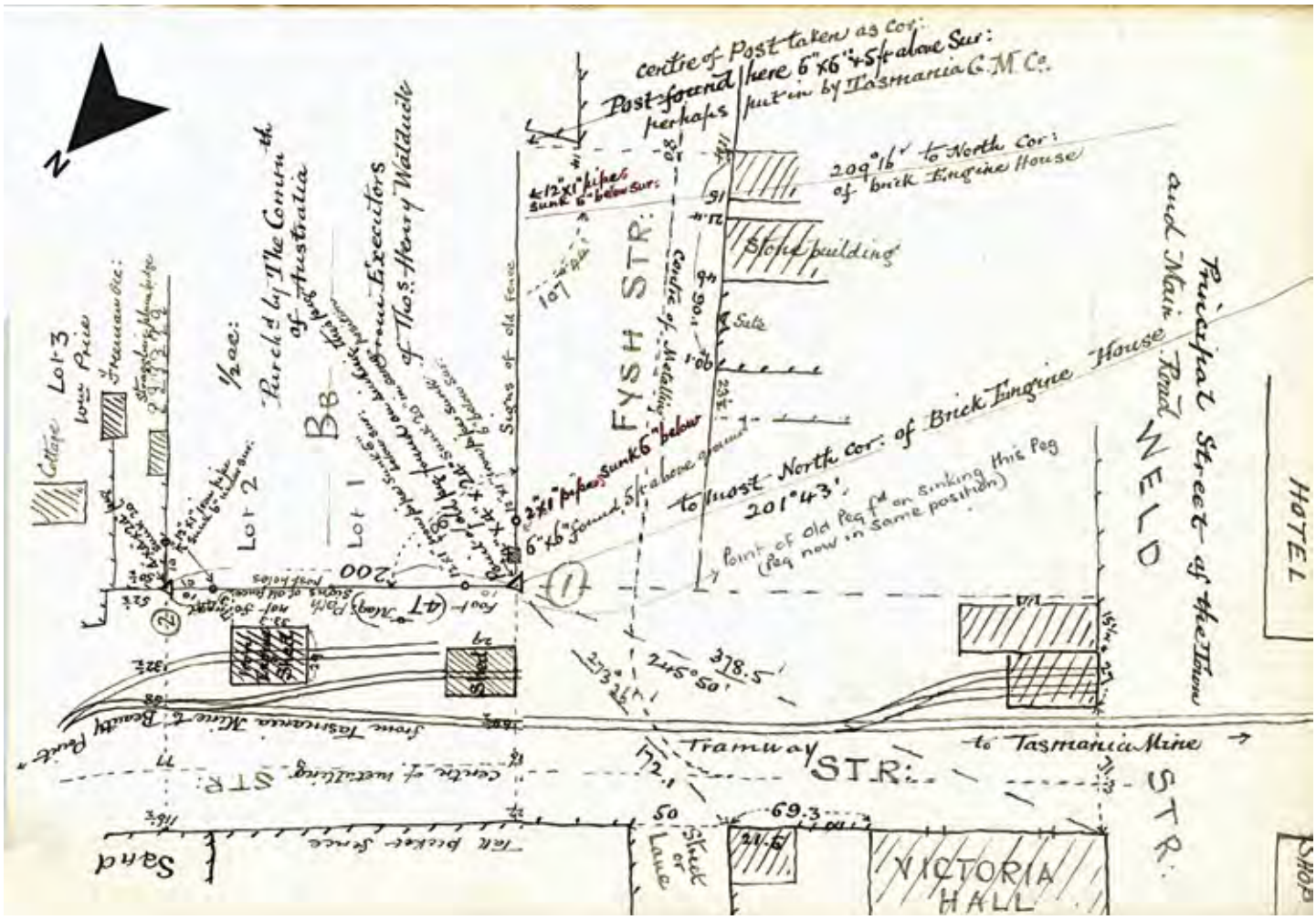



**Revisiting Wyett's Tramway, Beaconsfield (LR 269)**

Thanks to the National Archives of Australia, some additional information is available about the layout of the Tasmania Gold Mine Ltd (formerly Wyett's) tramway in Shaw St, Beaconsfield.

In October 1913 the Commonwealth decided the acquire an acre of land at the east corner of the intersection of Fysh and Shaw Streets as a site on which to construct a drill hall. As part of the process of purchasing the land, Launceston surveyor G T Eddie was engaged by the Department of Home Affairs to survey the site. This work was undertaken in September 1914. The field notes from the survey are available online at the National Archives (NAA: P1328, 1551) and include several plans showing the nearby tramway. The attached image, a combination two of the plans, gives an overall view of the tramway facilities in Shaw Street at that time; including the location of the engine shed.

The drill hall was erected in 1915 and still exists, although repurposed many years ago, but no trace remains of the tramway structures.

Colin Harvey
Via email

**Smithfield explosive tramways (LR148, LR291)**

The minutes the SA group meeting of 6th October 1994 show that a second visit was planned, and the minutes of 2nd February 1995 record that:

> Peter Barry gave a summary of the present position regarding the Smithfield Explosives Tramway, last visited by 7 members & friends on 15th October 1994. (Not previously reported, this proved to be a little disappointing, due to the small number who attended & the unfortunate failure of the loco.)

So, our first visit was in 1993, the second in 1994 and the visit in 1998 was our third, not our

***Above:*** *Coal handling, Cockatoo Island, c.1909-1914. Western end of island adjacent to boiler house. Photo: courtesy Australian National Maritime Museum, Mr W.A.Stanley Collection, ref MMA 00031376.* ***Left below:*** *Readers will recall that we ran this photo in LR269, October 2019. It shows a visit by parliamentarians and businessmen to Beaconsfield on 20 August 1912 at a time when the West Tamar Railway League was trying to get the government to build a railway along the west bank of the Tamar. Thanks to Colin Harvey's discovery of a map of the tram lines in Shaw Street at that time, readers may wish to compare the photo and map. The 'HOTEL' at right-hand end of the map, in Weld Street, is the Exchange Hotel in the photo's background. Amazingly, the ramshackle open-ended sagging building behind the rear of the train (with a crane for heavy goods) is a two-track tramway shed, accessed by a set of points that must be under the recently re-boilered loco, KS643/1893. The photographer would have been close to the intersection of Fysh Street. Note also on the map, bottom right, the Victoria Hall, where the gentlemen pictured had just partaken of a pleasant luncheon. By 1916 the Kerr Stuart loco was with the Powelltown Tramway in Victoria.*
*Photo: Framjee and Gillman,* Weekly Courier *29 August 1912.*

second, as detailed in LR291. The caption of that first photo on p.10 of LR148 gives the date of our third visit as 14 March 1997 - it was in fact 1998.

Les Howard
Via email

**Light Railways – Design changes (LR 291)**

I note that changes have been made to the format/design of *Light Railways* (LR291, Editorial). At the risk of being seen to be 'swimming against the tide', I would like to make comment.

In particular, the change to the width of the general text columns from 84mm to 92mm I think is a detrimental step. Further, the space between columns has been reduced, and the total width of both columns has increased from 173mm to 189mm. Double column formatting in magazines (as opposed to single column) has been used to help the reader follow the text, and not to lose his/her place, particularly when 'scan-reading'. Making text columns too wide can badly affect the reader's interpretation of that text, often leading to the need to re-read passages, and thus breaking the flow of the subject.

Comparing the old and the new formatting (LR 290 vs LR 291), and by choosing passages at random, I have found that columns of the older contained about nine to ten words, while the newer generally included between 13 and 16 words.

With respect to font type, it seems that this has changed from a style similar to Times New Roman to one of Calibri (body). This, of course, is a matter of personal preference, but I much favour the former.

In short, I would suggest that 'if it ain't broke, why fix it'

Scott Clennett
Bellerive, Tasmania
Via email

**Light Railways – Design changes (LR 291)**

I've just received Issue No. 291 of *Light Railways* and must say that I am very disappointed with the changes, most particularly the font. Somehow, the new font seems to cheapen the look of the magazine and the content within - not something that I would want to see.

Why was there a feeling that the magazine had to get "with it"?

I would call the previous look a classical style that would never go out of vogue, unlike the new one. I formerly worked at a major Australian print media group, and I remember that the company had a very wise saying - If it ain't broke, don't fix it !

Nicholas May
Via email

**Editor's Note:** We did receive a small handful of messages, both in favour and against the font changes. Having critically reviewed the actual printed magazine versus the screen preview it has been decided to make a couple of tweaking's. The font for the articles will revert to a serif font. The new captions, which many (like your Editor) find too small will revert to an italic serif. Additionally, there will be just the one colour for the articles' titles plus some slight changes in the various other 'departmental' section headings. We thank readers who took the time to let us know their thoughts. If you are not happy with some aspect, please let us know! We might not be able to satisfy but we do take all suggestions seriously and they are carefully discussed at length by your volunteer editorial team.

**Light railway aspects of Cockatoo Island (LR284) and**
**Light railways at sea: coal hulks in Western Australia (LR289)**

Regarding the above two interesting articles, the first by David Jehan and the second by David Whiteford, I recently noted a conjunction of them both in the attached photograph. It is from the interesting collection of the Australian National Maritime Museum and said to be on Cockatoo Island, Sydney Harbour, between 1909 and 1914. It includes two tramways not mentioned by David

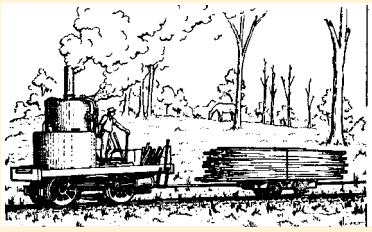
Jehan and show workers shovelling coal from a large heap into, possibly, 2ft-gauge side-tipping skips.
Four skips are visible, all with lettering on the ends – the one legible being DNSOD[PT]. The coal has clearly been unloaded from a collier, using a 'basket and tram' arrangement as described by David Whiteford in his article. That tramway would be on the wooden permanent staging visible above the coal heap and connected to any arriving collier by temporary track panels. Having created a large heap of coal, more workers are now loading some into skips for manual pushing into the adjacent boiler house.
The addition of lifting lugs on the four corners of the skips would seem to suggest that once in the boiler room they will be lifted and emptied into a hopper. Reference to the 1932 map with David Jehan's article places this at the extreme western end of the island and clearly by that date coal-handling facilities had been modernised as no tramways are shown.
I am wondering if the photos may be related to the 1910 NSW coal miners' strike that also saw the Sydney coal lumpers on strike in support. This resulted in the NSW government importing coal from Japan. Non-union labour was then often used to unload coal, some at Cockatoo Island – the clothing of the shovellers tends to suggest they may not be 'normal' coal handlers. Readers' comments most welcome.

Phil Rickard,
Ringwood, Victoria

# OBITUARY

**Bruce Macdonald**

It is with sadness that we announce the passing of Bruce Macdonald OAM, one of Australia's most notable engineering and light railway preservationists. A full obituary will appear in the next issue of *Light Railways;* however, we take the opportunity now to express our sympathy to Bruce's family and close friends at this time of loss.



# LRRSA NEWS

## MEETINGS

**LRRSA members' Online meetings**
The LRRSA holds regular members meetings Online via Zoom conferencing on the dates below. Members wishing to "virtually" attend will need to pre-register by responding to an email inviting you to attend or via our website lrrsa.org.au. After registration, details of how to join the meeting will be provided by email closer to the various dates. Dates not suit? Presentations are available on Youtube a couple of weeks after each meeting. Why not check our website for links to past presentations?

**August 2023 members Zoom meeting – Articulated locomotives used in Indonesia**
**Date:** Thursday 10 August 2023 at 8.00pm AEDT
Ross Sadler will give a presentation on the use of articulated locomotives in the Indonesian sugar industry. The first locomotives to be used in Indonesia were small four-coupled engines, with only limited pulling power. Naturally, there was an incentive to employ larger engines, but at the same time there was little chance of upgrading the track to higher standards.
Thus, various forms of articulated locomotive came to be used as the standard workhorse of the Indonesian sugar lines. Those used included an 0-8-0 tank engine with Klein-Lindner axles, an 0-4-4-0 Mallet tank engine, the ingenious Luttermöller locomotive from O&K, plus articulateds from Berliner Maschinenbau (L. Schwarzkopf) and another German firm Arn Jung.
The presentation will feature animations, still photographs and video clips of the various types of articulated locomotives in action on Indonesia's sugar lines from the 1970s to the first decade of the new millennium. Reserve the date – not to be missed!

**October 2023 members Zoom meeting – 1972 ARE Visit to Indonesia**
**Date:** Thursday 12 October 2023 at 8.00pm AEDT
Continuing the Indonesian theme, Frank Stamford will present an illustrated talk on the Association of Railway Enthusiasts' initial 3-week tour to Java, Madura and Sumatra, which took place in August 1972. At that time Indonesia was alive with an amazing variety of steam locomotives, many of them foreign to Australian eyes. Photographs and commentary will cover some of the highlights of the extensive tour. Subjects covered will include: Surabaya Steam Tram, other steam trams, Cepu Forestry Railway locomotives, Mallets in the mountains of Java, the Ambarawa Rack Railway, many elderly and unusual locomotives, the West Sumatra rack railway, oil palm railways, North Sumatra Railway, and others. Register now at www.lrrsa.org.au and join us for a fascinating 'tour'!

**Brisbane: "No meeting"**
It has been decided to cancel the Brisbane meetings until further notice. But why not join us Online for a meeting via Zoom?

**Sydney: Trades Hall banner room collection**
Mr Neale Towart will present a history of the heritage listed Trades Hall building in Sydney and particularly detailing the superb Trades' Union banner collection housed therein. Early State railway, tramway, mining and metal working union banners, of the large type once used in marches, are on display. The detail on these banners is spectacular. Guaranteed to be a fascinating evening!
**Location:** Club Burwood RSL, 96 Shaftesbury Road, Burwood, in the 'Private Room', Brasserie Restaurant. Free parking in RSL car park. Only 10 minutes easy walk from Burwood railway station. Please contact Ross (0415 995 304) or David (0400 347 127) if you need to be signed in upon arrival.
It is highly recommended to arrive early and enjoy a meal with other LRRSA members.
**Date:** Wednesday 23 August 2023 at 7:30pm

**Melbourne: "No meeting"**
Online meetings via Zoom will be hosted from Melbourne and will feature presenters from far and wide. See details at top of this list.

**Adelaide: "Bi monthly meeting"**
IMPORTANT: The Adelaide meeting on Thursday 3 August will be the last held on the first Thursday of the even month. The next meeting will be on the LAST THURSDAY OF THE ODD MONTH – i.e. Thursday 28 September and will feature John Meredith's videos of sundry NZ sites including Glenbrook and railcarting. Watch this space and your e-mail for future advices re November and 2024. Note the date! As accommodation is limited, interested persons should contact Les Howard at sa@group@lrrsa.org.au for details if you have not previously been to a meeting. A small but friendly group!
**Location:** 1 Kindergarten Drive, Hawthorndene
**Date:** Thursday 3 August 2023 at 7.30 pm

News items should be sent to **heritagetourist@lrrsa.org.au** Digital photographs for possible inclusion should be sent direct to Richard Warwick at **editor@lrrsa.org.au** including the name of the location, the name of the photographer and the date of the photograph.

## QUEENSLAND

**BALLY HOOLEY RAILWAY STATION, Port Douglas**

610 mm gauge

The locomotives at the Port Douglas Marina are getting a makeover. The three historic attractions permanently attached to Choo Choos Bistro are getting some special attention via a new paint job from staff employed by owner John Morris. John proudly owns and displays the locomotives at the Bally Hooley Railway Station and is passionate to have them regularly serviced and survive in good condition. *Nelson* is the first to be brushed up and then it will be *Bundy's* turn along with *Speedy*. It is expected the work will take several weeks.

Purchased from Mossman Mill in 2002, the Morris family took over the ownership and maintenance of the locomotives as well as the tracks. They were helped by a dedicated group of volunteers allowing it to operate over many years in Port Douglas between the Marina and St. Crispins station.

Due to the high cost of running the railway, approaches were made to several organisations to take over the running of the trains, including the Tin Shed, the Historical Society, and the Douglas Shire Council, but none were able to commit to the long-term future of the trains. Unable to operate during the COVID-19 pandemic, the locomotives were stored and maintained at the depot. During this time a new concept emerged, one that would ensure they remain in the Douglas Shire long into the future.

The tracks were removed by Mossman Mill and re-purposed in the cane carting rail operation. The locomotives and carriages might now be a static display, but present and future generations can at least marvel at these magnificent machines.

John Browning, *Light Railways of Australia* Facebook Group, 24 May 2023. Adapted from an article written by Paul Makin, journalist, *Newsport*, 24 May, 2023.

**BUDERIM-PALMWOODS HERITAGE TRAMWAY INC.**

762 mm gauge

**CELEBRATING 20 YEARS**

This year Buderim-Palmwoods Heritage Tramway Inc. (BPHTI) celebrates 20 years of community service since a steering committee of eight Buderimites met, on the suggestion of Maroochy Shire Councillors, to consider the formation of an organisation dedicated to establishing a permanent walking track along the route of the old Buderim to Palmwoods tramway which closed in 1935, as well as other tramway projects.

This also led to the discovery in 2004 of the original Krauss locomotive which ran on the line and its return to Buderim for restoration and display. Funds for the purchase of the locomotive were provided by Maroochy Shire Council.

***Top:*** *The Buderim Krauss locomotive in a storage shed awaiting its move to a more permanent display. Photo: Bill Dunn*
***Above:*** *The Martins Creek flat top wagon on display in a park at Buderim. Photo: Bill Dunn*

Over the years BPHTI has established itself as a major community organisation dedicated to keeping Buderim's heritage alive. Apart from the development of the walking track into a very popular local attraction and the superb restoration of the Krauss loco, BPHTI has undertaken various infrastructure projects, educational facilities, book launches, guided walks along the walking track and talks to local organisations. It has also hosted school groups on the walking track as well as visits to the Krauss loco.

Bill Dunn, BPHTI

In a further report from Helene Cronin, President of the BPHTI, she writes about a recreated passenger vehicle from the tramway which was located on Martins Creek behind the Village Green on Lindsay Road. It was not put there by BPHTI but by another group (Martins Creek Headwaters Action Group) who were clearing Martins Creek of Camphor Laurels. During the clearing they came across an old tramway embankment and decided to include a display on the embankment. BPHTI got involved and applied to Council for a grant for signage and were successful.

The Action group disbanded a few years ago and the display declined into disrepair. BPHTI contacted the Mens Shed and it was decided BPHTI would do a joint venture with them to restore the display. Unfortunately, Council got involved and told the groups that unless they took out insurance to cover the display, they would not allow the repairs to go ahead. The Mens Shed and BPHTI decided not to go ahead with the repairs. The display was made up from an old cane train and has now been removed although the signage is still in situ.

Helene Cronin, President, BPHTI, 9 June 2023.

**FRIENDS OF ARCHER PARK STATION AND STEAM TRAM MUSEUM, Rockhampton**

1067 mm gauge

The Purrey Steam Tram had a steam pipe break which necessitated a major maintenance job. Workers hope to have it up and operating again by mid- to end-May. The museum meanwhile will operate the section car, TMC-6, on Sundays until the Tram is repaired.

*Tram Tracks:* Volume 17 Number 2 1 May 2023

**DURUNDUR RAILWAY, Woodford**

610 mm gauge

A big success story for ANGRMS during the past year has been working with CERT 22 students who are undertaking track worker training using the railway. The course involves a mix of classroom and onsite practical training/experience. These courses are also of immense benefit to ANGRMS in that it is getting the track upgraded using steel and concrete sleepers. These courses are now at the point where a large amount of the track has been upgraded and management needs to start planning for what happens at the end of this year/early next year when all of the available track has been done.

After a long and expensive overhaul, the motor for *Goondi* has arrived back on site and has been placed back in the frame. There is still a lot of work to be done before the locomotive is operational again but this was a big milestone. Work has also continued on regauging a tamper for use on 2 ft gauge.

Nambour Historical Society has donated one of the goods cranes from Cooroy as it requires more space for display of items from the Maroochy River lift bridge. The plan is to set it up as a static exhibit, potentially in the area beside the Margaret Street headshunt. This, along with old signal will provide display items to help enhance the visitor experience as well being a learning tool for younger visitors.

*Durundur Railway Bulletin* Volume 44 Number 380 March/April 2023

## NEW SOUTH WALES

**PETE'S HOBBY RAILWAY, Junee**

610 mm gauge

The great majority of the photographic images that have appeared in the various Progress and other Reports on the railway's web page have originated from Pete himself. However, all this changed last October when two outsiders visited Pete's Hobby Railway and have since released videos on YouTube of what they saw. In conjunction with the Junee Roundhouse 75th anniversary celebrations over last year's October long weekend, Maikha Ly produced a 7½ minute professional standard video on Pete's Hobby Railway. Using both ground-level and drone overhead footage, Maikha provides some great scenes of the railway from an outsider's viewpoint, brought together with an interview commentary by Pete.

Pete's Hobby Railway website, March 2023

**ZIG ZAG RAILWAY, Clarence**

1067 mm gauge

After eleven long years the railway has passed the final hurdle and received full accreditation to carry passengers. Following a big weekend with members onboard testing emergency procedures, the Office of National Rail Safety Regulator lifted the restrictions on the railway's accreditation to allow it to carry passengers. Receiving full accreditation was the final regulatory hurdle to clear before being able to bring back passengers. The official opening date was announced as 27 May 2023, which saw the railway finally carry passengers after eleven years of setbacks and rebuilding.

Lee Wiggans, moderator, *Zig Zag Railway Interest and Discussion* Facebook page, 4 May 2023

**DORRIGO RAILWAY MUSEUM, DORRIGO**

1485 mm gauge

SMR 26 was spotted recently on its way to Dorrigo, at Black Mountain near Guyra. Another engine, SMR 20, went through Guyra later and looked to be in particularly good condition. There are seven of these locomotives in total. Two were in pieces and went Dorrigo over the past few years. The last five went to Dorrigo.

*Old Time Photos of Tram and Train Engines of Yesteryear* Facebook Group, Darien Garth, 11 May 2023.

## VICTORIA

**PUFFING BILLY RAILWAY, Belgrave**

762 mm gauge

Puffing Billy Railway's ex-Queensland Railways diesel hydraulic loco DH5 has been repainted, retaining the blue and yellow livery of the VR. It was involved in a very interesting special train operation on Saturday 3 June. It departed Belgrave at 7.00am on a train of six empty cars. At Emerald, loco 1694 was attached to the back of the train, and it continued to Lakeside. The Climax had come up from its home at Menzies Creek Museum to Emerald late the previous afternoon.

At Lakeside DH5 dropped off the train and was inactive until 2.30pm. Meanwhile the Climax departed Lakeside at 9.00am on the special train with about 120 passengers on board. The weather at this time was wet, and unusually for the Climax it slipped a little on the 1 in 40 grade out of Lakeside. The destination was Menzies Creek, where the passengers could visit the Museum, and watch train activity at the station.

And there was much to watch! Garratt NGG16 129 and 8A arrived double-heading on the first regular train of the day from Belgrave. Both the Garratt and the last six cars were detached from this train, while 8A took the rest on to Lakeside. Then 14A arrived from Belgrave on the second Lakeside train for the day.

The Climax-hauled train then came back into the station from the museum siding, where it had been stabled. It departed Menzies Creek at 12.15pm for a 1¼ hour trip back to Lakeside. This included a 27-minute stop at Emerald to cross a train from Lakeside hauled by 8A. On arrival of the Climax at Lakeside, DH5 was attached at the Belgrave end and the train proceeded as empty cars back to Belgrave, with the Climax being detached from the back of the train at Menzies Creek. It then returned to the museum.

Frank Stamford

**WALHALLA GOLDFIELDS RAILWAY, Walhalla**

762 mm gauge

WGR has been in operation since 1991 and it is clear from looking at each successive year's numbers that the railway has continued to grow. According to the most recent figures, almost three quarters of a million passengers have been conveyed since 2002, with ticket revenues for that period amounting to over $14 million.

Whilst the COVID-19 pandemic resulted in the loss of considerable revenue to the railway, now that restrictions have been lifted it has been quite apparent that there has been an almost immediate and complete recovery in passenger numbers. An informal sampling of customers reveals that most of these come from the metropolitan areas, with a smaller local portion and a steadily increasing number of visitors from all over the world.

*Climax locomotive 1694 with its train at Lakeside station on the Puffing Billy Railway on 3 June 2023. Photo: Rodney Reed*


***Top:*** *An evocative shot of Climax locomotive 1694 in the mist on the turntable at Emerald on the Puffing Billy Railway on 3 June 2023. Photo: Rodney Reed* ***Above:*** *Puffing Billy Railway's ex Queensland diesel-hydraulic locomotive DH5 has recently had a new paint job and is seen here at Lakeside on a very wet Saturday morning on 3 June 2023. Photo: Frank Stamford*

Unfortunately, in operating for this length of time, maintenance needs have also increased as the locomotive fleet ages. This financial year alone the railway has invested approximately $91,000 on their upkeep.

Ten years ago, management was fortunate enough to secure ownership of two large DH class locomotives, one of which has been sitting in the Walhalla yard awaiting sufficient funds to re-gauge it for use on the 2 ft 6 in line. Work is now well underway on this unit with some $74,000 of a total of $160,000 being expended on it to date. Work on its axles has almost been completed and when these are returned to Walhalla they will be reattached to the body and the locomotive relocated to Thomson for final preparation work.

The addition of this unit should take a huge amount of pressure off the existing fleet and enable the railway to systematically rotate each of them in and out of service for maintenance. The DH will also enable the railway to meet the increased tourist demand for the railway service in the future.

A recent inspection by the Office of National Rail Safety Regulator (ONRSR) led them to remark that the railway was one of the best presented and maintained that they had visited.

Like other tourist railways, it has become increasingly apparent of late that the railway has reached the point of overlap between operating the railway as volunteers and engaging paid employees. To take the pressure off the hardworking maintenance crew the Board recently decided to advertise for a part time diesel mechanic to supplement their efforts and free them up for other, equally demanding work.

Readers may recall the delivery of two NB carriages some time ago to a property in Rawson. These two carriages require significant restoration to enable them to enter service on the WGR. This restoration project is a joint venture between the Puffing Billy Preservation Society and the WGR with the PBPS wishing to support it

through finance. The railway is currently seeking suitable premises in the Latrobe Valley to enable this work to be undertaken, plus interested people to be involved in the project as well as a project manager. This project provides the opportunity for two historic carriages which most likely ran on the original Moe-Walhalla railway to return home.

At present, the 10 Class is running well, if not a bit hard to start, and *Kasey* is waiting on parts related to the Hydraulic system before it can re-enter traffic. When it does, the Fowler will be dismantled to release the wheels for re-tyring which will be done at the old Yallourn SEC Workshops.

*Dogspikes and Diesel*, May 2023

**YARRA VALLEY RAILWAY, Healesville.**

1600 mm gauge

The turntable from the now-defunct South Gippsland Railway is to be moved to the Yarra Valley Railway at Yarra Glen. This will enable locomotives to be turned at both ends of the line once it is completed. The turntable was originally at Foster on the Woodside line and is being removed as part of the Korumburra station refurbishment programme. At present it is fenced off from public access due to safety concerns.

Once the rails have been laid from Tarrawarra (the current end of the track) to Yarra Glen and the turntable installed, operations currently originating in Healesville will be moved to Yarra Glen and the rails from Tarrawarra to Healesville pulled up and completely re-laid as they are currently in a poor condition.

Graeme Sproul, *Railways in Victoria…Past and Present* Facebook page, 7 June 2023.

**ALEXANDRA TIMBER TRAMWAY AND MUSEUM, Alexandra**

610 mm gauge

Local contractors reconstructed the last of the timber platform facing in concrete in April, replaced the timber coping and completely resurfaced the platform with hot mix asphalt. One of the reasons for the local subsidence was a large wombat burrow beneath the platform which, after ensuring that it was vacant, was sealed with concrete to prevent any recurrence.

*Timberline* 180, Winter 2023.

## TASMANIA

**DON RIVER RAILWAY, Don**

1067 mm gauge

The Tasmania Fire Service and the Tasmanian Police completed their investigation into the recent fire very quickly on the day of the fire and concluded that the fire was accidentally lit, with the likely cause being restoration work on a carriage.

Fire crews from four towns were called to the railway in the early hours of Tuesday 4 April and found three warehouses alight. Firefighters used cherry pickers to fight the fire from above.

Confirmation has been received that the carpenter's workshop has been completely destroyed along with a lot of the parts' store. Due to the quick work of the Tasmanian Fire Service, the Two Tracks Function Centre only sustained water damage. The main workshop has some smoke damage but the carriage shed and royal carriage have been saved.

The good news was that normal services were resumed on the following Thursday.

ABC News online, 4 April 2023.


*Climax locomotive 1694 and NGG16 129 cross at Menzies Creek on 3 June 2023. Photo: Frank Stamford*

**TASMANIAN TRANSPORT MUSEUM SOCIETY, Glenorchy**

610 and 1067 mm gauges

The approval to vary the Society's accreditation to run trains on the former main line between Elwick Road and Grove Road was given by the Office of the National Rail Safety Regulator on 27 April. The approval was a major achievement, as it has been a long and arduous process to provide documents and complete tasks to get this far. Many members have contributed to getting the track ready to run on, and a smaller number have worked on the documentation.

Ballast wagon QG17 was returned to the museum from Queenstown in mid-March after a period of hire to the West Coast Wilderness Railway which began in May 2011. Since its return it has received a quick repaint. Built in October 1956 by the Tasmanian Government Railways, it was one of a class of 32 similar Grovers bogie wagons used on departmental ballast trains. It was withdrawn from service in 1989 and donated by AN Tasrail.

Tasmanian Transport Museum Newsletter, Autumn 2023

## SOUTH AUSTRALIA

**BHP WHYALLA**

1067 mm gauge

A photo appeared on Facebook recently that was taken in April 1968 of the 3 ft 6 in gauge 1891 Beyer Peacock built as a 2-6-2T and formerly of BHP Whyalla languishing in a park by the ocean at Whyalla. To a question from a correspondent about whether it was still there, it was suggested that it was now languishing in a shed far from the ocean at Quorn. However, further correspondence suggested that it was now at the Mount Laura Homestead Museum in Whyalla, and that the one at Quorn was a similar but different locomotive. Further discussion established that the one at Quorn is BHP number 3 while the one at Mount Laura is BHP number 2. Photos of number 3 at Quorn show it has a hungry board around the bunker, while number 2 at Homestead Park does not.

*South Australian Railway Enthusiasts* Facebook Group, Graeme Kirky, 31 March.

**FARINA HERITAGE SITE, Farina**

1067 mm gauge

Diesel-electric locomotive NSU62 was recently photographed at the gates of Steamtown Heritage Rail Centre in Peterborough, waiting to head north to Farina. This is the first time in decades that it has emerged from the Peterborough Machine Shop.

It was suggested that it would head north on May 10 where it will be repainted and stored in the replica goods shed that the Farina preservation group is building. It will then be a static display although a small section of rail line has already been created by this group. NSU 62 was the very last loco to run out of Farina. The group had previously tried to obtain one of the privately owned NSUs at Maree but was only offered one in very poor condition. Steamtown donated this one to the group.

*South Australian Enthusiasts* Facebook Group post by Ben Graefe 23 April 2023

## WESTERN AUSTRALIA

**BENNETT BROOK RAILWAY, Whiteman Park**

610 mm gauge

Workers have recently added a tropical double-layer roof to the Atlantic *Planet* to reduce the heat transfer from the sun. NG15 123 and BT1 have been getting ready for their annual boiler inspections. NG15 123's boiler is now back on the railway and work is progressing well on putting the loco back together.

From the start of the railway, workers have had to design and build the railway's own carriages. Operations commenced on 8 December 1984, and it was quickly realised that the first train simply was not big enough.

Consequently, a QBB flat top and two camber bar bogies were purchased, regauged and modified to two-foot gauge. Three carpenters and a painter on the CEP scheme built the upper structure and the three carriages all commenced service in September 1986. Volunteers then built six camber bar bogies, rebuilt three chassis, then built three upper structures. Various modifications have been made since, including full size doors with drop windows, full glazing sliding windows, concertinas, safety side steps, a PA system with lights and an Indian Red colour scheme. At present there is a functioning four coach summer set, and a four-coach winter set, with the party coach and the Grey "R" wagon as spares.

No carriages were built between 1993 when the eleventh thirty-foot rebuild (V3326) was finished, and 2013 when there were some very busy Ashley days which showed that more passenger carrying capacity was needed. Consequently, R 1751 was built. Since 2013 workers have not built another dedicated passenger carriage. ZB 213 has been finished after a decade long build but it has little passenger capacity.

*The Bennett Brooklet* – Feb/Mar 2023

## OVERSEAS

**WELSH HIGHLAND RAILWAY, Porthmadog, Wales, UK**
597 mm gauge

The Welsh Highland railway at Porthmadog has completed its restoration of the Baldwin locomotive 4-6-0T 'WDLR 794' (now WHR 590) [Baldwin b/n 44699/1917] and an official ceremony to celebrate its completion was held on 27 May 2023. The locomotive arrived at the WHR in 2004 in many pieces and work has been underway since that time. The British Imperial War Museum has donated the locomotive to the WHR who now have ownership of it. The locomotive is a sister to Baldwin 45215/1917 (WDLR 633) which operated for many years at Dreamworld, Coomera, Queensland and is now on display there.

Michael Chapman, Welsh Highland Railway



***Right & Below:*** *Welsh Highland Railway restored Baldwin locomotive WDLR 794 (now WHR 590) at the workshops in Porthmadog. Photos: Michael Chapman*


**LOCOMOTIVE NO. 31** – an enigma amongst NSW Public Works Department locomotives. A small standard gauge 0-4-0ST, mentioned by Jim Longworth and Garry Allen in *Locomotives of the NSW PWD - part 1* in LR290. Its parentage is unknown but said to originate in the 1880s or 1890s. A number of NSW engineering works have been linked to this locomotive, none with any certainty. Its early history is obscure until in February 1913 it was put at work at the Manning Heads breakwater, repairing damage inflicted by severe gales in mid-July 1912. By early 1914 it was out of use until, in October 1915, it was shipped to Coffs Harbour for working the jetty which had been converted from 3 ft 6in gauge to 4 ft 8½ in. At some point it was shunted aside, replaced by a newer locomotive, and its boiler used as a steam supply. Our photo shows it slowly mouldering away in the PWD depôt, maybe around 1940. Readers will note the rather moth-eaten 'air-conditioned' cab and the interesting addition of corrugated iron affixed with fencing wire around the funnel. Was this a primitive smoke deflector or to hold the funnel together? No.31's fate is unknown – maybe a scrap drive during the Second World War saw it consigned to the furnaces. Thanks to Jon Henry for his valuable research. Photo: courtesy Coffs Collections mus07-2829, https://coffs.recollect.net.au/nodes/view/45488