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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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Imperial to metric conversions:

1 inch (in)	25.40 millimetres
1 foot (ft)	0.30 metre
1 yard (yd)	0.91 metre
1 chain	20.11 metres
1 mile	1.60 kilometres
1 ton	1.01 tonnes
1 pound (lb)	0.454 kilogram
1 acre	0.4 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

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Contents

Editorial

As 2019 comes to a close, it is worth reviewing the achievements of the LRRSA during the last 12 months. We have published six editions of this magazine with a wide variety of articles covering most states of Australia and kept our readers up to date with news of current industrial railways and various heritage and tourist railways. Also, as covered elsewhere in this edition, we have published a reprint of the book *Rails to Rubicon*, and there are two other books currently in the production process that will be published in the first half of next year. There are several other books that are nearing completion and will be published soon after.

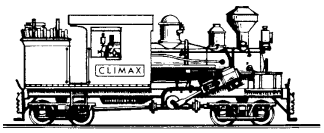
During the year the 2018 JLN Southern research award winner was announced and Mike McCarthy won it for his two excellent articles on the Torrumbarry Weir tramway in northern Victoria.

The Facebook page *Light Railways of Australia* continues to go from strength to strength and currently has over 1300 members. The page regularly features a wide range of historical and current day topics that are of great interest to our readers.

The Society has conducted many entertainment meetings for members in Adelaide, Melbourne, Sydney and Brisbane covering a wide range of interesting topics and a in Victoria and NSW field trips have been held to some fascinating places of light railway interest.

All in all, it has been a very good year, and 2020 promises to be even better. On behalf of the LRRSA Council, I would like to wish all of our members and readers a very Merry Christmas and all the very best for 2020. *Richard Warwick*

Front Cover: *Illawarra Light Railway Museum Society locomotive* Kiama *suitably decorated for Christmas celebrations taken at the station at Albion Park in December 2018. It was built at the Davenport Locomotive works in Iowa in the USA in 1917 with builders' number 1596. The locomotive worked at the Kiama quarries for many years. Photo: Brad Johns*



Light Railway Research Society of Australia Inc. A14384U
PO Box 21 Surrey Hills Vic 3127
www.lrrsa.org.au

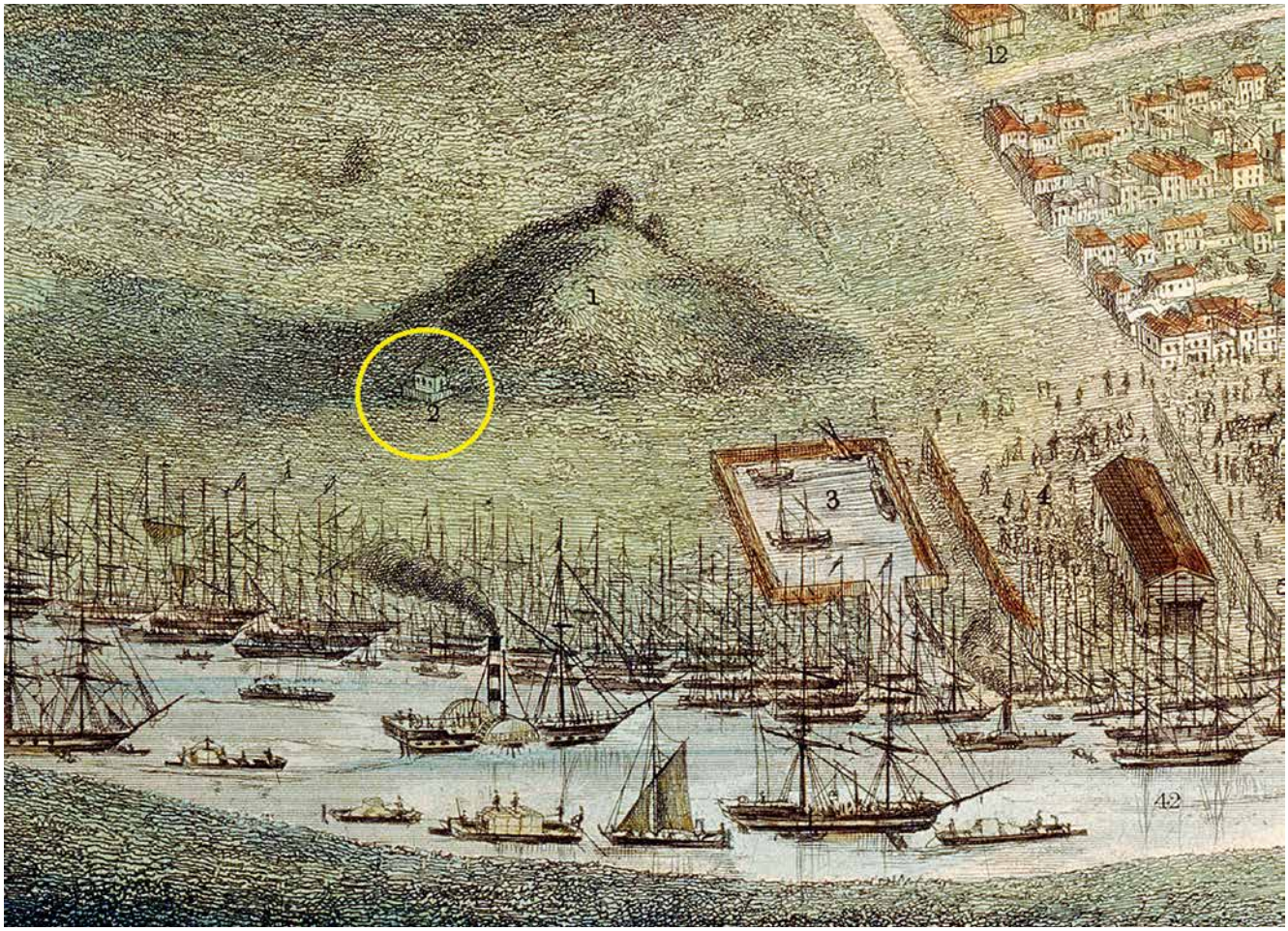
The Light Railway Research Society of Australia Inc. was formed in 1961 and caters for those interested in all facets of industrial, private, tourist and narrow gauge railways in this country and its offshore territories, past and present.

Members are actively involved in researching light railways in libraries and archives, interviewing knowledgeable first-hand participants and undertaking field work at industrial sites and in forests.

Light Railways is the official publication of the Society. Material submitted is subject to editing, and publication is at the discretion of the Editor.

Articles, letters and photographs of historical and current interest are welcome. Contributions should be double spaced if typed or written. Electronic formats accepted in the common standards.

Material is accepted for publication in *Light Railways* on the proviso that the Society has the right to reprint, with acknowledgement, any material published in Light Railways, or include this material in other Society publications.



This lithograph from 1855 depicts Victoria's first powder magazine (circled) nestled in the shadow of Batman's Hill, with the Yarra in the foreground and Spencer Street running towards the top of the image. While the magazine is in close proximity to buildings, it is obvious that the hill would give some protection from any accidental explosion, while proximity to the river reduces the distance gunpowder would have to be transported overland. *Nathanial Whittock, State Library of Victoria image H34147*

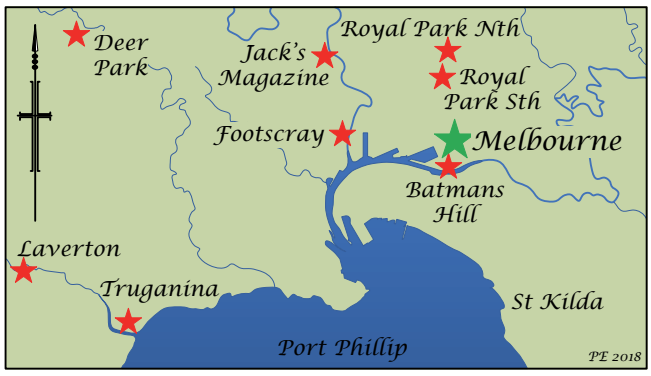
Sleeping on a volcano[1]

The gunpowder magazines of Melbourne and their tramways

by Peter S Evans

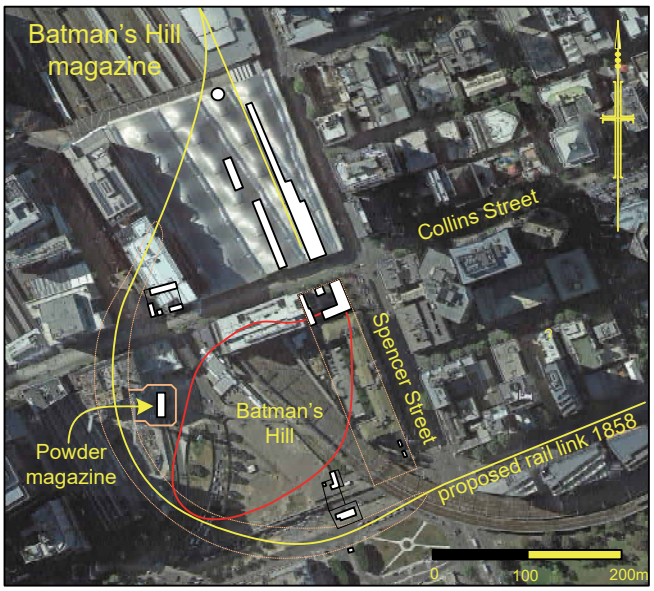
The explosive in common use when the first permanent settlers arrived in the Port Phillip district in 1834 was ordinary black gunpowder, all of it imported from England. Gunpowder consists of a mixture of one part of sulphur, one part of granulated charcoal, and six parts of saltpetre (potassium nitrate, KNO_3). Known from antiquity in China, it was formally recorded by English chemist Roger Bacon in *The Mirror of Alchemy* in 1266. Gunpowder manufacture in bulk commenced in England in 1570, during the reign of Elizabeth I. It was commonly dispatched and transported in wooden casks held together with copper hoops. Such casks should be well made to both contain the powder and prevent the ingress of water, but many were not, either from the use of unseasoned wood or by poor workmanship. Gunpowder that leaked could be ignited quite easily by a simple spark or exposure to a flame.[2]

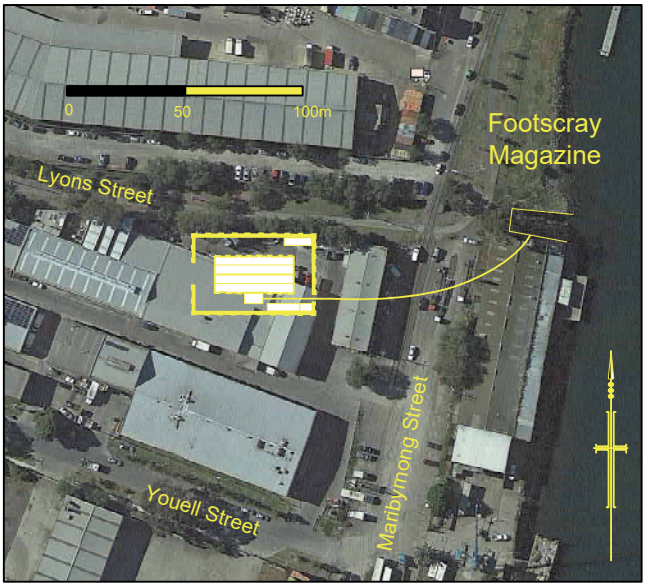
The storage of gunpowder requires an area with considerable buffer space around it in case an accident occurs. Such storages are commonly known as 'magazines'. Gunpowder magazines were historically designed as strong buildings with thick and heavily buttressed walls, but relatively weak roofs so that the blast from any accident was directed upwards. All metal in the buildings is normally copper or brass to prevent the generation of sparks, and strict rules are enforced for their operation including the wearing of 'magazine slippers' on the feet of every person entering. They are typically surrounded by earthen mounds ('traverses') further designed to direct any blast upwards. Most had an attached receiving room where barrels could be inspected as they arrived and repaired as necessary in an adjoining cooperage before storage in the magazine. In Victoria, the history of explosives magazines is a long one and, as the capital Melbourne grew, of having to be removed further and further from centres of population.



Batmans Hill, Footscray and Royal Park

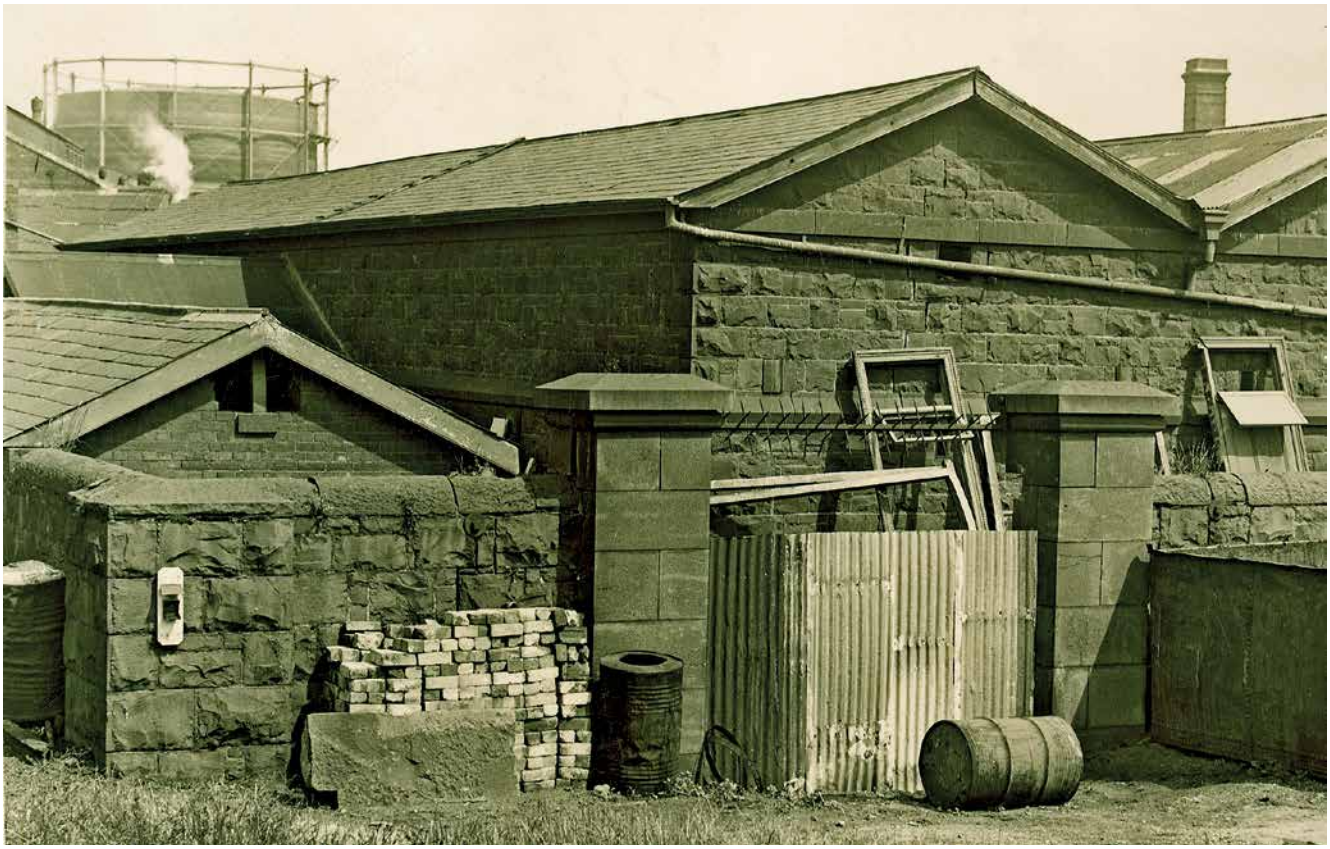
An early proposal for an official magazine in which to store gunpowder was made by gun maker and gun dealer John Blanch, but any expenditure was refused by the government



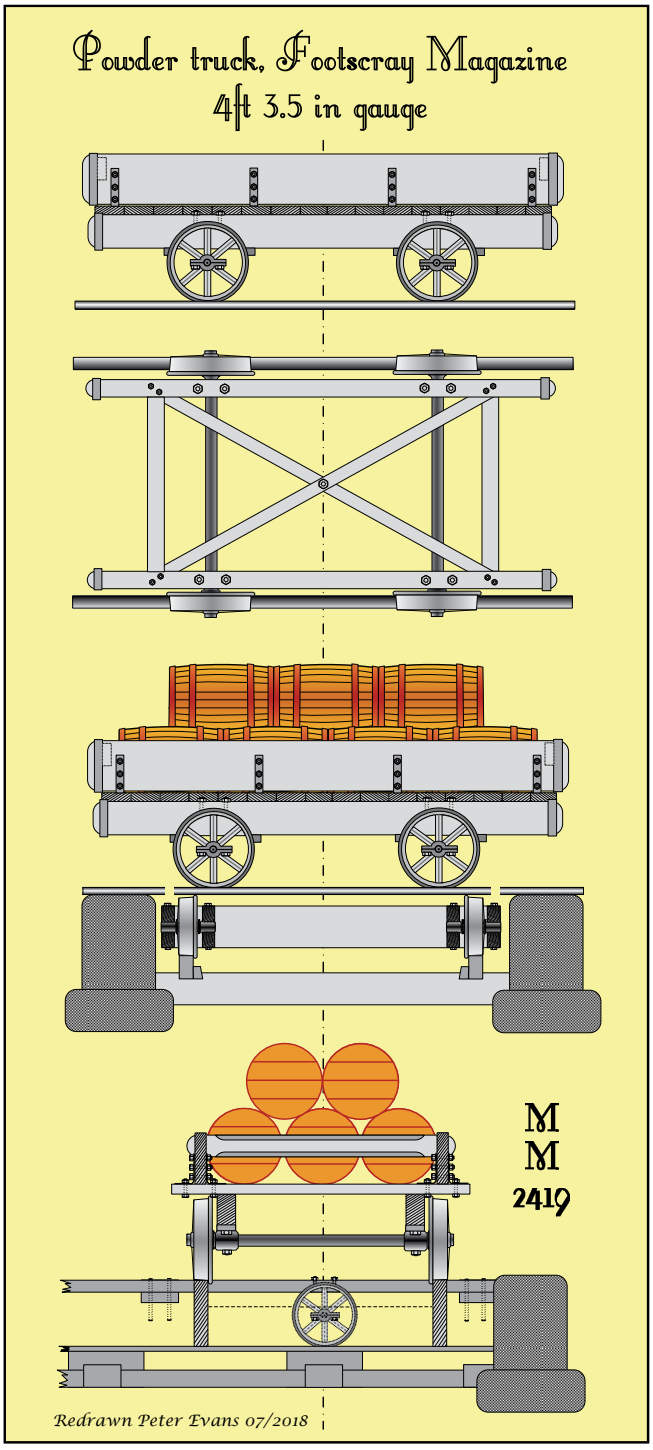


in Sydney until such a building was able to pay for itself through storage fees (the original 'Catch-22'?) Unfortunately, on 17 December 1839 Blanch's store of gunpowder, which was in his personal premises (the 'Sporting Emporium' in Market Street), exploded. It cost five lives, including those of himself, his wife, and their unborn child. Thereafter even small deliveries of gunpowder by ship were treated with the utmost caution by authorities as there was nowhere safe to keep it in bulk. Within the town itself, no more than 2cwt (224lbs) could be stored by any one person. With the growth of Melbourne on the rise, something had to be done and, in 1847, a small magazine was built on the western side of Batman's Hill at the western end of the city at a cost of £2000. It was 35 ft by 17 ft inside, contained 10,000 cubic feet of stonework, and could hold 3000 barrels of gunpowder. It opened on 22 January 1848, was regulated by Act of Parliament from Sydney, and George Sutherland was appointed the Port Phillip District's first official keeper of explosives at a salary of £100 per year.[3]

This small magazine served the fledgling city for several years but, with independence from NSW and the gold rushes in the early 1850s (and the expanded need for explosives for deep mining) something more was needed, and magazines were established at Geelong in 1854[4] and at Ballarat and Bendigo in 1857, other mining centres following suit. In 1841, the weight of gunpowder imported into the Port Phillip District had been less than half a ton. By 1860 the quantity of powder in the Batmans Hill magazine alone was 90 tons; it was bursting at the seams, and additional powder was being stored in hulks offshore in Port Phillip. Already, residents of the city were nervous about the possibility of an explosion.[5]

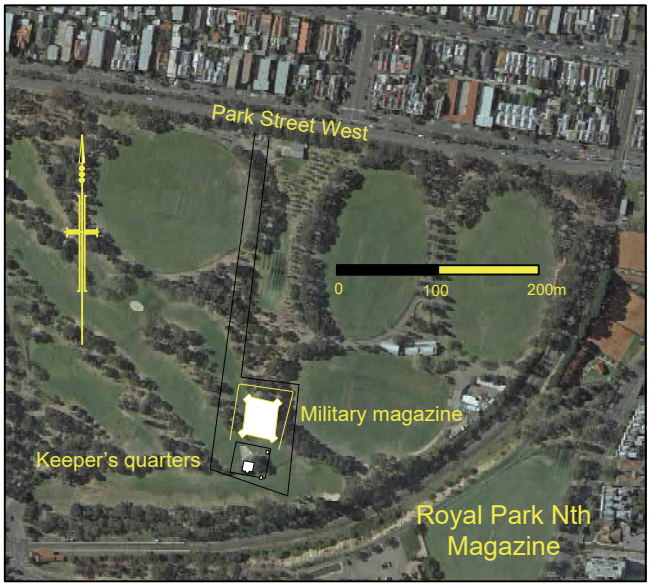


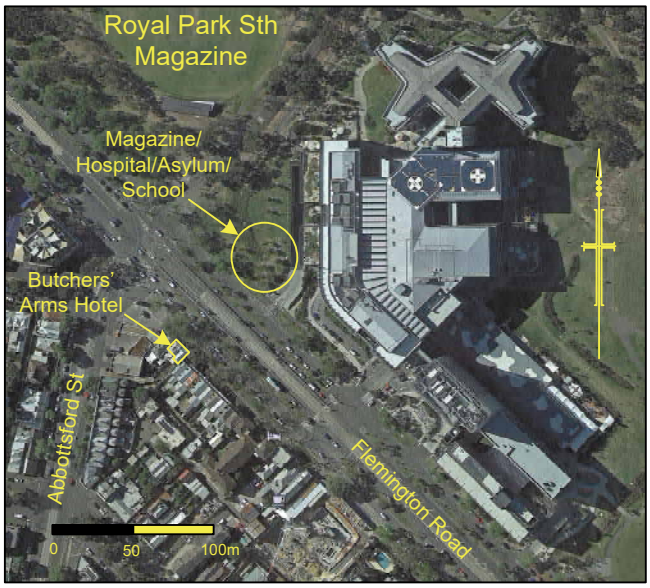
Footscray powder magazine in 1944, long after its intended use had ceased. Unknown photographer, State Library of Victoria image H13048



A new magazine was constructed at Footscray over the summer of 1858-1859. The site was poorly chosen, being subject to flooding.[6] The main building was constructed in bluestone, about 80 ft by 40 ft, and had a slate roof. It was surrounded by an external bluestone wall 132 ft by 84 ft.[7] this was the first of Victoria's magazines known to have had a tramway system, tenders for which were called in September 1859. The contract for the tramway and dock at the junction of the Saltwater and Yarra Rivers was awarded to J. Hutchen at a price of £800.[8] The tramway was laid with wooden rails, and the trucks were equipped with copper wheels.[9] (This followed contemporary practice in England, although vehicles with tyres of india-rubber running in wooden grooves had also been suggested there as an improvement).[10] Drawings show the rail gauge to be 4 ft 3½ inches, and the magazine to have incorporated a traverser.[11] It was intended that the Footscray facility would take over the storage of the bulk of Melbourne's stock of explosives.[12]

In late 1860 a contract was awarded to P S Sinclair for the construction of a powder magazine in the northern section of Royal Park for £2579. Royal Park was then pretty much a wilderness, save for preparations to establish a zoological gardens on the site of a government experimental farm in the north-western corner, and was little frequented. At the time, it must have seemed ideal for the storage of explosives. The magazine was intended primarily for military purposes, and its siting may have been chosen for its proximity to a practice range used by the North Melbourne Volunteer Rifles.[13] However, close by, the suburb of Brunswick was rapidly becoming established.





In October 1863 the Railway Department gave notice that the Batmans Hill magazine would have to be removed so that the hill could be levelled for the construction of new railway sheds. The Department would pay for the removal and re-erection of the magazine in a place chosen by the Department of Customs. Princes Park in Carlton received first consideration, but was considered too remote. The site eventually chosen was on the western side of Royal Park on the Flemington Road. The Trustees of the Park would allow this intrusion so long as the site was formed, fenced, and suitably planted.

Road to the Model Farm at Royal Park in 1871. At the time, this then remote location must have seemed an ideal location for a powder magazine. Painting by David Relph Drape, State Library of Victoria image H2012.150/2

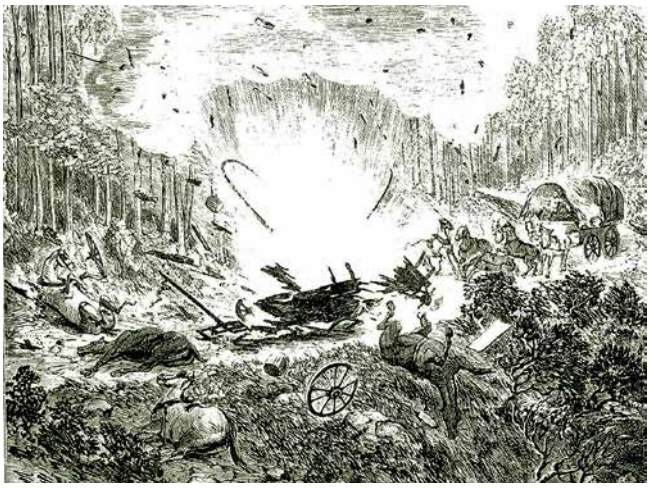
Re-erection was underway by February 1864.[14] The new site was directly opposite the Butchers' Arms Hotel, which would place the magazine somewhere in the forecourt of today's new Royal Children's Hospital.[15]

However, its intended use was strongly opposed by the residents of North Melbourne[16] and quickly revised, and it was converted first into a lunatic asylum and then an infectious diseases hospital, and appears to have been temporarily abandoned by the end of 1869 before being briefly used as a temporary classroom for the Errol Street school in 1873-1874, and as an 'industrial' school for abandoned or orphaned children from 1878.[17] An 1879 report described the school as:

> An Industrial School for young children waiting to be boarded out and for returned service girls; in charge of a matron. This building is altogether unsuitable. It was erected for a powder magazine. Accommodation for 50 at most. Sometimes crowded and sometimes only half full.[18]

It appears that it retained the latter use until 1890 and was dismantled in January 1891,[19] having given 43 years of continuous service in its many roles.

In 1872 the Victorian government set up a board of enquiry into the whole question of the storage of gunpowder and other explosives (which by this time included guncotton). At this time the northernmost Royal Park magazine was still in use, but only for the storage of ammunition and gunpowder for military purposes. However, it was full to bursting; even its military supervisor, Colonel W A D Anderson considered that it was 'merely a question of time when the magazine must blow up'.[20] The Board recommended certain modifications, including the installation of a tramway connecting the cooperage room and the magazine. In relation to the magazine at Footscray, flooding continued to be a problem and, to the east, sparks from the funnels of passing steamers posed a definite hazard while, to the west, a similar danger existed from the fires in a brick kiln. The overarching recommendation was for a new and larger site accessible both by rail and water.



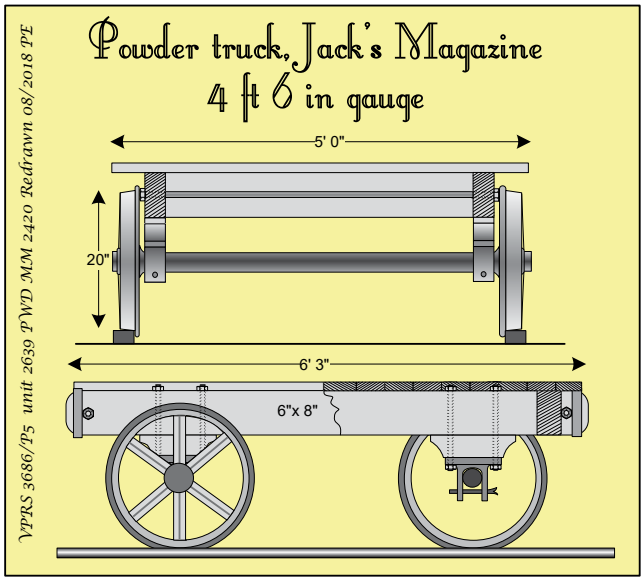
In April 1870 a wagon carrying 70 kegs of gunpowder totalling just under one ton exploded near Martins Gap on the road between Mansfield and Jamieson, completely destroying the wagon and killing carrier William Jewell and four of his seven horses. The heads of the kegs had several times worked loose on the rough roads and the powder had been leaking. If one ton of gunpowder could do this, what disaster could be wrought by the 180 tons representing the maximum capacity of the Footscray magazine, or even the 300 tons in the powder hulk in the Bay? Illustrated Australian News for Home Readers, *Saturday 16 April 1870, pages 73 and 78, State Library of Victoria image IAN23/04/70/73. See also PROV, VPRS 24/P0, unit 238, item 1870/333*

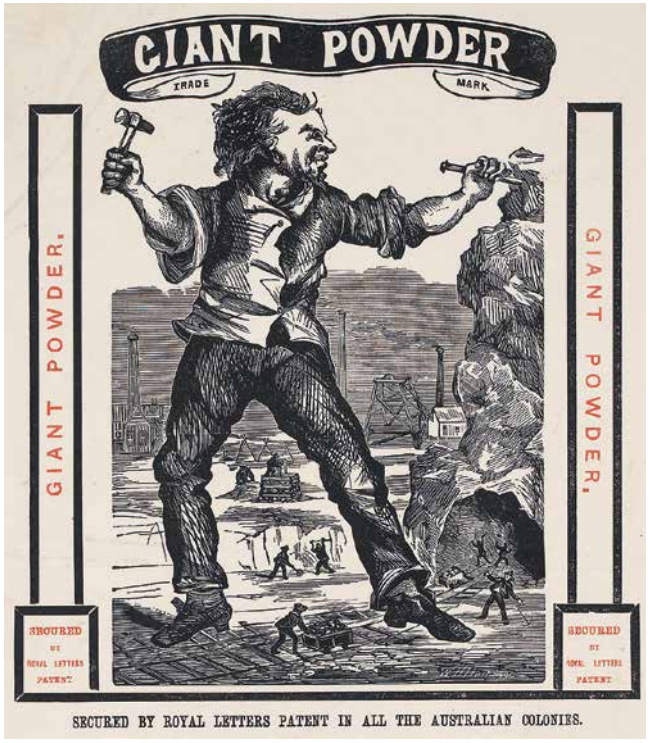
With the import of gunpowder approaching 500 tons per year, action was urgently required.[21]

At the same time new and more powerful explosives were already on the horizon. In July 1872 the first trial of dynamite was undertaken at a quarry in Richmond. One of the importers, Jones Scott & Company, began the manufacture of a similar nitroglycerine compound, Lithofracteur, at Deer Park (on the Ballarat Road well-outside Melbourne) in April 1876.[22] This would further complicate the magazine problem with a safety requirement to store it separately from gunpowder.

Saltwater (Maribyrnong) River: 'Jack's Magazine'

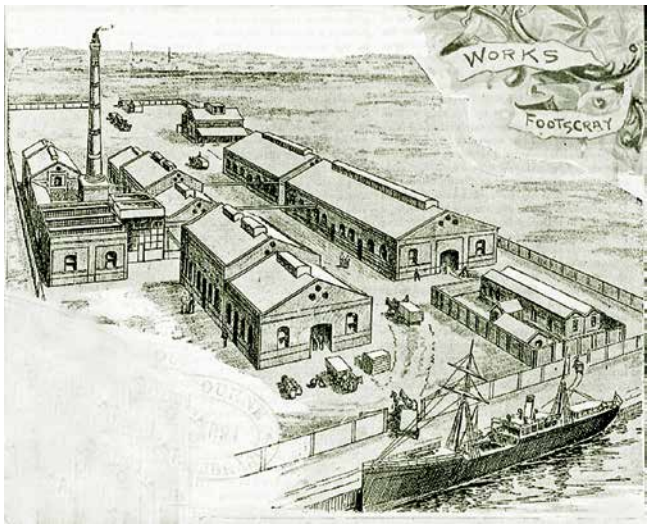
In August 1872 the government finally decided to take action, but had not yet settled on a site. One month later a choice was made – at Maribyrnong, further upstream on the Saltwater River from the existing Footscray magazine.[23] In April 1874 tenders were called to undertake the work.[24] It seems to have taken some time to find a contractor willing to take the job, but preparation of the site had started by August 1874 under the direction of contractor George Cornwell. The work was estimated to cost £40,000, but only £10,000 had been initially voted for by Parliament.[25] The site was admirably suited, with high basaltic banks to the west which would help contain any blast and, at the same time, provide material for the construction of the magazines and outer enclosing walls. A canal from the river would provide access for barges, leaving the magazine itself well-protected from flooding. Tramways were to be laid down for access to the magazines within the site, the rails to be of wood 4 in by 4 in and truck wheels to be of gun-metal. Drawings dated 1877 show a truck of 4 ft 6 in gauge and, with sleeper lengths of 7 ft in the specifications, it would seem this was the originally intended gauge. Curves on this gauge would necessarily have to be gentle, and five turntables with bluestone bases, deal frames and gunmetal rollers were specified to cope with this wider gauge.[26] However, measurements on site indicate that the gauge of 2 ft 6 in was that last used, and those tramways had been relaid with iron rails sometime in the past and the turntables dispensed with. Tramways were also used extensively for construction purposes.[27] By June 1876 most of the buildings were up and the earthen mounds completed. The sum of £50,000 had been expended and another £12,000 was wanted to finish the work and excavate the canal providing access.[28] In November 1877 the tender of William Tozer was accepted for two trucks and a 'landing cage'.[29] The all-up cost for the finished facility was £74,708 7s 0d.[30]





Trade mark registered in Victoria in September 1872. 'Giant Powder' (actually a form of Nobel's patented dynamite: nitro-glycerine infused into an inert earth binder) was manufactured in America and sold in Australia by sole agent Maxwell Reynolds of 35 Queen Street in Melbourne, and the illustration is clearly aimed at mining companies. In storage, the nitro-glycerine often 'sweated' out, rendering it dangerous to handle and transport, so it had to be kept separate from ordinary black powder (for which it would act as a trigger should the nitro-glycerine explode). Victorian Patents Office Copyright Collection, State Library of Victoria image H96.160/2476

By this time there was constant agitation to have the explosives removed from the magazines at Royal Park[31] and Footscray. The Royal Park problem was solved late in 1874 by transferring the stocks of powder and ammunition to the lightship *Empire* in Port Phillip and, in 1883, the military magazine and its boundary wall in Royal Park were removed.[32] (Today, the site is obliterated by a golf course).



Artist's impression of Mowlings candle factory, with the former Footscray powder magazine in the bottom right-hand corner. Part of one wall still stands today. Illustrated Australian News, *1 August 1894, page 16. State Library of Victoria image IAN01/08/94/16*

By 1 February 1878, the new powder magazine at Maribyrnong was ready for occupation and it was directed that all explosives be removed from Footscray. The Footscray magazine seems to have operated in a limited way for the storage of dynamite during 1878-1880,[33] and the buildings were advertised for sale in August 1881 and sold for £700.[34] They were later incorporated into George Mowling & Son's candle works as a storeroom for the finished product in 1894.[35] (All but one of the walls of the magazine were demolished in 1972).

The new site at Maribyrnong included two large bluestone gunpowder stores and, on the west side, an 'examining room' for powder barrels and an adjacent cooperage for the repair of any barrels found to be faulty. A powder siding was installed in the Victorian Railways' Sandhurst line in 1878 (near present-day West Footscray) for the dispatch of explosives to regional locations.[36] John Russell Keays was transferred from the Footscray magazine in April 1878 to become the first keeper at the new Maribyrnong magazine.[37] Initially, he did not have a lot of work, the importers preferring to store explosives on the hulks in the Bay, reducing their transport costs. (Powder hulks in Port Phillip were licensed from 1858 and, over the years, included the *Deborah*, *Eleutheria*, *Janet* (operated by Messrs Tope & Holten), *Sydney Griffiths*, *Elizabeth*, *Rosa Mary Jane*, the former convict hulk *Success*, and the government lightship *Empire*.[38] Some continued in use into the early 1900s). As a result, the new Maribyrnong magazine, costing £500 per year to maintain, was almost empty, containing a bare 200 tons.[39] By 1890 this situation had been reversed, with the magazine so full that no further explosives could be accepted.[40]

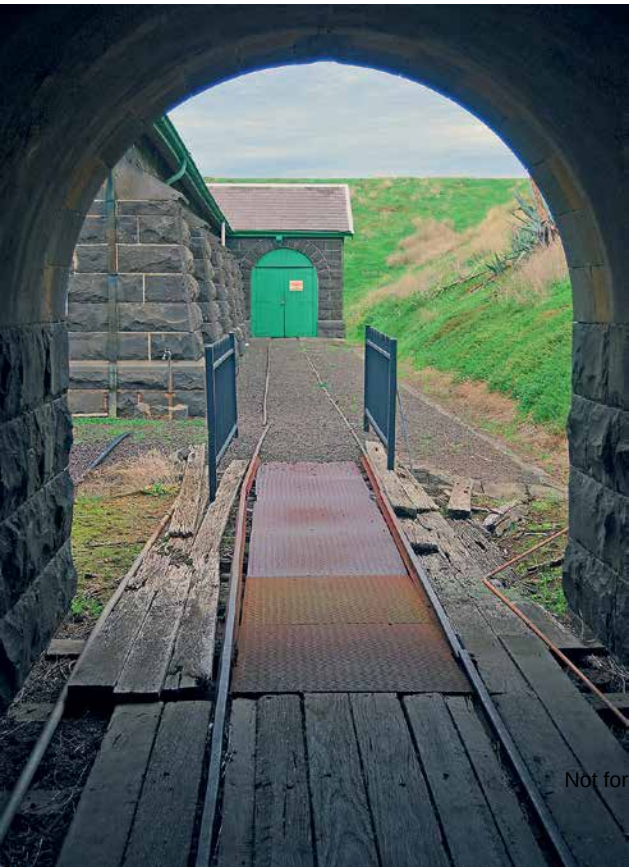
As one newspaper correspondent put it, Melburnians were 'Sleeping on a Volcano'.[41] In September 1890 an assessment of the situation revealed that there were over 600 tons of gunpowder, five million 'fulminate of mercury' detonators and 1.5 million rounds of ammunition crammed into the magazine. The site was a scant 3½ miles from central Melbourne, and experience with other magazines that had exploded overseas suggested that the destruction from any blast at Maribyrnong would reach at least that far. Accidental fires could be prevented by adherence to the regulations, but deliberate sabotage by dissidents could not be ruled out. The amount of powder stored in the magazine had to be reduced to 50 tons with all possible speed, either by distribution to localised military magazines at defensive positions around Port Phillip, or by transfer to commercial magazines in the country. Ideally, new magazines had to be built far removed from the centre of population.[42]

An explosion at the Colonial Ammunition Factory (less than a kilometre to the south east of the Maribyrnong magazine) on September 1897 (with three deaths resulting) hastened the fate of the magazine.[43] With Federation in 1901 and the removal of commercial explosives to a new magazine at Truganina, the Maribyrnong magazine was given over to the storage of ammunition and the less-dangerous cordite (which burnt rapidly in a fire rather than exploding) and, as a defence establishment, fell under the control of the new Commonwealth government. By August 1903, there was a maximum of 60 tons of cordite and eight million rounds of small arms ammunition stored at Maribyrnong.[44]

By 1904, the condition of the canal leading to the magazine sometimes did not allow the passage of barges, so an extra five shillings per ton was allowed for the transhipment of explosives to the magazine,[45] presumably by the tramway linking the wharf with the magazine. In 1909, tenders were called for a 'brick fuse store and tramway' at Maribyrnong. The tender was awarded to 'Wilson & Sly' for £345 3s 7d.[46] This was probably the first of the three brick cordite stores erected around the outer perimeter of the earth mounds on the eastern and southern sides, and may mark the point where the gauge of the tramway system was converted to 2 ft 6in.

Following the First World War, an appointment was made to the Maribyrnong magazine that remains important today. The man appointed was Walter 'Wally' Jack, who worked there from 1920 to 1943. Walter Jack was born in London on 9 October 1878 and was in Perth, WA, by 1914. On 17 September 1914 he enlisted in the AIF, giving his occupation as 'storeman' and his status as a widower with one son. Wally Jack was of fair complexion with blue eyes and brown hair.

Above: *One of the two main magazines on the Saltwater River making up part of the complex which is today known as 'Jack's Magazine.' Photo: Peter Evans.*
Right: *One of the tunnels used to access the magazines. Photo: Peter Evans.*
Below left: *View from the tunnel towards the entrance door to the magazine. Photo: Peter Evans.*
Below right: *The examining room at Jack's magazine, where shipments were inspected on arrival prior to storage in the magazines. Photo: Peter Evans*



The Clarkat locomotive in operation at Jack's Magazine. *Image courtesy Working Heritage via Rob Jones*

He trained at Seymour in Victoria and was quickly promoted to Warrant Officer in the Ordnance Department and then, in France, to Second Lieutenant in July 1916 to be Deputy Assistant Director of Ordnance Services, 3rd Division AIF. For this duty he was mentioned in dispatches by Sir Douglas Haig. In 1918 he was promoted to the rank of Major, awarded an OBE in 1919 and then returned to Australia, leaving the Army in March 1920 at the age of 42.[47] His transfer to civilian life capitalised on his ordnance experience, and he was appointed an assistant storeman in the Commonwealth Ordnance Branch by 1921, rising to oversee the Maribyrnong magazine, which retains his name today – 'Jack's magazine'. He retired on the eve of his 65th birthday on 8 October 1943 and died in 1955.[48]

The Clarkat locomotive preserved at the Puffing Billy Museum at Menzies Creek. *Photo: Peter Evans*

At least one small locomotive was used at Jack's Magazine in the years after 1945, a converted Clarkat tow tractor. The Clarkat tow tractor was introduced in 1927 by the Clark Equipment Company of Battle Creek, Michigan, USA, and remained in production until 1987. A Clarkat 'B', Serial No. CK 43-470

The Clarkat locomotive builder's plate. *Photo: Peter Evans*

(Heavy), was one of eleven machines shipped in April 1943 to the US Army Transportation Corps' Lathrop Holding & Re-consignment Depot in Lathrop, California. These vehicles most likely came to Australia shortly afterwards, as the Commonwealth of Australia was in possession of a number of these small vehicles by 1949.[49] Sometime after arrival in Victoria, it was converted for use on rails at Jack's Magazine, and today is preserved on the Puffing Billy Railway at Menzies Creek.

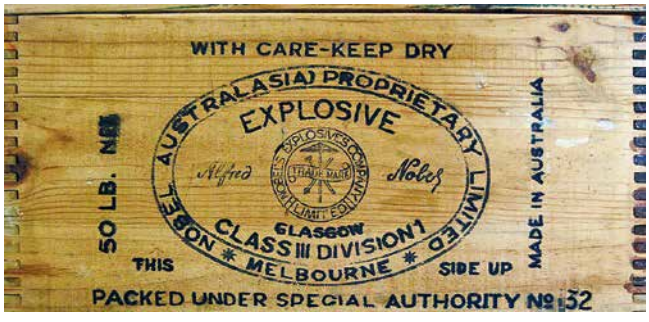
Photographs show it hauling a rake of at least three flat-top trucks of the type commonly in use with the Australian Army.

By the early 1990s Jack's Magazine (and the several other defence establishments at Maribyrnong) were obsolete, and the site of the magazine was handed back to the Victorian Government. The difficulty in repurposing it was recognised as early as 1880, when the Inspector-General of the Public Works Department, William Davidson stated: 'It is difficult to discover a use to which the magazine, which is a splendidly built bluestone structure, could with any advantage be put: I cannot think of one'.[50] Today, Working Heritage (a Victorian government body) is tackling just that problem. This has led to the lifting of the internal tramways in the magazines but, essentially, the site is still as last used, a living testament to Victoria's industrial and defence heritage.[51]

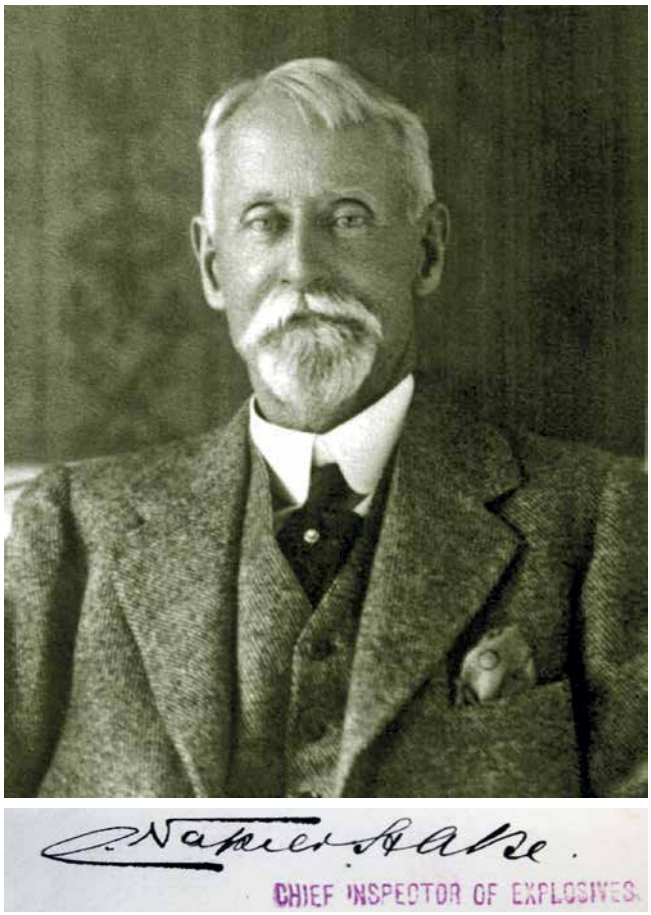
Truganina

By 1890 the quantity of explosives at the Maribyrnong magazine and the increasing number of houses in the area lead to agitation for the removal of the magazine elsewhere, and that removal to be combined with a system whereby all the explosives were not concentrated in a single spot but in smaller amounts widely distributed. A stipulation would be that explosives would no longer be transported through crowded suburban streets,[52] particularly since blasting explosives had largely transitioned from black powder to the more powerful nitroglycerine compounds like dynamite and gelignite.[53] A decision was made to open up a new site in a more remote location.[54] Overseeing the move would be newly-appointed inspector of explosives Cecil Napier Hake [1848-1924], chemist, explosives expert and a nephew of General Gordon of Khartoum fame. Hake arrived in the Colony in April 1890 and immediately set about his work.[55]

Access to both rail and sea transport was considered a distinct advantage for any new storage for explosives, and a suitable site convenient to both was located in the Parish of Truganina on the shores of Altona Bay in Melbourne's west. The first choice was the outlet of Skeleton Creek, not far from where the explosives hulk, the 333 ton former barque, *Sydney Griffiths*, was moored off Point Cook. A long siding from the railway at Laverton would lead west and south (down the present-day Point Cook Road) to a tramway interchange, with a tramway then heading east to the explosives reserve.[56] On further inspection, the ground was found to be too swampy and full of crab holes,[57] and attention was turned to an area a little further to the north. An explosives reserve of more than 500 acres was acquired under the *Powder Magazines Act 1896* which empowered the exchange of Crown lands for land previously alienated to George Chirnside in 1853. The *Powder Magazines Act* also authorised the construction of a tramway from the reserve west along the centre of Queen Street and north along the centre of Merton Street (then both surveyed but unmade),



Typical box constructed to hold dynamite. In the collection of the Truganina Explosives Reserve Preservation Society, photo by Peter Evans



Cecil Napier Hake, Victoria's Chief Inspector of Explosives from 1890 to 1907 (after the latter date he transferred to Commonwealth defence duties). He was the chief architect of the Trugunina Explosives Reserve. NAA, series B3756, control symbol 1891-425, barcode 965133

passing under the Melbourne—Geelong Railway via a separate underpass and a curve of eight chains, and terminating at a siding and receiving shed on the north side of the railway at Laverton station.[58] Work on the erection of magazines and fencing of the reserve seems to have started almost immediately, with most of the work being completed by August 1898. The intent was to license sites within the reserve to individual importing agents and relieve the government of much of the responsibility for the storage of explosives (with the added benefit of licence fees returning the interest on the expenditure involved in creating the reserve).[59] The tramway between the reserve and Laverton station was constructed by C D Hall in 1900 to a gauge of 2 ft at a cost of £905, with the 2000 ft-long jetty out into Altona Bay completed at around the same time.[60]

Twenty-eight licensed brick magazines, well-distributed, each capable of holding 20 tons of explosives (with a maximum 1000 tons distributed throughout the reserve) and surrounded by substantial earth mounds had been erected by December of 1900, and the process of moving existing stocks of explosives from Maribyrnong to Altona via lighters was underway. Rail access facilitated the arrival of fresh explosives to the reserve and their redistribution to country Victoria, while the jetty connection facilitated import and redistribution by sea. The reserve was so well laid-out that it was considered a model suitable for copy by the other colonies (on eve of Federation, soon to become States).[61]

Tramways were laid within the reserve to connect the jetty and Laverton station tramways with the individual magazines. J W Duncan laid these at a contract price of £194 10s 0d, with a further contract awarded to Zacharias Williams for constructing an additional 32 chains of connecting tramway.

In December 1900 a contract was let to Martin Sorenson of South Melbourne for the supply of 24 trucks for the explosives magazine, priced at a total of £424 9s 0d. A further eight trucks were ordered from the same source for a total of £338 15s 0d in 1906.[62]

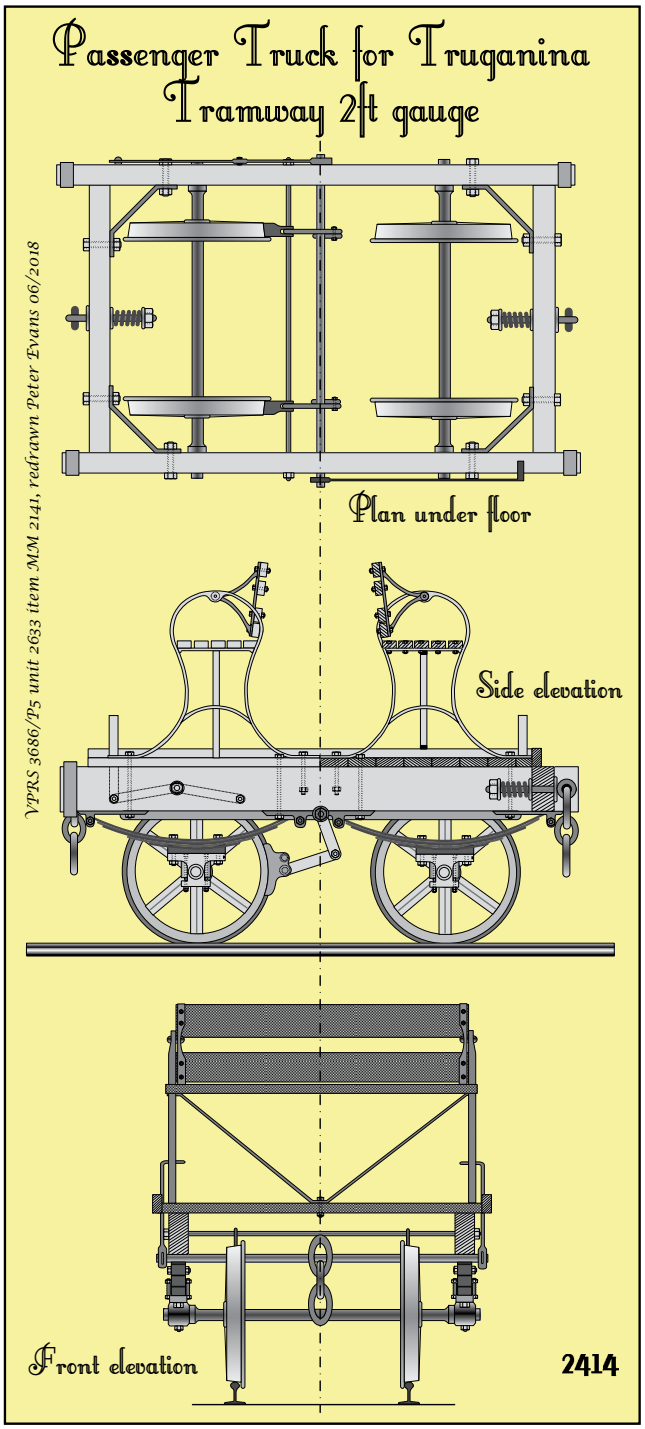
By March 1901, all was complete. An additional two magazines had been erected by the Department of Defence, each holding 35 tons of explosives, eventually becoming five along the main north-south line of the tramway. Photographs show rakes of wooden trucks hauled by horses on neatly laid-out connecting tramways running on low embankments.[63] Stock grazing within the reserve kept down the grass and hence the fire hazard although, in times of drought, stock climbing the blast mounds in search of grass caused an erosion problem. The revenue from licences to graze stock was credited to the Truganina Reserve.[64]

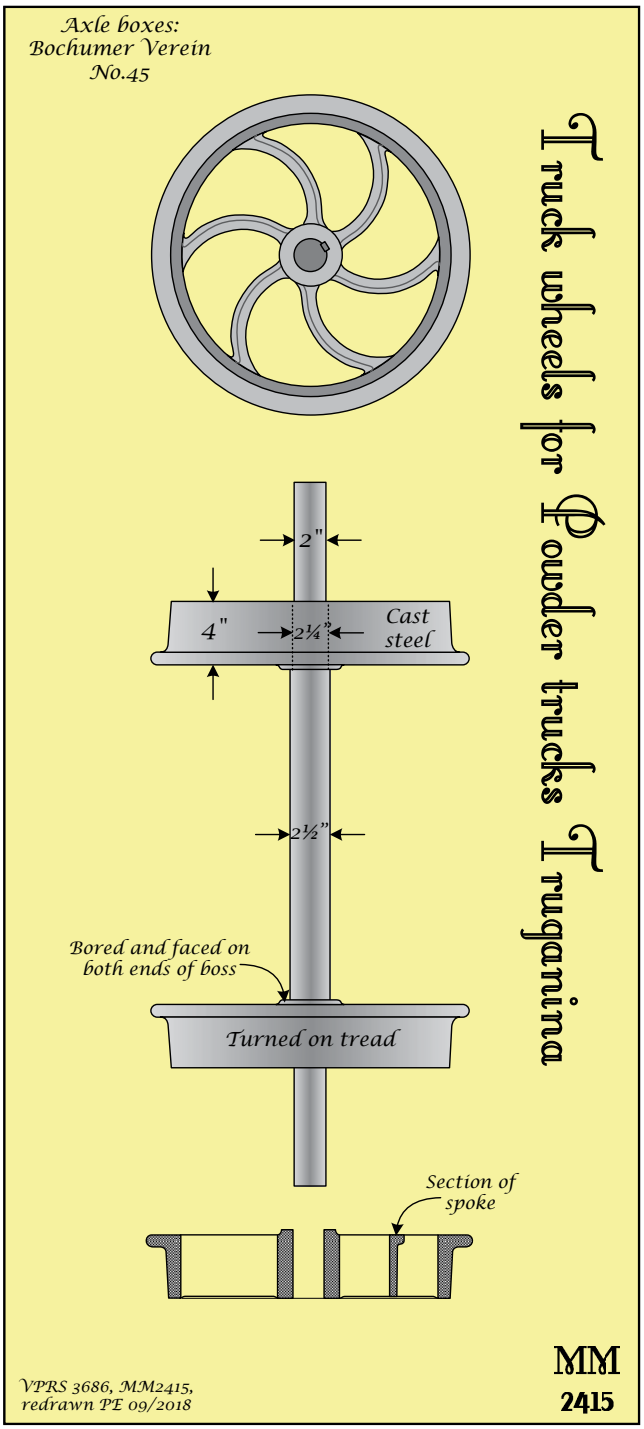
By 1904 the Reserve was still accident-free despite handling nearly two million pounds in weight of explosives each year.[65] A number of new tramways were built in 1914 when Nobel (Australasia) Pty Ltd increased the number of magazines it required on the site, and a further six magazines were acquired by that Company in 1936.[66]

By 1938 Nobel (Australasia) Pty Ltd controlled almost every one of the 54 magazines within the reserve. A government committee was set up to enquire as to the future of the reserve and whether or not it would be better served in private hands. At that time the motive power consisted of eight Clydesdale horses, all stabled on site and well-cared for. The tramway rolling stock consisted of the following trucks: eight of the originals built in 1901 (refurbished), six of those built in 1906, eight built in 1916, eight built in 1932, and eight built in 1937. There was also one 'tray drop truck' built at an unknown date. (A passenger truck was proposed but it is not known if it was ever built). In total, the trucks were valued at £1824. These trucks ran on seven miles of track (including the line to Laverton), all laid in a mixture of 20 lb, 30 lb, 40 lb, 45 lb, 50 lb and 60 lb/yd rails. Sleepers were of Red Gum, and the line was ballasted with crushed bluestone and shell grit. The tramway was valued at £6400 and the two bridges on the line at £140.[67]

The tramway between the explosives reserve and Laverton was slated for replacement by motor transport on a new road to be constructed as an unemployment relief scheme started in 1936.[68] During the early 1940s a special road, 'Explosives Road' (now the northern part of Merton Street), was constructed to

By 1938 Nobel controlled almost every magazine at the Truganina Reserve. Advertisement from the front cover of the Industrial Australian & Mining Standard, *Thursday 11 September 1924.*

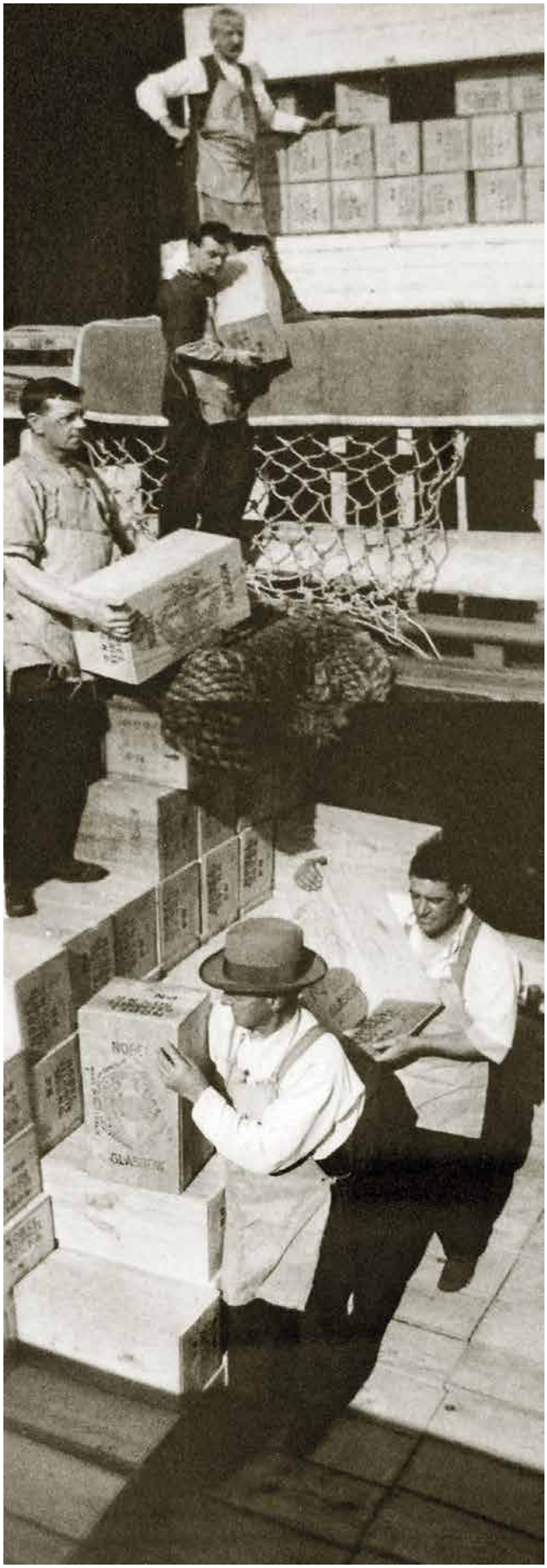




A lighter and pair of tugs at the Truganina jetty. *Image courtesy Truganina Explosives Reserve Preservation Society*

facilitate the delivery of explosives from the factories at Deer Park to the reserve. This road incorporated a bridge under the Geelong Road (Princes Highway), thus reducing the potential for unfortunate incidents. It passed under the Geelong railway via the western opening of the Laverton Creek bridge. As motor vehicles were not allowed into the Truganina reserve for obvious reasons, each (and there could be up to nine trucks per day), had to be unloaded manually and transhipped into tramway trucks for distribution to the magazines. Once at the magazines, they had to be re-stacked on benches and up to eight cases high. Continually handling the cases weighing 50 lb each led to tired arms, and leather aprons lasted a bare six months. Within the reserve, one horse usually hauled a rake of four trucks. The horses were driven with long reins but all knew their jobs well. They also provided the motive power for maintenance work. Parts of the site were very boggy, especially near the Cheetham saltworks, and one horse, 'Laddie', became bogged up to his belly and it took a day's work and the combined efforts of four or five men to winch him out. Horses were also used to transport materials to maintain the tramways although it was said that, before replacing a sleeper, you had to 'scrape the snakes out of the way'.[69]

It was eventually decided to retain the reserve in government hands (so as not to create a trade-inhibiting monopoly), especially as the reserve was running at a small profit and had a history of zero serious accidents. It was decided that the internal tramway system would be upgraded, but that the line to Laverton railway station would be closed permanently and replaced with motor trucks. One recommendation carried into effect was the purchase of buffer zones north and west of the reserve to provide additional protection in case of any accident, that to the west let to J Tyquin for grazing and that to the north leased to a golf club. A further buffer zone to the south was leased to Cheetham Salt.[70]



Manhandling explosives from a tramway truck on the jetty into a lighter. Note the leather aprons and soft overshoes worn by the men. Image courtesy Truganina Explosives Reserve Preservation Society

The Victorian Railways provided dedicated gunpowder vans for the transfer of explosives at the Laverton siding. This example is an early one (ex Geelong & Melbourne Railway) which lingered in service for decades, and is still in existence today (body only) near Echuca. LRRSA Archives

Tramway operations

Strict rules were in place for handling explosives on the tramway system. These were:

1. Explosives shall with all due dispatch be conveyed to and from the pier.
2. Trucks containing explosives shall, except where explosives are being placed in or taken out, have the doors closed and the pins at each end of the doors securely in place. When the doors of a truck are opened, both hooks shall be placed in position to hold the upper door.
3. A rake of trucks shall consist of not more than five trucks containing explosives; the maximum quantity in any one rake shall not exceed 10,000 lb. of commercial explosive.
4. In the transportation of explosives, detonators shall not be conveyed in the same rake of trucks as other explosives, provided that a truck containing detonators not exceeding 25,000, separated by at least one empty truck, may be attached to a rake proceeding to Laverton Railway Station; the truck containing the detonators to be attached near the north-west gate at a safe distance from the magazines and detached at a safe distance from the Railway Receiving Shed at Laverton. Service explosives shall not be transported in the same rake of trucks as other explosives.
5. Empty trucks shall give way to full ones — trucks containing explosives shall have preference. Drivers should keep a good look out to see their line is clear. Rakes of trucks travelling in the same direction shall keep not less than 50 yards apart. Trucks shall be clear of points before the points are moved, and the points shall be moved only by means of the lever. Branch line points shall be altered after use so that there is a clear course for traffic on main lines. Trucks containing explosives shall not be run onto or out of branch lines leading to the magazine unless the point lever is held in position by a man other than the driver.

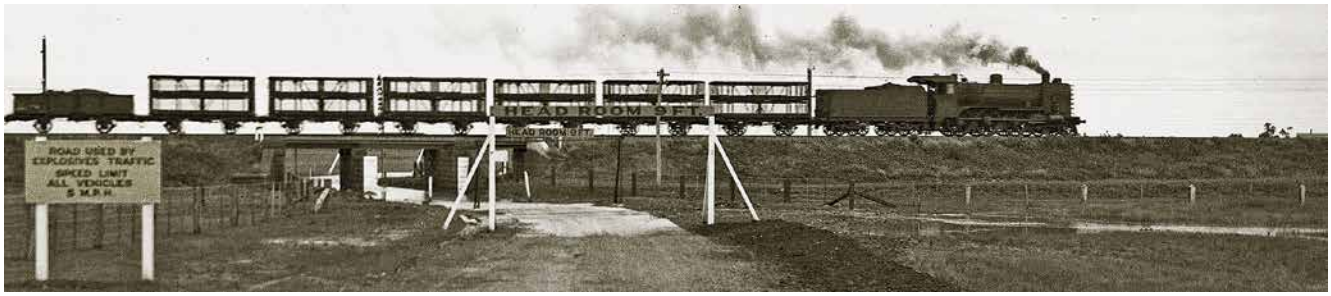
The rules at the railway shed at Laverton were equally stringent:

1. No matches, lighters, pipes, tobacco, cigarettes, or any other article liable to cause fire or explosion shall be allowed in or in close proximity to the Receiving Shed.
2. Overshoes shall be worn by all persons in a Powder Van or on the platform of the Receiving Shed.
3. The platform shall be swept clean before work is commenced, shall be kept clean by frequent sweeping, and shall be swept clean on completion of the work.

Above: *A horse hauling a rake of four trucks on the internal tramways of the Truganina Explosives Reserve. Note the number '45' on the lead truck.* *Photo: John Buckland, LRRSA Archives*

Below: *What is likely the same four trucks in the preceding image have arrived at the jetty. The loop line on the jetty was added circa 1954 to increase the number of rakes of trucks able to be at the head of the jetty at any one time.* *Photo: John Buckland, LRRSA Archives*

Above: *At the Laverton end of the line, the Truganina tramway passed under the Geelong – Melbourne railway. In this image looking north, the tramway was provided with a separate opening on the left. The two openings to the right were subsequently converted into a roadway. Motorists should not be surprised when it floods, as the roadway is actually the bed of Laverton Creek. PROV,VPRS 17684/P3, item 38_00455*
Below: *In this image of the same location some years later and looking south, an A2 hurries past with a train of empty sheep wagons. The road is now used by explosives traffic, and the former tramway formation to Laverton station can be seen just below the locomotive. PROV,VPRS 17684/P3, item 39_00084*



4. Empty cylinders and their fittings shall be carefully examined on arrival to ensure that no explosives and no objectionable matter are within them, and after such examination shall be placed neatly on their sides upon the racks.
5. Packages shall be carried from place to place and at all times carefully handled.
6. Packages with any exposed iron, dirt, grit, or any other objectionable matter on them shall not be placed in cylinders or railway vans.
7. Packages containing knot holes or in any way damaged shall not be placed in cylinders or railway vans.
8. Detonators shall not be handled in the shed whilst any other explosive is present.
9. Cylinders and their fittings shall be carefully examined and any dirt, grit or other objectionable matter removed, before packages of explosives are placed in them.
10. Cylinders or their fittings in any way damaged or defective shall not be used for the dispatch of explosives.
11. Packages of explosives shall be properly secured in cylinders by the fittings supplied for this purpose.
12. Explosives vans to be swept clean before explosives are placed in them.
13. Packages shall be well and securely stowed in the vans to prevent movement and the possibility of damage.
14. Explosives vans shall be kept locked at all times except when packages are being placed in or removed therefrom.
15. The shed and its immediate vicinity shall be kept clean and free from any rubbish, dry grass, papers, or other inflammable material
16. Explosives limit 10,000 lbs, personnel limit four men, exclusive of overseer.

Looking east along the final section of the Truganina Tramway just before it was lifted. This section of tramway formation is now a bike path. PROV,VPRS 17684/P3, item 28_00077

Closure

By the early 1950s the post-war housing boom began encroaching towards the explosives reserve, and a new site was found at a more remote location further west at Point Wilson. On 11 May 1962 the last shipment was made from the Truganina Reserve (although the tramways and spur lines adjacent to the northernmost magazines were to be retained) and, on 25 May 1962, the first shipment was made from the new Commonwealth facility at Point Wilson. First thoughts for the Truganina reserve were for industrial activities, but a proposal for a pigment plant by ICIANZ in 1960 and for a youth correctional centre in 1964 failed to get approval from the Altona Council. Most of the land at the Truganina explosive reserve was sold-off or otherwise disposed of, only 16 hectares being retained for government use (making up the present Truganina Reserve). The retained site has a high

The Truganina Explosive Reserves keeper's house in 2018.
Photo: Peter Evans

degree of archaeological, geological, historic, floral and faunal significance and, since 2000, has been managed by the Hobsons Bay Council.[71]

It appears that the infrastructure within the diminished reserve did not change substantially for some years after closure as, in 1969, members of the LRRSA found six magazines still in use and were able to run an impromptu 'train' using a flat wagon. Most of the tramway formations have since disappeared over time as the sandy soil on which they were built is continually moving. Very little of the built structures survive apart from the Keeper and Assistant Keeper's houses (with attendant outbuildings), a detonator store and a couple of testing huts. Only one of the magazine mounds survives. A number of box-type wagons from the reserve were placed on the foreshore adjacent to the jetty around August 1968.

Truganina trucks 'preserved' on the Altona foreshore in the 1980s.
Photo: Peter Evans

They remained there until early 1990 when, because of their dilapidated condition, they were given to a machinery collector in Belgrave South on the condition that he restore one and return it as a museum piece. That never happened and, on the sale of his property, the rotting bodies were discarded and the majority of the ironwork sold for scrap. Fortunately, enough ironwork was salvaged to enable the construction of one replica truck, which is now stored undercover on the Truganina Reserve.[72]

With the wagons gone, the only substantial remnant of the explosives tramway system is on the south side of the current Truganina Reserve in the form of a curved concrete bridge with rails intact. There would seem to be no reason to construct such a substantial structure where a low earthen

Remains of a detonator store at Truganina operated by the Victorian Department of Ports & Harbours, and one of the few intact explosives structures on the Truganina Reserve today. One of the requirements for detonators would have been the blasting of reefs across 'The Rip' at the entrance to Port Phillip, a task that went on for more than fifty years and was only finished in the mid-1930s. (For details see The Argus*, Saturday 22 October 1932, page 6).* *Photo: Peter Evans*

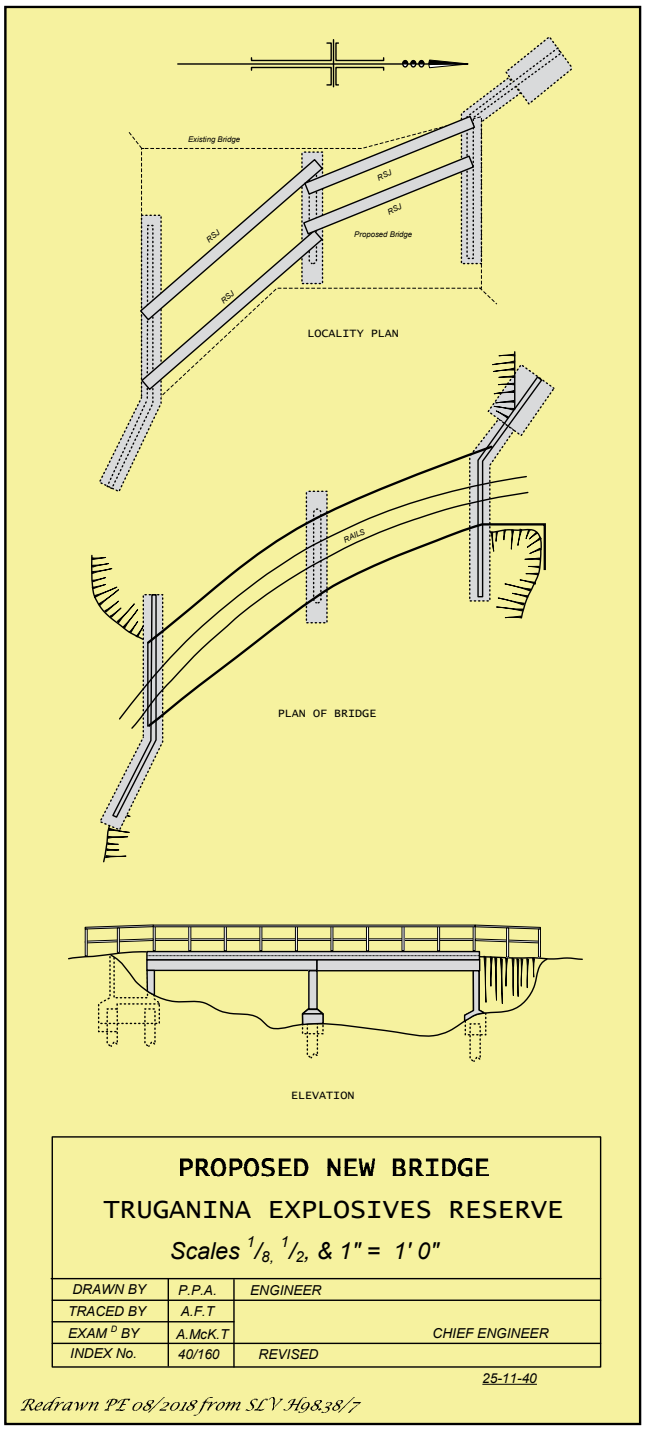
The sole surviving mound once surrounding a magazine at Truganina.
Photo: Peter Evans

The only remains of the once-lengthy Truganina jetty in 2018.
Photo: Peter Evans

embankment would have been adequate. A technical drawing for a reinforced concrete bridge intended for the Truganina Explosives Reserve dated November 1940 (and almost exactly similar to the existing bridge) can be found in the State Library of Victoria collection, image H98.38/7. This drawing shows that the bridge was erected using the supporting piling of an earlier timber bridge as a foundation,[73] and once had some form of channel underneath it. A small amount of cartographical detective work was required to discover why.

Using Queen Street with its distinctive bend, the positions of the concrete tramway bridge and remnants of the jetty as 'anchor points', aerial photography from 1946 and 1947[74] was

Above and right: *The sole remaining tangible evidence of the Truganina Tramway on the southern side of the Reserve. Both Photos: Peter Evans*



overlaid on a Google Earth image to delineate the original tramway system. This revealed the original purpose of the bridge — crossing the original outfall of Laverton Creek, now filled in almost to bridge level. Originally, Laverton Creek terminated at the extensive Truganina swamp, with only a small overflow running through the explosives reserve (and underneath the concrete tramway bridge). When operations in the reserve ceased in 1962, a wide channel was dug to drain the swamp as a flood mitigation measure. This has cut right through the heart of the original reserve, and much of the land south and west of the channel has been heavily disturbed and a significant area converted into parkland, involving major earthworks and mound-building. The least disturbed area is in a lightly forested patch on the seaward side, and a search revealed many bricks, lumps of concrete, remnants of shaped bluestone, and iron debris, but no trace of any of the tramway system.

Of the tramway along Victoria and Merton Street there is likewise no sign, although remnants of a low embankment at the curve at the north-east corner of those streets were reported during recent roadworks. The tramway underpass adjacent to and just west of the road-under-rail bridge at Merton Street has been filled-in, but may still exist beneath the railway formation. Construction of the standard gauge line and duplication of the broad gauge railways plus earthworks for the Princes Freeway overbridge have destroyed further remnants near Laverton Station, although a section of tramway embankment just north of the railway and west of Merton Street probably underlies the bike path.

Acknowledgement

The writer acknowledges a debt of gratitude to Colin Harvey for assistance with finding references to the gunpowder magazines of Melbourne and for suggestions for the improvement of the text, and to the Truganina Explosives Reserve Preservation Society for access to the reserve and for photographs.

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3. *Port Phillip Gazette*, Saturday 27 October 1838, page 1; *Port Phillip Patriot & Melbourne Advertiser*, Monday 16 December 1839, page 4; Monday 23 December 1839, page 3; Saturday 28 August 1847, page 2; *Geelong Advertiser*, Tuesday 18 July 1848, page 5; PROV, VPRS 19/P1, item bundle 1842/0150, item bundle 1845/1955, and item bundle 1851/1264; Finn, E. (1888). *The Chronicles of Early Melbourne: Historical, Anecdotal and Personal by Garryowen, 1835-1852*. Fergusson & Mitchel, Melbourne, Volume I pages 36, 38, 436 and 437.
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6. *The Argus*, Friday 3 June 1859, page 4.
7. *The Argus*, Tuesday 2 August 1881, page 2; *The Age*, Tuesday 4 September 1888, page 2.
8. *The Argus*, Friday 30 September 1859, page 3; *The Age*, Saturday 29 October 1859, page 5.
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10. *The Engineer*, Friday 14 October 1864, page 239.
11. Public Works Department drawing MM 2149.
12. *The Age*, Wednesday 3 October 1860, page 4.
13. *VGG*, Gazette 135, Tuesday 23 October 1860, page 1997; PROV, VPRS 242/P0, unit 29, item 60/A/3073.
14. PROV, VPRS 3253/P0, unit 197, item 116.
15. The Butchers' Arms hotel was established on the south-eastern corner of Flemington Road and Abbotsford Street in 1859, with Stephen Toogood its licensee in 1861. By 1871 the hotel had changed its name to the Victoria Royal Park (there were subsequently other Butchers' Arms Hotels in North Melbourne, in Queensberry Street and Blackwood Street). For details of the hotel see *The Age*, Wednesday 16 October 1861, page 6; *The Argus*, Saturday 1 July 1871, page 5; *The Herald*, Saturday 23 September 1871, page 3; Monday 6 March 1876, page 3; MMBW detail plan 754 & 755, dated 1896, and PROV, VPRS 8159/P2, item B, record 08159-p0001-000001-320. For other mentions of the transplanted magazine see also *The Herald*, Monday 17 November 1862, page 6; *The Age*, Wednesday 2 March 1864, page 5; *The Argus*, Tuesday 16 February 1864, page 6; Thursday 20 October 1864, page 5; Wednesday 4 October 1871, page 6.
16. PROV, VPRS 3253/P0, unit 229, item 110. It is not to be thought that they were alone in their concerns: much the same debate about safety was being conducted in England around the same time. See *The Engineer*, Friday 4 August 1865, page 72.
17. *Leader*, Saturday 23 January 1869, page 18; *The Herald*, Thursday 16 December 1869, page 3; *The Argus*, Saturday 8 June 1878, page 9; Mattingly, H. E. (1934). *Errol Street State School No.1402: Diamond Jubilee History 1874-1934, North Melbourne*. No publisher given, pages 9 and 16.
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21. *VPP* (1872) op cit, passim; PROV, VPRS 975/P2, unit 38, letter 72/2155; VPRS 969/P0, unit 7, letters 1671 and 1764.
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26. PROV, VPRS 3686/P5, unit 2639, PWD drawing MM 2420; VPRS 0967/P0, unit 24, Saltwater River Magazine specifications.
27. *The Age*, Wednesday 23 September 1874, page 3; Wednesday 13 January 1875, page 3; *The Argus*, Wednesday 13 January 1875, page 6.
28. *The Age*, Wednesday 14 June 1876, page 2.
29. *The Argus*, Friday 16 November 1877, page 5.
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31. PROV, VPRS 3253/P0, unit 341, item 420; unit 342, item, 474.
32. *The Argus*, Tuesday 22 December 1874, page 9; *The Age*, Saturday 9 January 1875, page 8; Saturday 20 October 1883, page 4; Friday 2 November 1883, page 7.
33. *The Argus*, Friday 1 February 1878, page 3; *VGG*, Gazette 106, Friday 10 September 1880, page 2269; PROV, VPRS 972/P1, item 1, record 12; VPRS 3253/P0, unit 537, file 85.
34. *The Argus*, Tuesday 2 August 1881, page 2; Saturday 11 February 1882, page 10; PROV, VPRS 7934/P1, unit 28, letter D81/61.
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65. *VPP, Explosives Act 1890, Annual Report for the year 1904*, page 3.
66. PROV, VPRS 5357/P0, unit 4695, item MISC948; unit 3839, item G34008.
67. PROV, VPRS 5357/P0, unit 4965, item C85884.
68. *Weekly Times*, Saturday 19 December 1936, page 13.
69. Altona Library, Truganina Oral History collection, call Number TBK 994.51 GRA, recorded July 2000 by Bronwen Gray. Interviews with Doug & Noel Grant (tape 1) and Jim Melmoth (tape 5). See also *The Herald*, Thursday 4 June 1953, page 16.
70. PROV, VPRS 242/P0, unit 279, item C85884.
71. PROV, VPRS 242/P0, unit 279, item C85884; VPRS 242/P0, unit 1011, item C99668; Pamphlet, *Truganina Explosives Reserve*, issued by Hobsons Bay Council in 2000.
72. *Light Railways* 27, page 30; *Light Railway News* 77, page 19; *Light Railway News* 84, page 14; personal observation by the writer. From numbers painted on the wagons there must have been at least 45 of them at one point.
73. Probably that erected by T. Coate in 1899 under a contract worth £110 5s 3d – see *VGG*, Gazette 12, Friday 2 February 1899, page 457.
74. Photomap Melbourne, Zone 7, map 848 (dated 1948), Central Plan Office negative 16679.

Rockhampton Harbour Board locomotive

by John Browning

Rockhampton in central Queensland was established on the bank of the Fitzroy River, making it a port, but the lengthy twisting, shifting, shallow course of the river between the city and sea made navigation difficult. As trade increased and larger vessels were introduced, a Harbour Board was set up in 1896 and from 1900 it embarked on an expensive exercise in futility, implementing a combination of dredging and training wall construction that resulted in no navigational improvement of any note.

In April 1905, the contractor G.C. Willcocks was engaged to construct the Shoal Island training wall for the Harbour Board.[1] Contemporary newspaper reports tell us that the contractor had a locomotive in use at Thompson's Point by October to assist with the training wall construction.[2]

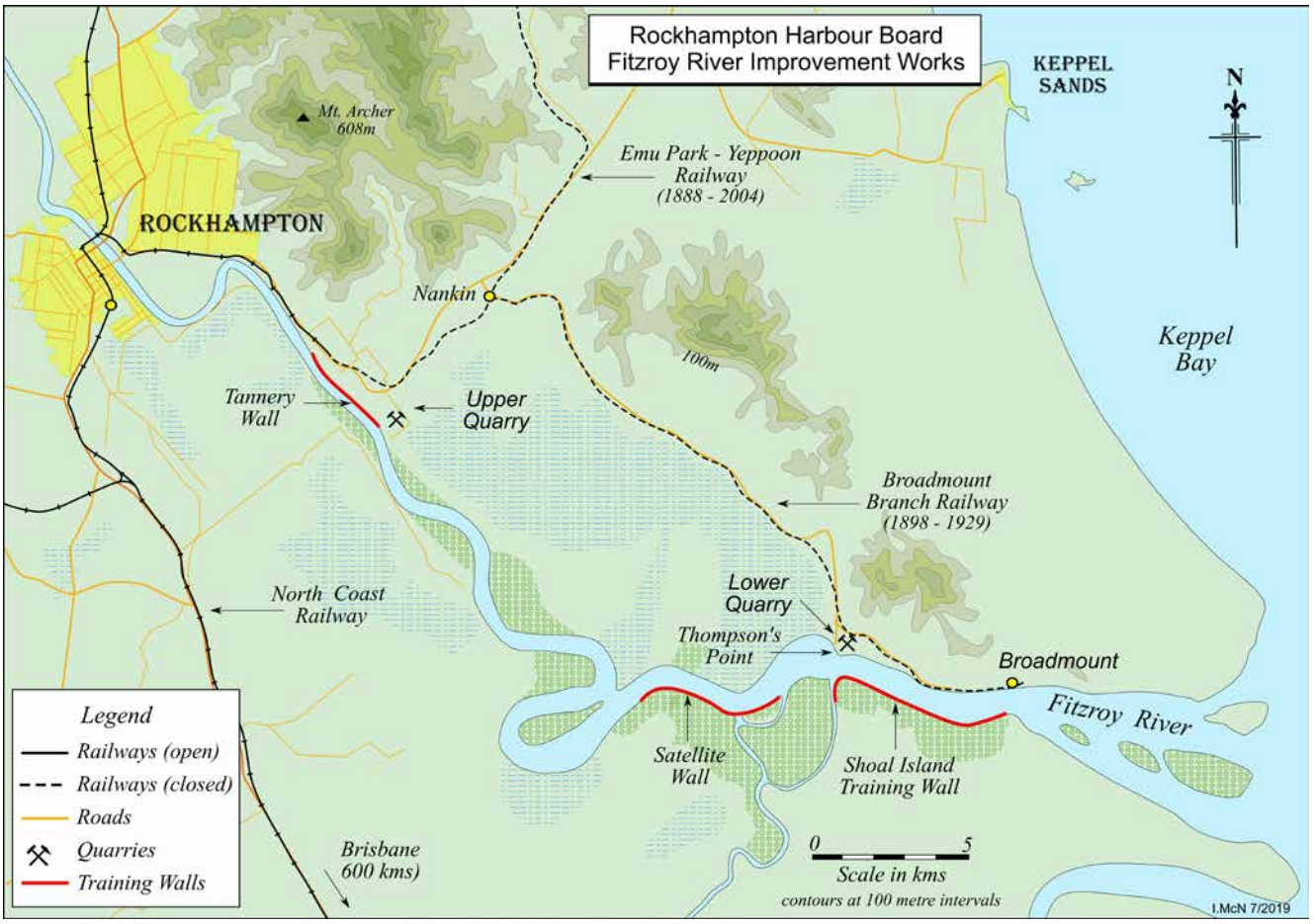
Thompson's Point was on the north bank of the Fitzroy about 35 kilometres downstream from Rockhampton, and the locomotive was used to haul stone from what was known as the "lower quarry".

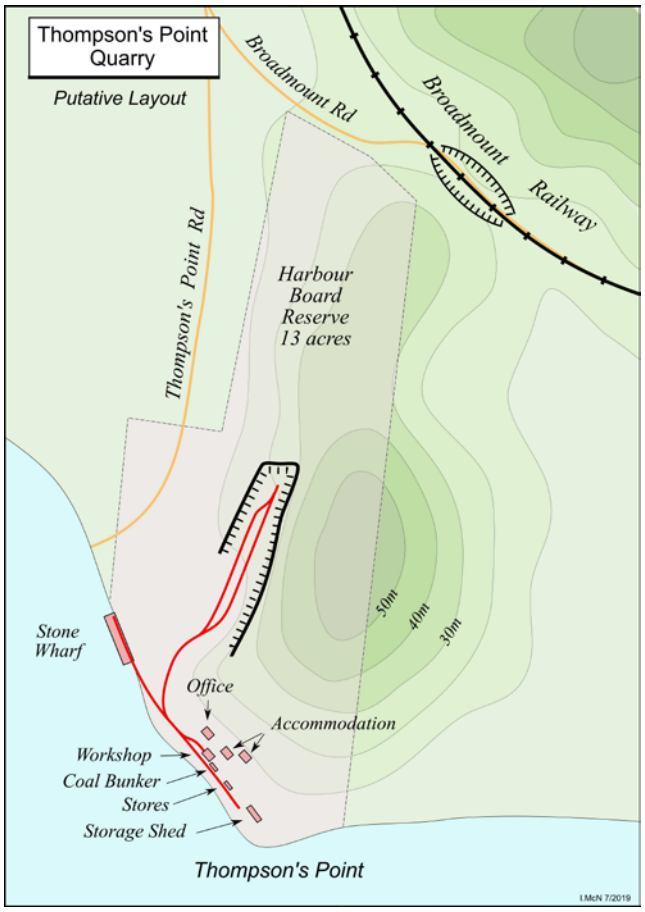
Thompson's Point was a busy place, with around 100 men working for the contractor there. Most of them lived in tents or in crude dwellings with walls made from corn sacks, known as "hash houses".[3] Stone was taken across the river by punt to be used in the construction of the Shoal Island training wall, planned to be almost three miles in length.[4] A siding had previously been put in on the QR Broadmount branch at Thompson's Point to make a temporary connection to a river wharf in 1898, but there was no later rail connection between QR and the quarry.[5]

Things soon went sour between the Harbour Board and the contractor, with legal action under way by February 1906. As part of a settlement, the works and associated plant were taken over by the Board in March 1906.[6] The Board determined to continue training wall construction using direct labour.[7] The locomotive was registered with the government under the Factories & Shops Act in late 1907, registration number 113.[8] Maintenance was carried out with the help of local engineers Burns & Twigg.[9]

In April 1908, the locomotive was moved by river punt to the 'upper quarry' near Nerimbera, about 18 kilometres closer to Rockhampton.[10] The quarry was close to the river bank and a 65-ton Bucyrus steam shovel on loan from the Mount Morgan Gold-mining Company was used for excavation. Stone for constructing the Tannery wall, upstream on the north bank, was loaded into punts at two wharves connected by rail to the quarry.[11] Work at the upper quarry was terminated in July 1910[12] and by September the locomotive was back working at Thompson's Point in concert with a Ruston Proctor steam shovel purchased from the Araluen Steam Shovel Gold-Mining Company in NSW, hauling stone for the Shoal Island training wall and for the Satellite wall upstream.[13] It was still present in April 1913 when the quarry closed, although working with reduced boiler pressure.[14] Curiously, an estimate had been requested for the construction of a locomotive shed for it only a month before.[15] It was lying at Thompson's Point with a condemned boiler in early 1915.[16] In May 1916, it was reported that the boiler was being broken up for scrap.[17]

Having consulted John Armstrong's Volume 1 of "*Locomotives in the Tropics*", and failing to find any suitable locomotive listed as sold that might have been available for this construction work, my initial idea was that Willcocks must have brought a standard gauge locomotive from NSW for this job.



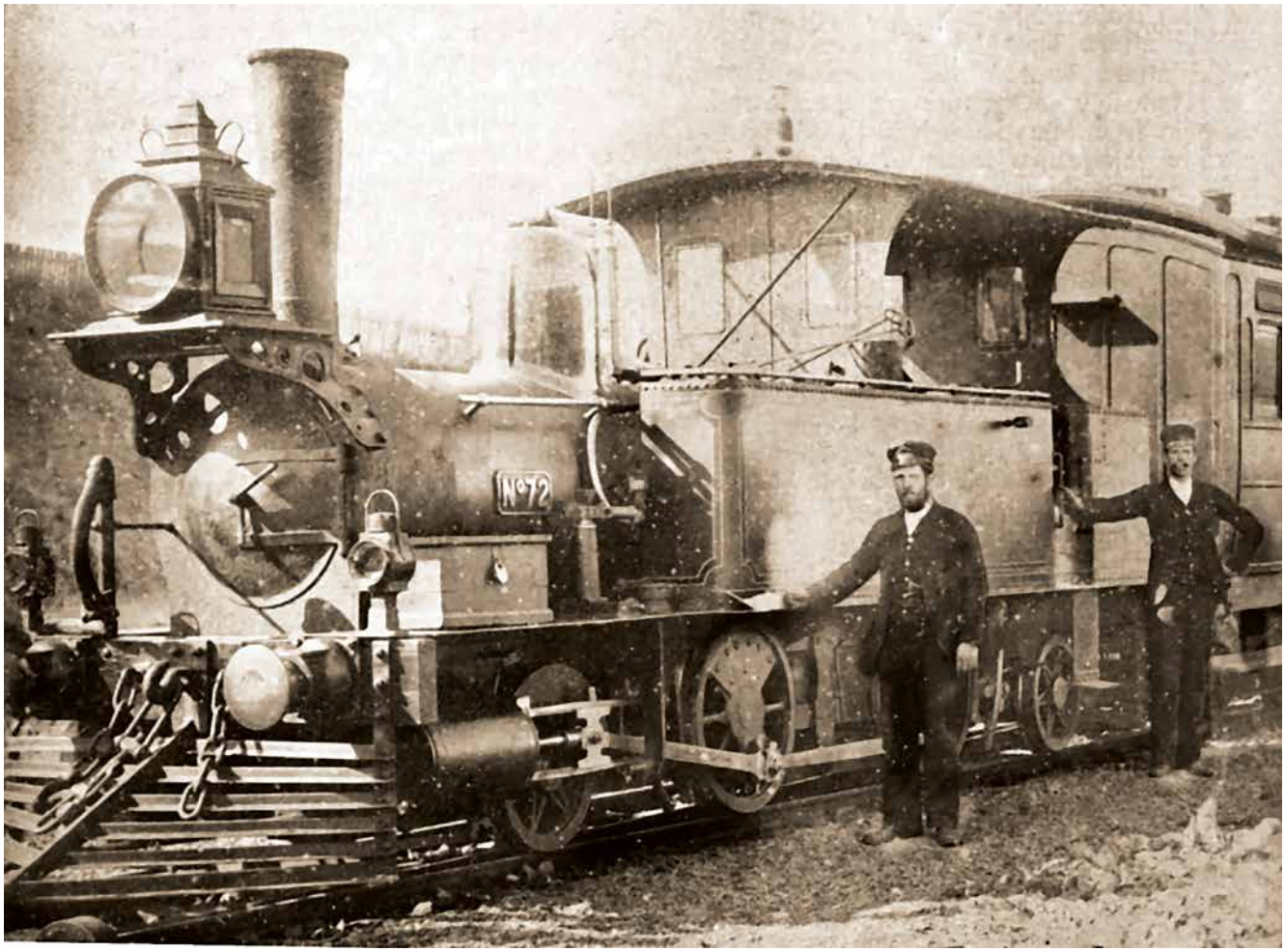


This assumption was dispelled when the image from a hand-coloured magic lantern slide appeared on the State Library of Queensland website. The photographic image shows a tank locomotive hauling nine wagons along the riverbank at Thompson's Point. The image is said to date from around 1910 and shows some scattered buildings close to the shoreline, although the loading facilities for stone punts are not immediately visible.[18]

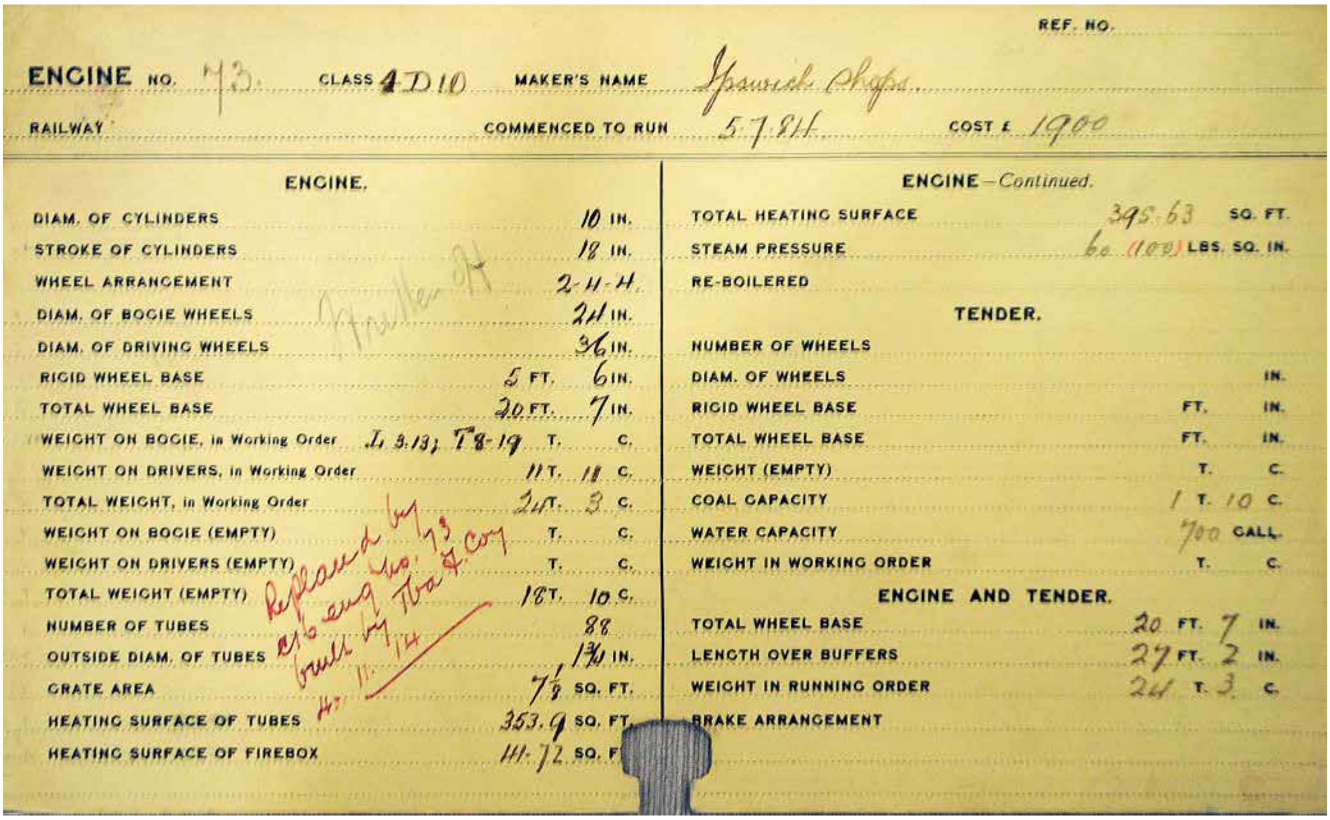
It seems likely that the train is on a section of track linking the loading area (out of sight to the left) with the Harbour Board's main workshops area. Running along the river bank, this section of tramway had encroached upon the Livingstone Shire Council's road, and the Harbour Board had been forced to build a diversion road almost a mile in length to replace it.[19]

The locomotive looked to me like a Queensland Railways 4D10 Class. A check of the locomotive cards at Queensland State Archives solved the issue. The card for 4D10 Ipswich Tank No.73, built in 1884, records that it was written off in November 1902 and sold to G.C. Willcocks in July 1905.[20] The relevant QR ledger book records the receipt of £300 from G.C. Willcocks in October 1905 for "Sale of Old Engine".[21]

No.73 with its two fellow 4D10 Ipswich class members (No.72 and No.74) had been built at Ipswich Workshops and are said to have incorporated spare parts dating back to the earliest days of the Queensland Railways. They were small 3ft 6in gauge 2-4-2T engines intended for suburban trains, with 10 inch by 18 inch cylinders, and weighed just 24 tons 3 cwt in working order. All three were written off by 1902. [22]



Queensland Railways 2-4-2T No.72, built at Ipswich Workshops in 1884. *Photo: ARHS Qld Collection courtesy J.P. Davidson*



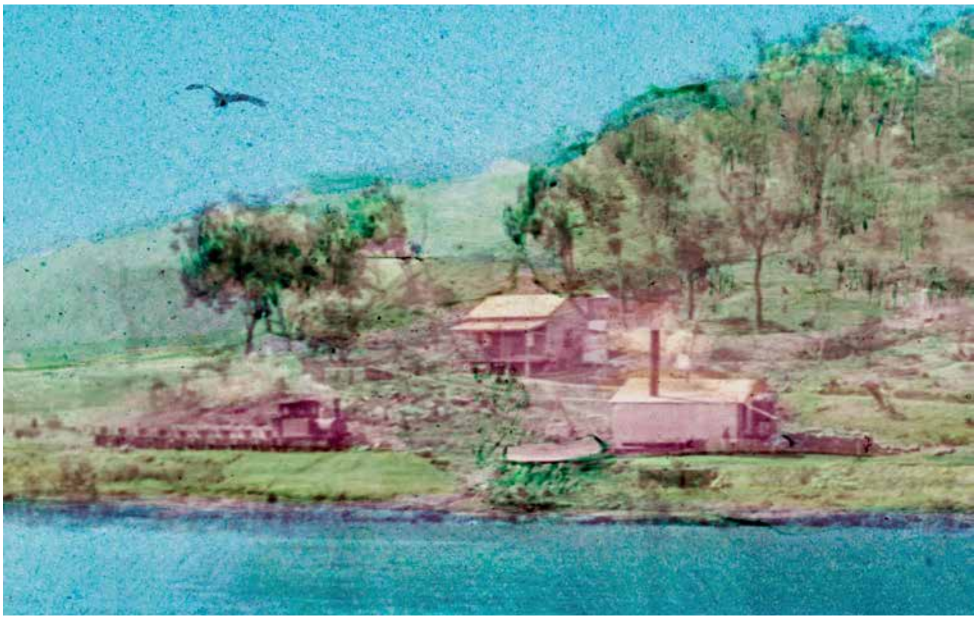
REF. NO.

ENGINE NO. 73. CLASS 4D10 MAKER'S NAME Ipswich Shops.

RAILWAY COMMENCED TO RUN 5.7.84. COST £ 1900

ENGINE.		ENGINE—Continued.	
DIAM. OF CYLINDERS	10 IN.	TOTAL HEATING SURFACE	395.63 SQ. FT.
STROKE OF CYLINDERS	18 IN.	STEAM PRESSURE	60 (100) LBS. SQ. IN.
WHEEL ARRANGEMENT	2-4-4	RE-BOILERED	
DIAM. OF BOGIE WHEELS	24 IN.	TENDER.	
DIAM. OF DRIVING WHEELS	36 IN.	NUMBER OF WHEELS	
RIGID WHEEL BASE	5 FT. 6 IN.	DIAM. OF WHEELS	IN.
TOTAL WHEEL BASE	20 FT. 7 IN.	RIGID WHEEL BASE	FT. IN.
WEIGHT ON BOGIE, in Working Order	L 3.13; T8-19 T. C.	TOTAL WHEEL BASE	FT. IN.
WEIGHT ON DRIVERS, in Working Order	11 T. 18 C.	WEIGHT (EMPTY)	T. C.
TOTAL WEIGHT, in Working Order	24 T. 3 C.	COAL CAPACITY	1 T. 10 C.
WEIGHT ON BOGIE (EMPTY)	T. C.	WATER CAPACITY	700 GALL.
WEIGHT ON DRIVERS (EMPTY)	T. C.	WEIGHT IN WORKING ORDER	T. C.
TOTAL WEIGHT (EMPTY)	18 T. 10 C.	ENGINE AND TENDER.	
NUMBER OF TUBES	88	TOTAL WHEEL BASE	20 FT. 7 IN.
OUTSIDE DIAM. OF TUBES	1 3/4 IN.	LENGTH OVER BUFFERS	27 FT. 2 IN.
GRATE AREA	7 1/2 SQ. FT.	WEIGHT IN RUNNING ORDER	24 T. 3 C.
HEATING SURFACE OF TUBES	353.9 SQ. FT.	BRAKE ARRANGEMENT	
HEATING SURFACE OF FIREBOX	41.72 SQ. FT.		

Replaced by 2-6 eng. No. 73 built by Tba & Coy 4.11.14



Above: *QR Steam Locomotive Record Card for Engine No.73. Queensland State Archives Item ID326089*

Right: *A colour adjusted extract from "Houses on Thompson Point" Glass Magic Lantern Slide c.1910. State Library of Queensland Record Number 1525786*

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17. *C*, 20 May 1916 p.37. http://nla.gov.au/nla.news-article69367238
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Rubicon pioneers' picnic

After an interval of 25 years, the society is pleased to present a reprint and revision of Peter Evans' book Rails to Rubicon. *However, no book can encompass all the material available, so it seems an opportune time to reprint the following report, originally published in the* Alexandra and Yea Standard and Yarck, Gobur, Thornton and Acheron Express *of 13 December 1912 as "Picnic to Pioneers". It has been slightly shortened and gently edited. The original can be found at http://nla.gov.au/nla.news-article61188472. The photos were taken by 18-year-old Lindsay Cumming on the day of the picnic. More details in the Postscript.*

On Thursday last the rising generation of residents of Thornton gave a picnic to the pioneers of the district at the Rubicon saw mills. For some time past Mr W H Robinson has been maturing the plan of an excursion to the mills, and on Thursday last it eventuated. The day was all that could be desired for such an excursion – bright, sunny, glorious, a little on the warm side, which made the shady, cool glades a delight to enter.

During the early morning quite a cavalcade of buggies and waggons might have been seen in the Rubicon Lane making for Clarke and Kidd's depot. Here all disembarked from their vehicles to take their seats on the trolleys, which had been made comfortable with rugs and cushions. About fifty assembled for the trip, varying in age from four-score years to one youthful traveller who had not realised three months. The trolleys were in charge of Messrs W H Robinson, J Tredway and W Robb, three experienced men well known for their carefulness, and on Thursday doubly careful because of the nature of their load.

Two of the trolleys has two horses each; the third had three. Mr and Mrs Cumming accompanied the party with their camera, and took a number of views both on the journey and at the mill. From the depot to the bridge across the Rubicon, the scenery was of the ordinary bush type, wild, rugged, picturesque, the murmur of the Rubicon fifty or sixty feet below, a diapason in itself, in harmony with the trills and warbles of the birds and the high, shrill insect notes, making a grand recital nature alone can give.

From the Depot to the Retreat near the bridge was one gradual climb, and from the altitude attained glimpses of marvellous views could be obtained of valleys and ranges stretching far, far away to the high peaks of Yea and Trawool. At the bridge, what is known as scenery really began. Columns of description could not place before the reader the splendours and magnificence of growth, clothing the hills from base to summit that opened out mile after mile. Two steep ranges run side by side for miles, the Rubicon rushing on like a mad mill race at the bottom amid boulders and rocks in one continuous roar. The tramway is carried along a cutting on the side of one of the ranges, with the river from 200 to 500 feet below. To look at the work entailed in this cutting makes one stand amazed at the courage, determination and sublime audacity of the men that cut it. One granite boulder alone cost £5 to blast. To keep the grade, they could not go above; the steepness of the cliff below forbid them working lower. They had to go through it, and through it they went. How they got through

Picnic at Clark & Kidd's water-wheel mill, 5 December 1912, ". . . an al-fresco repast at the side of the line on an extemporised table.*" The arrival of the railway at Alexandra in 1909 enabled sawmilling in the Rubicon Forest, in North-Eastern Victoria, to be put on a commercial footing. In anticipation of the railway, a consortium of local men formed a company, known as Clark & Kidd, to build a tramway high into the Rubicon ranges to exploit the towering eucalypts. The recently-laid line in the foreground heads south to the Rubicon Lumber Co's new mill, two miles distant. Photo: Lin Cumming, courtesy State Library of Victoria (SLV) H2005.88/313*

*" . . . a*n inspection of the mills and the appliances for loading the trollies, and carrying away sawdust. . .", *Clark & Kidd's Water-wheel mill. About half the party appear to be clustered around the saws, presumably learning the finer points of sawmilling. The shingle roof was later replaced by galvanised iron due to the snowfalls – the mill being at about 2600 feet in elevation. This mill was later known as Clark & Pearce's No.1 mill subsequent to Gilbert Pearce buying out the original shareholders except for Clark. The mill was burnt-out in the January 1939 bushfires.*

Photo: Lin Cumming, SLV H2005.88/243

it is a puzzle to all. Even now visitors cannot go a dozen yards from the track so dense is the growth, so rugged are the rocks.

The view presented is a dream of Paradise, the Park of God. From the stream at the base to the very summit of the range is one dense tangle of vegetation, trees, shrubs, climbers, ferns, every shade, every a form of foliage imaginable, eucalyptus uprising up to heaven, the dark green-leafed Fagus Cunninghamii, light woods and black woods, myrtles and musk, the deep-blue berried vine and the snow-white clematis, the spreading fronds of Dicksonias and giant Lomarias along the stream, and mammoth Alsophilias, like eyes of the forest, higher up.

At the falls a halt was called to gaze upon this wonder of the mountains, a giant expending his energy in sound. It is computed that in this fall a force of 10,000 horse power is going to waste day and night the whole year through.

After giving the horses a rest, the cavalcade started on again through scenery the like of which, while it may be equalled, is not surpassed by anything in Victoria. At this part of the journey more than one thrill was felt as gulch and gully had to be carried on high trestle-work bridges, with about thirty feet fall if the trolley went off the rail. At such moments some were glad that at Jam Tin Creek they had indulged in a draft of the liquid crystal.

At last the whirr and screech of the saws announced that the mill was reached. Here, great preparations had been made for an al-fresco repast at the side of the line on an extemporised table.

After lunch, Mr W Robb, as a representative of the mill proprietors, proposed the toast of the Pioneers, associating therewith the names of Messrs R W Wightman and W McMartin. It was thought by many that the forest had been only lately discovered. That was not so. It was more than 25 years back when he first came up in company with Mr McKinnon and Cr. J Payne. They saw the forest, but they could see no way out for the timber. The council offered £5 for anyone who could find a track. Ogden blazed his way through for some distance, but gave it up. Beaver next came, but gave it up in despair. It was thought that the forest was hopelessly locked up.

Over and over again men went out cattle collecting, got into the forest, but no one could see a way back except on top of the ranges. Finally a few of them pooled their bit of capital risking all they had, with the result that the tramway was constructed, the mill erected, and the finest forest in the world made an available asset of the State. No one, however, would ever know what they passed through to achieve that purpose. They had commenced, they resolved to complete at all cost what they had begun. He was pleased to see the pioneers of the district, who had visited the place to the early days, and knew what an Herculean task the company had undertaken. He regretted the absence of Messrs Clark and Kidd, both of whom would have been present, but had been detained by unforeseen events.

Mr R W Wightman, JP, a pioneer of four score years, thanked them for the way they had received the toast. It was 30 years since he and Mr. McKinnon first came to that spot. It was a wild place in those days. They gazed on the forest in admiration, but could see no way out. The construction of the tramway was a marvel of skill and courage and perseverance. He had been amazed at what he had seen on the way up. Obstacles had been overcome, the granite rocks blasted out, and gullies crossed. The work was a marvel. He respected the men who had so courageously carried out their purpose.

They had timber there the whole world wanted.

Mr W McMartin, snr, said he could only look on what he saw with amazement. It was some years since he was last in that locality. With his seventy-nine years upon him, he did not ride over the ranges as in years long gone. He had often got on the ridges above searching for cattle, but he could not get down to where they were then. He thought they would never be able to get in from Thornton. He had seen the forest, he admired the splendid straight stems of the trees rising like masts, he grieved over the millions of pounds worth of timber that would have to go to waste. He gave some vivid descriptions of rides on the ridges and spurs in those far back days. He had known the country thereabout for 53 years, and knew it through and through, but he never for a moment thought he would live to see a tramway constructed into that forest.

The Rev E H Scott proposed the health of Mr Pearce, the manager of the mill. Mr. Pearce, in reply, said it was a great pleasure to see such a large company there, and especially the pioneers of the district. With Mrs Robinson (the oldest resident of the district), Mrs Wightman, Mrs Baker, Messrs Wightman, McMartin, Robb and others around him, he himself felt a very recent arrival. His part in the pioneering was very small, for the worst of it was over when he arrived. Still, he felt glad of a pioneer with him when first he ventured up into the ranges. As soon as he saw the forest he knew it was not equalled in Victoria. It was good building timber. He was not afraid of risking his capital and becoming a shareholder. They had sent the timber to the Newport seasoning works to be tested. It was a success. They were constantly getting orders. They were kept constantly cutting for the Government. Orders were also coming in not only from all over Victoria, but also from New South Wales. The district could feel proud of its pioneers, who had got into the forest, and still more proud of those who made a way out. They all did a good work.

Mr A McMartin proposed the ladies, who had supplied the lunch, and had thereby helped to make the day so enjoyably complete. Mr T Robb, in responding, said he did not know what they would do on such occasions without the ladies.

After an inspection of the mills and the appliances for loading the trollies, and carrying away sawdust, etc., the cry of "all aboard" brought all together to mount on top of the loaded trucks. On the return all went merrily till a call came "truck off". The truckers do not take this very seriously, as the experience is not uncommon. But for those not daily on the line, there was a feeling and a flutter, possibly not without some reason, as a faulty rail might at any moment mean the death of a trucker. The top end of the line is in good condition, but some of the wooden rails at the near end seemed a bit faulty, and as life is imperilled, too much attention cannot be given to this. At both the depots a simple yet effective contrivance was inspected for lifting the loads of timber, weighing from six to ten tons, off the bush trollies on to the trollies running on the metal line.

Postscript.

In 2011, a large number of photographs taken by Alexandra, Victoria, identity Lindsay (Lin) Gordon Cumming (1894 - 1979) were donated to the State Library of Victoria by his daughter Sandra Cumming. The photos, taken between c1912 and c1950 mainly depict life, family and events in the Alexandra area. Local industry, including the recently established sawmilling operations in the Rubicon Forest, also feature. At various times Cumming had a photographic studio, bicycle shop, was a piano salesman, an apiarist, from 1918 the Ford motor-car dealer, and later various other car brands.

*". . . t*he cry of "all aboard" brought all together to mount on top of the loaded trucks." *Three truck loads of timber, complete with at least 23 picnickers (including baby) on the return journey. It appears that the women and 'the pioneers' got a ride whilst the younger able-bodied men had to walk. The tramway, of 3ft 4½in-gauge, initially ran from the Rubicon/Royston rivers' junction (later extended to The Depot on the closest 'road'), to Clark & Kidd's mill some three-and-a-half miles distant, and about 1500 feet higher, in the mountains.*

Photo: Lin Cumming, SLV H2005.88/314

"At the foot of Rubicon Mt.". This image seems to be of the same occasion. Certainly, it's a warm afternoon – the ladies in summer dresses and the men have largely divested of their coats. It also appears that some straggling picnickers are sharing a couple of bottles of a thirst-quenching beverage with the truckers! Meanwhile, at left, a patient horse and driver waits with a waggonette, whilst at right, the tram horses ponder their lot in life.
Photo: Lin Cumming, SLV H2005.88/241

Some of his photographs will appear in the reprint and revision of the society's book *Rails to Rubicon* (originally published 25 years ago). A further selection are included here. It is believed Lin's first camera was a Thornton-Pickard Special Ruby Altrincham glass half-plate camera. The reference in the report to "Mr and Mrs Cumming accompanied . . . . their camera" is intriguing. As the photos show, they were taken by Lin, who at the time was just 18 and single. (Lin finally married in 1939, to Margaret Kubeil, of Kanumbra.) Lin was the photographer so maybe he was escorting his mother, Sarah, or did he have a young lady friend and the reporter made an assumption?

More details of Lin's interesting life may be found at:
www.esplash.me/pdf/fs_051_Alexandra_Photographer_Lindsay_G_Cumming.pdf
www.esplash.me/ebook/NP_HT02_the_historic_times_edition_two_newspaper.pdf

Captions, Introduction and Postscript: Phil Rickard

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

Bingera Mill's Com-Eng 0-6-0DH Wattle *(FD4789 of 1965) heads a rake of fulls round the tightly curved lead of a siding in South Kolan on 19 July.* *Photo: Luke Horniblow*

QUEENSLAND

BUNDABERG SUGAR LTD, Bingera Mill
(see LR 269 p.33)
610 mm gauge
Com-Eng 0-6-0DH *Burnett* (AH2967 of 1963) was seen based at the Wallaville depot on 22 July and Com-Eng 0-6-0DH *Invicta* (A1513 of 1956) on 8 August. Both *Burnett* and *Invicta* (A1513 of 1956) were seen based at the depot during September. EM Baldwin 0-6-0DH 66 *Perry* (6/1576.1 8.66 of 1966) was trucked across to Millaquin Mill early in September. Stored Com-Eng 0-6-0DH locos *Dunethin* (A1922 of 1958) and 19 (AJ2359 of 1962) have been sold to Fiji Sugar Corporation and had gone by late September. AW Petersen's siding on Jensen's property in South Kolan has a very sharply curved lead into it from the main line and only the mill's 0-6-0DH locos are capable of working it, with the lead bin coupled to the loco via a chain while the curve is negotiated. Com-Eng 0-6-0DH *Wattle* (FD4789 of 1965) was seen working it on 19 July and EM Baldwin 0-6-0DH *Manoo* (3875.1 7.71 of 1971) on 20 September. The latter, which is a spare loco here, was also seen at work on 17 September. The Plasser KMX-12T tamping machine (390 of 1994) was running round at the mill on 30 September.
Luke Horniblow 7/19; Lincoln Driver 8/19; Geoff Driver 9/19; Tony Escobar 9/19; Robert Wiltshire 9/19; Brian Bouchardt 9/19; Ben Glossop 9/19; Stuart Adcock 9/19

BUNDABERG SUGAR LTD, Millaquin Mill
(see LR 269 p.33)
610 mm gauge
EM Baldwin B-B DH *Fairydale* (10048.1 6.82 of 1982) was seen derailed at right angles to the track in the mill bottom yard on 23 August. Several full bins were also derailed.

EM Baldwin B-B DH Miara *(8988.1 6.80 of 1980) crosses the Currajong Creek bridge on its way back to Bingera Mill with a rake of fulls from Wallaville on 8 August.* *Photo: Lincoln Driver*

Above: *EM Baldwin B-B DH* Miara *(8988.1 6.80 of 1980) and Com-Eng 0-6-0DH* Invicta *(A1513 of 1956) at Bingera Mill's Wallaville depot on 8 August. Photo: Lincoln Driver*

Below: *A shed scene at Isis Mill on 29 August with, from left to right, Walkers B-B DH 3 (600 of 1968 rebuilt Walkers 1994), Walkers bogie brake wagon 3 (rebuilt from Queensland Railways wagon in 1993), EM Baldwin B-B DH 11 (10130.1 6.82 of 1982), EM Baldwin 6 wheeled brake wagon 11 (7937.1 7.78 of 1978) and Walkers B-B DH 6 (610 of 1969 rebuilt Isis Mill 2002). Photo: Ben Glossop*

Bingera Mill's EM Baldwin 0-6-0DH 66 *Perry* (6/1576.1 8.66 of 1966) was trucked here early in September. Spare loco Com-Eng 0-6-0DH *Tegege* (FD4799 of 1966) was seen in use in July and also late in August when EM Baldwin B-B DH *Calavos* (4983.1 7.73 of 1973) was out of action.
Luke Horniblow 7/19; Tony Escobar 9/19; Robert Wiltshire 8/19, 9/19

FAR NORTHERN MILLING PTY LTD, Mossman Mill (formerly MACKAY SUGAR LTD)
(see LR 269 p.33)
610 mm gauge
FNM stickers had started appearing on the cab sides of locos by 20 September. Locos seen in use during August and September have been EM Baldwin B-B DH *Daintree* (7303.1 7.77 of 1977) and Com-Eng 0-6-0DH multi-unit locos *Cook* (AL3372 of 1964) with *Ivy* (AL4181 of 1965) and *Douglas* (AL2562 of 1963) with *Faughy* (AL4190 of 1965).
Gregorio Bortolussi 8/19, 9/19

ISIS CENTRAL SUGAR MILL CO LTD
(see LR 268 p.37)
610 mm gauge
Track laying on the new line to Booyal and Duingal had commenced by 21 September. This line commences at Promiseland Road, north of Cordalba. Walkers B-B DH 2 (598 of 1968 rebuilt Walkers 1994) was seen hung up on a mound of dirt off the end of the line in Rudds siding on 26 August. As an initiative for Queensland Road Safety Week in Childers late in August, students from local schools had a field trip to learn about cane train safety. One of Isis Mill's Walkers B-B DH locos with a load of full bins was parked in Childers along with emergency services vehicles and a small car and these were used to simulate what the response might look like, should a crash with a cane train occurr.
Peter Southwell 8/19; Brian Bouchardt 9/19; myPolice Bundaberg 2/9/2019; Luke Horniblow 10/19; Ben Glossop 10/19

MACKAY SUGAR LTD, Mackay mills
(see LR 269 p.33)
610 mm gauge
The new loco shed at Racecourse Mill was in use by September. It is just a running shed at present although the Baldwin bogie locos still have to make their way to the old shed every night. This is now done using a very circuitous route along the Peri, Palms and Te Kowai lines. Late in June, Com-Eng 0-6-0DH 22 *Pinnacle* (AA1549 of 1961 rebuilt by Com-Eng as AN5849 of 1975) was seen bringing fulls into the Racecourse Mill yard. Walkers B-B DH locotrol locos *Calen* (692 of 1972 rebuilt Bundaberg Foundry 1995) and *Miclere* (664 of 1970 rebuilt Farleigh Mill 1996) were seen hauling a rake of full bins out of the last siding on the Mia Mia branch on 23 August.
A loaded sugar truck with dog trailer collided with the tail end of a rake of full cane bins at the Bruce Highway level crossing on Racecourse Mill's Rosella line south of Mackay on 28 September. Heavy fog had made the flashing lights difficult to see. The truck rolled over with the driver receiving minor injuries. Several cane bins were badly damaged.
John Phillips 6/19; *Daily Mercury* 28/9/2019, 30/9/2019; Queensland Police Service 28/9/2019; Shane V Brown 9/19; Russell Anderson 8/19; Mitch Zunker 9/19; Carl Millington 9/19

MSF SUGAR LTD, Mulgrave Mill
(see LR 269 p.33)
610 mm gauge
Com-Eng 0-6-0DM 5 (A1005 of 1955) was used for bridge inspections on the South Johnstone Mill rail network during the first half of September and was still there on 5 October. By 17 August, the cab of Com-Eng 0-6-0DH 3 (A1003 of 1955) had been removed and scrapped.
Gregorio Bortolussi 8/19, 9/19, 10/19; John Charleton 8/19; Dennis Badham 9/19; Dennis Brincat 9/19

MSF SUGAR LTD, South Johnstone Mill
(see LR 269 p.35)
610 mm gauge
EM Baldwin B-B DH 32 *Liverpool* (10385.1 8.82 of 1982) derailed on a set of points at Russo 1 near Garradunga while heading north with empties at around midnight of 19/20 August. A photo from the *Cairns Post* taken the following morning shows the loco at an angle to the track and past the points.
On 27 August, a rake of 6 tonne empties was spectacularly derailed across Meyer Avenue at the Grima Road intersection at Wangan. Both 32 *Liverpool* and Clyde 0-6-0DH 12 (55-60 of 1955) were in attendance at the scene. During the late PM of 2 September, yard loco Clyde 0-6-0DH 18 (56-83 of 1956) and EM Baldwin B-B DH 24 (5477.1 8.74 of 1974) were involved in a collision in the mill yard. The latter was hauling 32 full bins. A photo from the *Cairns Post* showed that 24's front headstock had broken away in the collision. It had returned to service by 30 September. Two men with apparently non-serious injuries, were taken to hospital. Clyde 0-6-0DH multi-unit locos 16 (56-93 of 1956) and 17 (55-57 of 1955) were seen at work during September, probably substituting for 24. A car collided with a cane train after failing to give way at Mundoo Road, Mundoo on 24 September. Clyde 0-6-0DH 14 (63-288 of 1963) was seen marshaling full Mulgrave Mill bins together for a loco from that mill at James Loop, east of Mirriwinni in mid September. Mulgrave Mill's Com-Eng 0-6-0DM 5 (A1005 of 1955) was being used for bridge inspections on the South Johnstone network during the first half of September and on 5 October, it was seen in the Lower Cowley area. Clyde 0-6-0DH 15 (66-491 of 1966) was at the mill on 14 September. It was last reported as being based at the Silkwood depot. Most of the bridges north of the mill have been upgraded and can now take locos up to 41 tonnes. This has enabled the working of the 32-tonne 32 *Liverpool* into these areas.
Cairns Post 20/8/2019, 3/9/2019, Australian Associated Press 3/9/2019; Gregorio Bortolussi 8/19, 9/19, 10/19; Dennis Brincat 8/19, 9/19; Jamie Hitchings 9/19, 10/19; Dennis Badham 9/19; myPolice Far North 25/9/2019

RIO TINTO ALCAN, Weipa
(see LR 267 p.26)
1435 mm gauge
On 22 September, Downer EDI Co-Co DE R1006 (08-1764 of 2009) with 34 empty wagons was entering the bauxite loading station at Andoom when the braking systems failed to stop it and a train being loaded was rear ended. R1006 and four wagons were extensively damaged with the driver sustaining minor injuries.
Cairns Post 30/9/2019

TULLY SUGAR LTD
(see LR 269 p.35)
610 mm gauge
At about 6.30 AM on 17 August, the body of a man was discovered by a cane train crew on trackage in Tully. It was believed he had been killed by another cane train several hours earlier.
The ex Mulgrave Mill NQEA bogie brake wagon (built in 1995) has yet to be placed in service and was seen stored early in September. Some work has been done on it including removal of the large ballast weights and fitting of a Tully style hut to the deck.
ABC Far North 8/19; Luke Horniblow 9/19; Gregorio Bortolussi 9/19

WILMAR SUGAR (HERBERT) PTY LTD, Herbert River Mills
(see LR 269 p.37)
610 mm gauge
On 20 August, Clyde 0-6-0DH *Ingham* (64-382 of 1964) went back to Victoria Mill after being on loan to Macknade Mill and in exchange, Victoria's Clyde 0-6-0DH *Lucinda* (65-436 of 1965) went to Macknade and was still there in early October. Some of the Herbert mills' redundant sugar bin flats were seen at Sims Metal, Townsville during September. Macknade Mill's Clyde 0-6-0DH 11 (65-383 of 1965) was expected to be transferred to Proserpine Mill on 14 October.
Editor 8/19, 10/19; Carl Millington 9/19; Andrew Matt 9/19; Tom Badger 10/19

WILMAR SUGAR (KALAMIA) PTY LTD, Kalamia Mill
(see LR 267 p.27)
610 mm gauge and 610 mm + 1067 mm dual gauge
1067 mm gauge Walkers B-B DH 5803 (682 of 1972) was being used for ballasting operations on the dual gauge line between the mill and Ayr during May.
Lyndon Camm 5/19

WILMAR SUGAR PTY LTD, Pioneer Mill, Brandon
(see LR 269 p.37)
1067 mm gauge
Referring to a report in LR 268, the Walkers B-B DH seen doing running trials at the mill in late April has been identified as the *Jardine* (592 of 1968). The unknown Walkers B-B DH seen in the workshop on 26 April has been identified as the new *Jerona* (611 of 1969), which is a rebuild of ex QR DH29, one of the stored locos at this mill.
A fire in the bagasse conveyor system brought operations at this mill to a halt on 5 October with repairs hoped to be completed by 21 October.

Above: *Pioneer Mill's Walkers 0-6-0DH* Aramac *(583 of 1968) refuges in Payards 2 while B-B DH* Jardine *(592 of 1968) from the same manufacturer, runs past with a load of fulls on 25 August. Photo: Luke Horniblow*
Right: *Kalamia Mill's dual gauge sidings at Ayr in June. Photo: John Phillips*
Below: *Walkers 0-6-0DH* Aramac *(583 of 1968) crosses the QR diamond at the Brandon catch points on Pioneer Mill's Colevale line on 28 September. Photo: James Chuang*

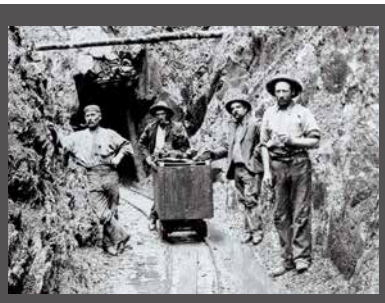
Cane already burnt and cane already harvested was transferred to Invicta and Kalamia Mills. While the mill is closed, it is planned to have some Pioneer area cane crushed at these two mills and Inkerman Mill.
Luke Horniblow 6/19; Kieran Koppen 9/19; *Townsville Bulletin* 7/10/2019, 9/10/2019; ABC North Queensland 6/10/2019, 9/10/19

WILMAR SUGAR (PROSERPINE) PTY LTD, Proserpine Mill
(see LR 269 p.38)
610 mm gauge
The Bruce Highway was blocked by a cane bin derailment at Blairs on the Cannon Valley line on 12 September. A haul-out vehicle collided with a loco hauling empties at a level crossing in the Bloomsbury area during the second week of September. It was the first collision between a train and a road vehicle this season. The Plasser KMX-12T tamping machine (222 of 1981) was seen at Holmes siding, Cannon Valley on 8 September. It has been badly graffitied on both sides. The Tamper sleeper renewer (602 of 1989) was at Glen Isla on 1 October.
Whitsunday Times 12/9/2019; *Daily Mercury* 18/9/2019; Peter Crossley 9/19, 10/19

OVERSEAS

FIJI SUGAR CORPORATION
(see LR 269 p.38)
610 mm gauge
India has submitted the preliminary report to the government for the upgrade of the mill rail systems to improve the transportation of cane. Now, an in depth study will begin. The government is currently subsidising truck operators $5 million per year to transport cane to the mills. In a sign of things to come, a photo published on the fijivillage.com website depicts a Hunslet 6wDH bringing in a rake of 3 tonne chopped cane bins. Sugar recovery at Lautoka Mill has been adversely affected by reduced cane purity compared to last year and efforts are underway to reduce cut to crush delays. Although not stated, this is a symptom of chopped cane harvesting and transport systems need to be geared towards reducing delays in getting the cane crushed after it has been harvested. Com-Eng 0-6-0DH locos *Dunethin* (A1922 of 1958) and 19 (AJ2359 of 1962) have been purchased from Bingera Mill in Australia and had left there by late September. Lautoka Mill Clyde 0-6-0DH 11 (65-432 of 1965) hauling a mixed rake of trucks and bins, caught fire at Butchery Point near Drasa, north of Lautoka, on 6 October. Photos showed it to be well alight with the engine bay and cab being thoroughly burnt out. The crew sustained minor injuries. Ex Lautoka Mill Fowler 0-6-0TT 7 (10656 of 1906) on display at Raffles Gateway Hotel, Nadi Airport, was seen with a new coat of paint in August. It is now maroon with cream trim and black frames, smokebox and boiler.
fijivillage.com 22/8/2019; Geoff Driver 9/19; Margaret Sansom 8/19; FBC News 30/9/2019; Navineet Dayal 10/19; *Fiji Sun* 7/10/2019, 8/10/2019

Hunslet and Baldwin locomotives hauling a cane train in Fiji at Sabeto between Nadi and the mill at Lautoka in August 2019. *Photo: Peter Sansom*



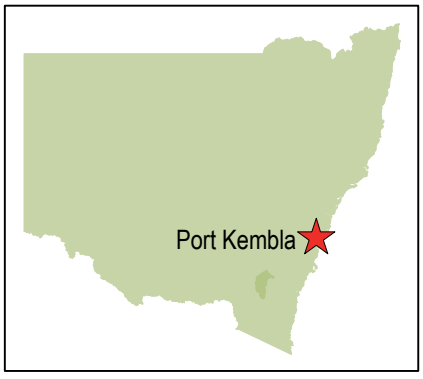
Field Reports

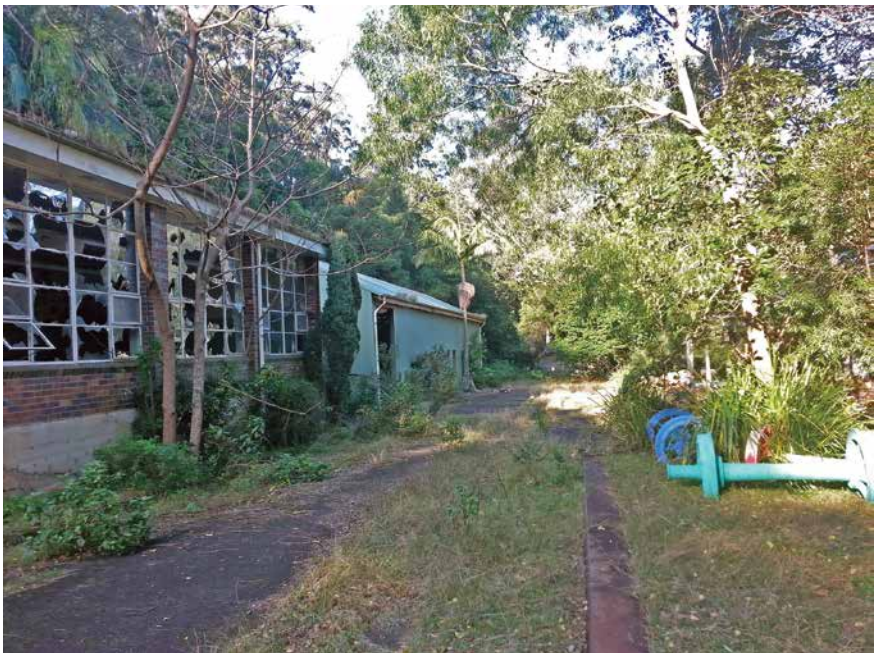
Please send any contributions, large or small, to fieldreports@lrrsa.org.au or to P.O. Box 21, Surrey Hills, Vic 3127.

The Port Kembla No.2 Colliery, NSW
Gauges 381?, 1067? and 1435mm

Port Kembla No.2 colliery (located on the southern flank of Mt Kembla) was opened circa 1920 and initially operated in a spasmodic fashion by the Illawarra Coke Company Pty Ltd. The mine was taken over by the Port Kembla Coal Company in 1933. From November 1933 coal was sent away from the Port Kembla Coal Company's siding (58 miles 32 chains from Sydney) on the as-yet unfinished NSW government Unanderra – Moss Vale railway. The siding was renamed Unanderra West siding in December 1943. Coal was mined by hand from the face and placed in horse-drawn skips for transport to the mine portal, then lowered to the siding by incline. The mine ceased production under the management of Australian Iron & Steel at the end of September 1964, was closed officially at the end of December 1964, and sealed in 1996. Several surface buildings survive including historic pit-pony stables. Access to the mine site is from the Mount Kembla Ring Track, but there is a track up to the mine from the Farmborough Heights area.[1]

In December 2018 I went for a walk from Farmborough Heights up to the old mine site. Embedded in the roadway between the buildings were three parallel rails. Rough measurements with shoes and a stick (I'll take a tape measure next time) indicated the gauge of the closer rails was around 1 foot 4 inches and the wider ones 3 foot 9 inches. So possibly these were 15 inch and 3 foot 6 inch gauge tracks (allowing for some error with my rough measurements). The loading bins at this siding were a fair distance below the mine, so the skips from the mine most





Top: *Rails embedded at the mine site.* ***Centre:*** *Derelict buildings and painted wheelsets at the mine site.* ***Above:*** *Detritus (including lightweight rail) at the site of the loading bins. All photos: Chris Stratton*

Concrete foundations at the site of the loading bins. *Photo: Chris Stratton*

likely were emptied where I found the rails, and the coal then conveyed down the hill to the loading bins. There were five brightly painted wheelsets lying around which may have been brought there later (and possibly had nothing to do with the mine).

In September 2019 I had a look at the site of the sidings and loading bins. The last time I looked here you could hardly see anything because the undergrowth was too thick (possibly the drought has thinned it out). The siding came off the Unanderra to Moss Vale line about two kilometres uphill from Farmborough Heights. There was lightweight rail lying around, and what looked like a narrow gauge skip body. Several concrete blocks formed the bases for the system that brought the coal down from the mine further uphill.

Chris Stratton 09/2019

References:

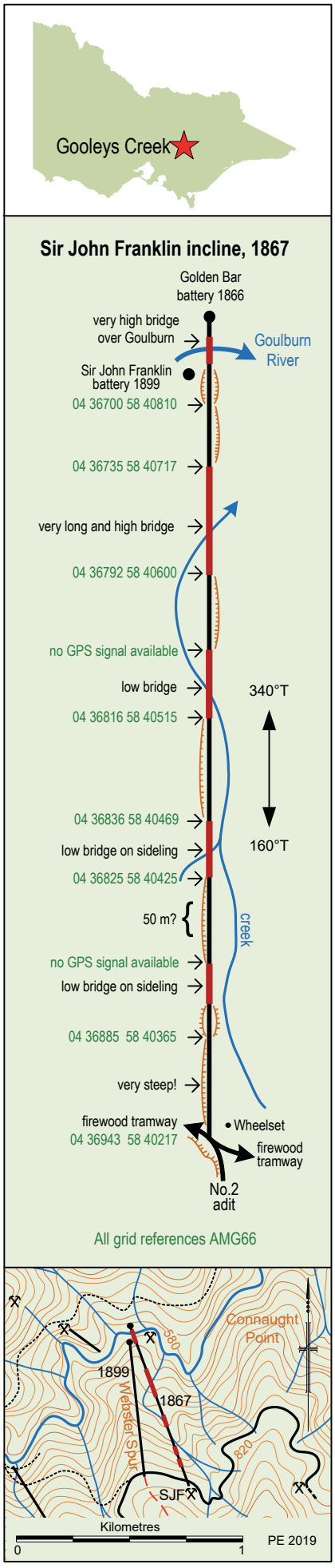
1. For more details see https://www.illawarracoal.com/minebase-m-s/314-port-kembla-no-2-collery.html

Sir John Franklin incline, Gooleys Creek, Victoria

Gauge 660mm

In 1865 prospector William Wye discovered a gold-bearing formation on a spur at Gooleys Creek, roughly 3 km ESE of Woods Point. The stone was tested and two tunnels were driven into the hillside. After payable stone was struck in the No.2 tunnel, a large self-acting tramway was constructed. The line was built down the hill from the No.2 tunnel and crossed 'Jenkins Gully' on a large trestle bridge. From here it continued steeply downhill and crossed to a machine site on the northern side of the Goulburn on another large trestle bridge. When it was finished, the line was 'almost a mile in length'. The wire rope was controlled by two large drums supported on a heavy iron axle. One of the cables was wound one way on one of the drums, and the opposite way on the second. The descending loaded truck pulled up an empty one on the other rope. A braking system fitted with wooden brake blocks worked on a large groove

Cornish boiler adjacent to the Sir John Franklin No.2 adit. *Photo: Peter Evans*



Grade tramway probably supplying firewood to the boiler. *Photo: Peter Evans*

between the two drums. The brake was applied using a large iron lever. The tramway delivered stone to the Golden Bar battery site far below. The battery was completed in 1866 and was a 12-head machine made by Langland Brothers' Port Phillip Foundry, and was powered by a water turbine. The mine worked on until 1883 when it closed, having produced 10,063 ounces of gold. The mine was reopened by the Sir John Franklin Company in 1899, but a new incline was constructed down the adjacent Webster Spur, obviating the need to rebuild all the expensive bridgework used in the original incline.[1]

The 1867 incline was surveyed by the writer on 14 January 2007. It leads directly from the mouth of the tunnel beside a Cornish boiler. On the same level is a tramway on a near-horizontal formation, presumably used to supply firewood for the boiler. The 1867 incline is incredibly steep and must have included at least five bridges, two of them very high. An abandoned wheelset (with inside bearings) near the top of the incline provided an indication of the gauge – 2 ft 2 in [660mm – a very similar gauge was measured on the tramway incline to the 1899 battery]. The wheels were 300 mm in diameter with a tread width of 70 mm and a flange width of 10 mm, and each had five curved spokes. The axle was 40 mm in diameter. A section of seven-stranded wire rope nearby was 5/16 inches in diameter [7 mm] and had a lay length of 50 mm. The accompanying diagram (not to scale) describes the layout of the inclined tramway as observed in 2007. The site of the Golden Bar battery has been sluiced-away, but there are substantial remnants at the 1899 Sir John Franklin battery site.

Peter Evans 09/2019

References:

1. *Woods Point Times & Mountaineer*, 21 December 1867; and Holliday, A. (n.d.) Untitled notes on mining at Woods Point. Manuscript call No. 2534/15, State Library of Victoria.

LRRSA NEWS

MEETINGS

ADELAIDE: "Tasmanian and Middle Eastern railways, a Bagnall and Zillerthalbahn"

After the usual business. There will be Tasmanian trains and Middle East rail from John Meredith, Zillerthalbahn and Achenseebahn from Roland Earl, and an explanation of how the Bagnall works from Denis Wasley and Peter Lucas. News of light rail matters will be welcome from any member. Intending participants would be well advised to contact Les Howard on 8278 3082 or by email: lfhoward@tpg.com.au since accommodation is limited.
Location: 1 Kindergarten Drive, Hawthorndene.
Date: Thursday 5 December 2019 at 7.30pm

BRISBANE: "WW1 narrow gauge railways and photo competition"

The Mike Loveday Photo competition will be conducted at the meeting. After the photo competition, Bob Gough will present a DVD on WW1 narrow gauge railways.
This is the Christmas break up and members and visitors are asked to please bring a plate of Christmas goodies
Location: Coopers Plains Library, 107 Orange Grove Road, Coopers Plains.
Date: Friday 20 December 2019 at 7.30pm

MELBOURNE: "Various videos from John Phillips"

Respected railway photographer John Phillips will present several videos of railway interest.
Location: Ashburton Uniting Church Hall, Ashburn Grove, Ashburton.
Date: Thursday 12 December 2019 at 8:00pm

SYDNEY: No meeting in December

The next meeting of the NSW Division will be in February 2020 and details will be provided in the next *Light Railways*.

Heritage & Tourist NEWS

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

MARY VALLEY RATTLER, Gympie

1067 mm gauge

An unwanted steam locomotive that was left to rust has become a symbol of pride for a Queensland town, thanks to years of painstaking restoration work by a small group of train enthusiasts. Historic steam locomotive 967 had been left to rust, but has been painstakingly restored and will return to service at the end of the month as part of the Mary Valley Rattler service.

The path to how locomotive number 967 found its way to Gympie, and to restoration, is a long and circuitous one. Built in 1950, locomotive 967 is a C17 class 4-8-0, a design suited to Queensland's lightweight railway tracks and sharp curves, which was once the mainstay of Queensland Railway's steam fleet. It was a Queensland Government Rail workhorse for 19 years, but since then has had a neglected existence. For 16 years the steam engine sat forsaken at Bulcock Beach on the Sunshine Coast before the Ghan Preservation Society bought it, only to neglect it in the desert near Alice Springs. In the early 2000s Beaudesert Rail offered it another chance, but when the company ceased operations in June 2003, the locomotive returned to storage with Queensland Rail at Ipswich. Finally in 2006, while 967 was "taking up space" with QR, it was gifted to the then Mary Valley Heritage Railway, a donation initiated by an unknown QR worker. In a partially dismantled state, the locomotive sat idle in a Gympie workshop until the restoration mission began in 2017.

Today, the Mary Valley Rattler is a steam train service hauled by locomotive 967, running from Gympie through the picturesque surrounding suburbs, offering locals and tourists an opportunity to explore rural areas of Queensland.

ABC Sunshine Coast ABC on line news 25/8/2019 By Tim Wong-See

BUDERIM TRAMWAY, Buderim

762 mm gauge

The Krauss locomotive arrived on the Sunshine Coast on 1 December 1914 and ran between the farming towns of Buderim and Palmwoods until 1935. It was then coverted to 610 mm gauge and used on a sugar tramway at Bundaberg. The remains of the Krauss were purchased in 2004 and volunteers spent six years cosmetically restoring the locomotive, finishing the job in 2010. Since then it has languished on a local farm, as it waits for the community to agree on its new home because two critical groups cannot agree on where it should live out its days.

One group wants it in the centre of Buderim, where the old station once stood and beside the local pool, as an attraction to be enjoyed by children, passers-by and travellers. The other group, the Sunshine Coast Council, which initially donated the locomotive to the group in 2004, disagrees. And wants it displayed in a new park outside of town, where there will be room for buses to stop, so children can explore the elegant old locomotive. The tramway group consider it a poor choice because the location is isolated, quiet and leaves the beloved locomotive at risk of vandalism and destruction. This argument has now spanned nine years and some of those who once worked on rebuilding the locomotive have died without seeing the Krauss return to Buderim.

There is however, hope of a compromise. On top of Buderim hill is a 3.4 hectare park developed by the council that has plenty of open space, parking and is bordered by homes, cafes and churches and the locomotive group suggest that there would be room for the locomotive.

ABC Sunshine Coast by Owen Jacques Posted 26 May 2019, 7:15am

General view inside the storage shed at ILRMS at Albion Park on Saturday night 28 September 2019 taken during the special night running.

Photo: Brad Johns ILRMS

NEW SOUTH WALES

ILLAWARRA LIGHT RAILWAY, Albion Park

610 mm gauge

The year has slipped by rapidly and the ILRMS has achieved so much. The Museum has been well received by the visitors who have attended, and the family fun themes of child friendly events, involvement with the Wings over Illawarra Air Show, the Christmas in July and other themes have been well attended.

The operational fleet has seen all diesel locomotives in operation and the steam fleet has seen *Burra* (Hawthorn Leslie 3574 of 1923) and *Kiama* (Davenport 1596 of 1917) both performing to expectations. It should be noted that 0-6-0 *Cairns* (Hudswell Clarke 1706 of 1939) is out of service awaiting boiler repairs and Perry 0-6-2T 7967/49/1 of 1949 is also down with boiler repairs. The John Fowler 0-4-0T 16089 of 11/1923 ex Kiama Tramways has seen the wheel sets taken out of the frame for machining. The 7¼ inch gauge miniature railway still plays a major part of the ILRMS operations: November 2019 will see 20 years of the miniature railway at Albion Park.

Site works has seen the Tramway Dining car LFA 449 ex NSWGR fitted with new sales counters and further upgrades. During the year we have launched our new website that has been a major improvement of the old site and is easier to navigate for visitors as there is a link to both Facebook and Instagram on the site. Other works around the site has seen new children's playgrounds constructed, site clean-up and beautifications to make that welcome feeling into the museum grounds.

In 2020 there will be many great events, and the return of the Tongarra Train Fest. The ILRMS and the HARS Aviation Museum are working together, and Sunday 16 February 2020 will see a joint opening day that will give visitors the chance to see historical aircraft operations and railways in one day, with a bus shuttle between both museums.

Brad Johns, Secretary ILRMS

PETE'S HOBBY RAILWAY, Junee

610 mm gauge

Recent highlights at Pete's Hobby Railway include:

Storage Shed. Ground-levelling earth-works have been undertaken and the shed floor laid in reinforced concrete containing two tracks, one with a six-metre-long inspection pit. Framework for the shed, 10 by 14 metres, is just about completed and it should be sheeted and roofed soon. In front of the storage shed will be a 7 metre manual turntable.

Hunslet steam locomotive. This locomotive is still out of action, but a new/replacement steam turret has been manufactured and should be delivered shortly. Pete is attempting to source a replacement safety valve to replace an air valve fitted in error during a past overhaul.

Fowler steam locomotive restoration. Progress has slowed dramatically as costs have considerably exceeded expectations. The locomotive has been totally stripped, with various parts either being repaired or replacements made. New boiler tubes are on order and Pete is currently awaiting delivery. It is likely that the wheels will be returned to the frame and the lot placed inside the new storage shed, along with the parts.

Ruston diesel locomotive. Currently available for service. Modifications have been carried out in an attempt to get the battery to recharge when the unit is in operation.

Progress Reports 52 and 53 August and September, 2019

ZIG ZAG RAILWAY, Lithgow

1067 mm gauge

An impromptu Golden Bolt ceremony was held on 8 June to mark the re-joining of the line once again from Bottom Points to Clarence.

A video of the event can be seen at YouTube: https://youtu.be/vVqCKeCuoYM

Volunteers returned to the site to replace a few more suspect sleepers on the straight heading towards the rail stack. History did not repeat itself some 30 years on from the original Golden Bolt ceremony, as when the crews returned, the Golden Bolt had not been removed by a treasure hunting member of the public, as happened 30 years ago.

The railway's insurers have approved the repair works to commence at Top Points. The vandals who came through in March 2018 really did a good job on the place, successfully undoing all of the work completed by volunteers over the previous two years, while adding over $100,000 worth of extra work. Repair works include electrical, repairing of toilets, windows, and extensive painting/graffiti removal. Insurance does not cover any non-rail-related assets, so these will need to be completed by volunteers when time and funds become available

Zig Zag newZ numbers 51 and 52, July and August 2019 via Terry Boardman

VICTORIA

KERRISDALE MOUNTAIN RAILWAY, Kerrisdale

610 mm gauge

Workers at the railway have been busy starting to take *Douglas* the new-built steam locomotive apart, to commence painting. It is a very exciting stage, but will take some time to achieve.

Jennifer Forbes on Facebook 20 October 2019

PUFFING BILLY RAILWAY, Belgrave

762 mm gauge

Locomotive 8A temporary repairs

After more than 100 years of service many mechanical components of steam locomotives can be worn out beyond redemption. In the case of NA locomotive 8A at Puffing Billy, built in 1908, it is the cylinders that have reached that critical point. Recently 8A required some emergency work to keep it going until the locomotive can be withdrawn from service to make permanent repairs.

The problem is that the steam pipe mating surfaces of the cylinder castings inside the smokebox, have been re-machined so many times to get a good seal, there is no longer enough cast-iron left. It was also found that some cracking of the cylinder castings has occurred. The solution was to bypass the steam passage of the cylinder castings, by fabricating new steam pipes and taking them outside the smokebox to the steam chests.

Basically 8A needs new cylinder castings. To replace the cylinders the loco has to be stripped down. That involves removing the front pony truck, the front buffer beam, dismantling the front section of the frames, removing the connecting rods and the crosshead guides to get the old cylinders out. A new set of cylinder castings has already been prepared and is currently stored. The new cylinders were designed with future repairs in mind as they have replaceable cylinder liners and port faces.

Another school of thought believes that a complete new set of frames should be constructed and fitted up with new cylinders. The rebuild would require 8A to be wheeled into the workshops, completely dismantled and the bare frames and cylinders taken away.

Puffing Billy locomotive 8A at Belgrave showing the temporary repairs – see report opposite.
Photo: Bill Hanks

Then the new frames with new cylinders prepared earlier would be brought in and all the other components fitted. That is easier said than done as many of the components may need to be reworked to fit the new frames and cylinders. I imagine the opportunity may be taken to fit new tyres to all the wheels and repair or replace any other badly worn components.
The frames and cylinders on all existing NAs are now all over 100 years old and those of 3A are now 120 years old.
Bill Hanks, September 2019

On a recent Thursday, visitors to Belgrave were treated to a sight that can be seen nowhere else in the world; a Climax locomotive, a Beyer Garratt (G42), and a South African Garratt all in steam together, outside the shed. G42 was being prepared for the day's trains; the Climax was being prepared for the weekend's Twilight Train and the South African Garratt was undergoing steam pressure valve evaluation. This locomotive is yet to move under its own steam and currently is being propelled by one of Puffing Billy's diesels. However, steam trials cannot be far away.
Andrew Webster 21 October 2019 site visit

WALHALLA GOLDFIELDS RAILWAY, Walhalla
762 mm gauge
In the yard at Thomson is the frame for the new rail-motor. Clearly visible at each end are the two openings for the doors that will enable passengers to exit in the event of a stoppage on a bridge. This scenario is the reason that the two ends of the original tram had to be removed as the doors were on the side which meant that there could be no exit of passengers on a bridge, of which there are eight between Walhalla and Thomson. A further four major bridges will need to be rebuilt when the railway is restored to Erica. Front and rear exits were a necessity with so many bridges. The frame is solid looking and the under-floor compartment for the flat engine is clearly visible. This frame will be married to the tram unit to complete the rail motor.
Andrew Webster 21 October 2019 site visit

Standard 610mm gauge skip on display at the Red Cliffs Steam Railway on Sunday 1 September 2019. Photo: Lindsay Bamford

RED CLIFFS HISTORICAL STEAM RAILWAY
610 mm gauge
The Red Cliffs Historical Steam Railway (RCHSR) was established in 1992 by a group of people interested in preserving and operating the steam locomotive that once hauled coal and briquettes from the VR siding at Red Cliffs to the State Rivers and Water Supply Commission pumping station on the Murray River. The organisation was incorporated in 1995.
Rides are available on the 1.5 km narrow gauge railway, re-built on part of the former VR branch line from Red Cliffs to Morkalla. The principle attraction is the Kerr Stuart steam locomotive *Lukee* built in 1901 and restored to operating condition after being in static preservation in Red Cliffs since 1953. The RCHSR rolling stock consists of *Lukee* and a diesel locomotive *Harry*, passenger cars, wagons, and an inspection car.
RCHSR website, September 2019


South African Garratt NGG16 number 129 in steam at Belgrave after restoration at the Puffing Billy workshops. Photo: Mike McCarthy.

Skylark class 0-4-2T built by Kerr Stuart at Stoke on Trent in the UK in 1901 at the Red Cliffs Steam Railway on Sunday 1 September 2019. Photo: Lindsay Bamford

TASMANIA

TASMANIA TRANSPORT MUSEUM, Glenorchy

1067 and 610 mm gauges

The rebuilding of the Queenstown–Strahan railway line has proven to be a very successful tourist attraction on the West Coast and patronage has steadily grown since the line reopened in late 2002. Now known as the West Coast Wilderness Railway, the trains are hauled by three steam locomotives and two diesel locomotives that were historically used by the Mt Lyell Mining & Railway Company on this line, as well as a similar diesel locomotive originally built by the Tasmanian Government Railways. One other ex-Mt Lyell locomotive is Abt locomotive No. 2, a sister locomotive to the three in use on the WCWR, which was donated to the TTMS in 1967.

Since the reopening of the line a number of approaches have been made to the museum regarding the possibility of returning the locomotive to service on the West Coast. The WCWR has now been successful in obtaining funding from the Tasmanian Government to acquire and restore No. 2 and the TTMS has been negotiating for some months for a suitable deal to allow ownership to be transferred. An agreement has now been reached and the locomotive will be released from the museum's ownership, as soon as documentation has been signed. To the Transport Museum, No. 2 has been a unique exhibit, being a late 19th century tank locomotive which was fitted with the Abt pinion drive that allowed the locomotive to climb and descend the steep grades between the King and Queen river valleys, by gripping the rack rails laid between the normal rails. Although the museum is sad to be parting with this exhibit, it will be wonderful to see the locomotive returned to service and once again work on the line on which it spent many decades.

When the Mt Lyell line was closed in August 1963 main line trains were being run by Abt locomotives 1, 2, 3 and 5 and the two Drewry diesel locomotives; apparently Abt No. 4 was dismantled at the time and its components were subsequently discarded. When No. 2 is returned to the West Coast it will reunite all the locomotives present in 1963, which is quite a remarkable feat considering they had different owners and were dispersed throughout Tasmania and interstate in the intervening years.

Tasmania Transport Museum Newsletter August–October 2019

IDA BAY RAILWAY, Lune River

610 mm gauge

The Railway had to apologise to all the customers who had booked the Rail Bike in September as the service did not commence in this month due to lack of Rail Safety Authority accreditation. The Railway Safety Authority has visited and checked the newly built Rail Bike (the first and only pedal & battery powered Rail Bike in Australia) and the railway infrastructure. Management is currently waiting for its response.

Currently, the turntable project has been half completed by the Friend's Group and is still waiting for the Tasmania Parks and Wildlife Service to permit the group to continue and finish it. When finished, the Ida Bay Station will be cleared from any obstacles, and provide everyone with a much safer and enjoyable platform to get on and off the train.

Ida Bay on-line newsletter 16 September 2109

WESTERN AUSTRALIA

BENNETT BROOK RAILWAY, Whiteman Park

610 mm gauge

Many passengers have travelled on the railway in carriages being pulled by the very hard-working diesel locomotive, Planet No. 7, over many years since the BBR started running in 1984. Planet No. 7 has had the odd maintenance problems over the years. She had a couple of engine overhauls a few years ago, and more recently the torque converter failed just before Ashley day. The Friday night crew sprang into action and removed the engine in readiness to gain access to the failed part, which involved removing quite a lot of the cowling and engine covers, making it an ideal time to repaint her. Workers spent the next few nights high pressure cleaning the oily covers and sanding down the parts ready for a long-overdue repaint.

The management committee has committed c. $125,000 over the next two or so years to returning ex-South African 2-8-2 NG 123 to service on the Railway, and repowering and overhauling the Fowler diesel, including wheel sets, to ensure the Railway has reliable and adequate steam and diesel tractive effort to operate train services over the next 15 plus years without further major attention

The Bennett Brooklet September/October 2019

Some more photos taken by noted rail historian and photographer Weston Langford, this time on the Colac to Beech Forest narrow gauge line in Victoria in 1960. The top photo shows the Beech Forest bound goods train near Ditchley Downs discharging sleepers on 17 August 1960. The bottom photo shows an Up goods train behind locomotive G42 approaching Wimba water tank, also on 17 August 1960.
Both photos from the Weston Langford collection. www.westonlangford.com/images/photo/100102 and 100105.