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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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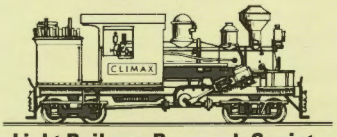

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Conversions:

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 super foot	0.00236 cubic metre
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

Contents

Comment

A 'gunner' is, by definition, an army artilleryman, holding the equivalent of the AIF rank of private. In the Australian vernacular, however, gunner can also mean a person who never seems to do what they keep saying they will – they're always 'gunna' fix this or 'gunna' build that.

To the casual observer, it may sometimes appear that the railway preservation fraternity has more than its fair share of 'gunners', as progress on important projects can often prove agonisingly slow. Many organisations, particularly those who were around in the 1960s and 70s, when much historic equipment was becoming available, have by necessity bitten off more than they could ever hope to chew, in order to save items that would otherwise have gone to scrap. This is to be applauded, of course, but the present-day dilemma is how to care for all these historical relics, some of which may still be languishing in open storage, and in very real danger of rusting or rotting to death before help can arrive.

A solution used by some groups has been to find new homes for these waifs. In fact, not only for items in desperate need of tlc, but also for those that by nature of their track gauge, technology or history, can be more appropriately cared for by another organisation. This is often achieved by means of a long-term loan or lease arrangement, so that ownership is retained, but the locomotive, carriage or whatever is well cared for in the short to medium term and will eventually return to the fold, in far better health than when it left.

To my mind, this is a very encouraging development, and I hope to see many more examples of this trend in the coming years. *Bruce Belbin*

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 the forests.

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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.

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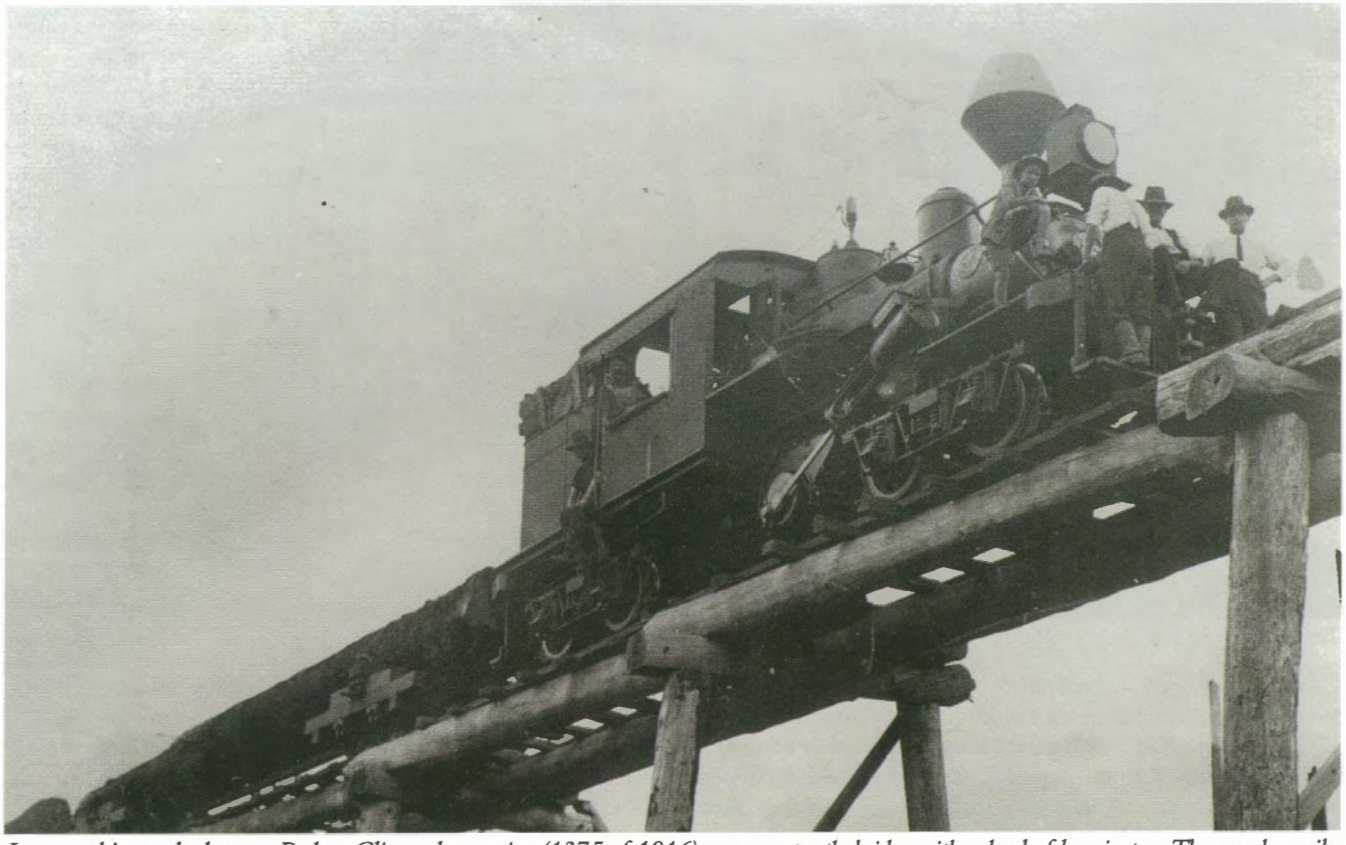
Front Cover: *Ross Verdich photographed ex-SMR 2-8-2T No. 30 (Beyer Peacock 6294 of 1924) at Richmond Main station during the visit by the ARHS tour group to the Richmond Vale Railway on 27 July 2008.*



Longworth's standard gauge B-class Climax locomotive (1375 of 1916) crosses a trestle bridge with a load of logs in tow. The wooden rails, the locomotive's condition and the presence of the three men on the pilot beam (plus the fact that this photograph was taken) suggests that this may have been an early test run. *Photo: John Kramer collection*

Longworth's (Laurieton) Ltd

by Ian McNeil

Foreword

Articles describing Longworth's Timber Tramway at Kendall have been previously published in *Light Railways* issues LR112, a 1924 account of a journey over the tramway, and LR131, Ray Cooper's operational history of the line.

Additional information has been unearthed in the business archives of Allen Taylor & Co. Ltd., a major player in the pre-war NSW coastal hardwood timber industry. This company held a majority shareholding in Longworth's (Laurieton) Ltd, which was thus subject to half-yearly inspections by Head Office, usually in the form of its demanding Managing Director, Mr FA Sargeant.

Longworth's timber tramway was a short 10-mile log line running from near Kendall on the Camden Haven River westwards towards the Comboyne forests. It was distinguished by being built to standard gauge (1435mm) and powered by a B-class Climax steam locomotive, B/N 1375 of 1916. Tramway construction started about 1915 and the Climax loco was in operation by August 1916. Originally wooden-railed, it was quickly found that the wear and tear on them was unacceptable, and by August 1920 the tramline had been re-laid with steel rails.

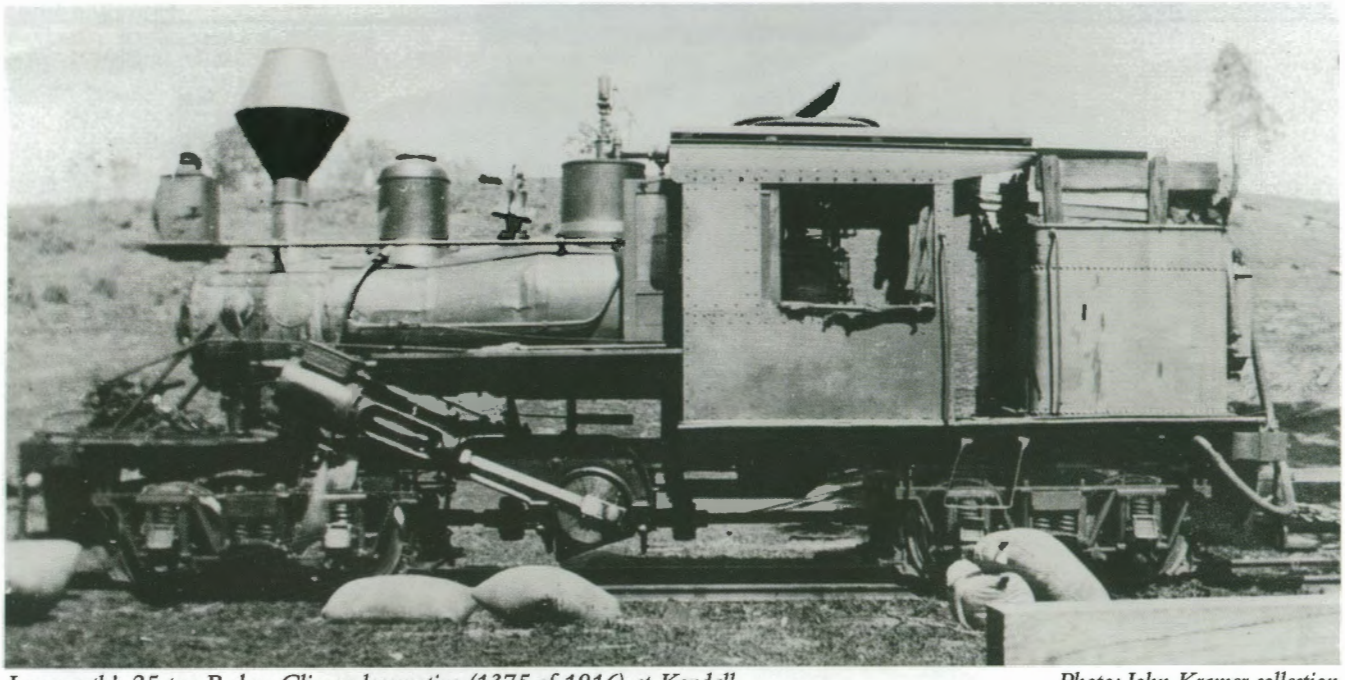
Operations ceased with the onset of the Great Depression in 1929, when both mill and tramway were closed. A last effort was made in May 1933 to re-open the tramway, but one of the old trestle bridges gave way under the Climax loco which overturned into the creek bed below. Although retrieved and repaired it never turned a wheel again. Motor lorries took over the log-hauling tasks, and by February 1936 both loco and tramline had been written off the books.

The following extracts are taken from Head Office Inspection Reports and Longworth's own Half Yearly Reports. They give additional insight into the construction of the tramway and its operation, and also the continual pressure from Head Office to maximise financial returns on their tramway investment.

August 1916. Half Yearly Report by Mr. K Longworth:

Tramline: As in my opinion a great deal of the future welfare of this business depends on this, I might be pardoned for going more fully into it. I am more than ever convinced of the wisdom of building the line. Owing to the high prices ruling, practically half the bullocks on the river have been sold, consequently the demand for the services of those left is keener, and it is quite certain that a rise in the price of logs will follow.

Our line is almost completed to the green timber and in the course of a month we should be drawing pretty largely on it for our supplies. So far as it has been constructed the line has stood the test well. Only a few places show signs of sinking which was only to be expected as it is only ballasted with earth. The bridges have all stood the test well and the wooden rails on the wooden road are a success, while steel is used for the grades and curves. Logs are now coming in to the depots at Dewdrop's and Kerr's while a few are obtained at McInnis'. I feel certain that without this line we could not hope to keep our Mill going whereas by its construction we anticipate keeping all Mills going and obtaining a better class of logs.



Longworth's 25-ton B-class Climax locomotive (1375 of 1916) at Kendall. *Photo: John Kramer collection*

Loco: The Loco arrived safely and was quickly and most successfully put together by our Engineer at a minimum cost of approximately £20. After trials I can express complete satisfaction with her and I confidently look forward to good results. The wisdom of getting sufficient power has been clearly demonstrated.

November 1916. Half Yearly Report by Mr. K Longworth:

Tramline: As the time goes on I am more than convinced of this undertaking and can say if it were not for the tramline we would not be working two benches and be very doubtful if we could get enough logs to work one constantly. The line is now so far extended that we are in sight of virgin forest and the teams are practically hauling to Depots ready for the loco as soon as we can extend the line that far.

Up to now we have not had a run of first class logs but were glad to take what was offering to enable us to keep going, but within a month the line should be far enough out to reach first class timber, and it will be my endeavour to have two trips a day made by the loco, which will make us practically independent of teams for logs

Loco: This loco is doing good work and has come up to our expectations. After 6 months work I have to express entire satisfaction and with more logs available I will look for better results from her.

February 1917. Inspection by Mr. F. A. Sargeant:

Tramline: Inspected tramline. The line has been constructed about 7 miles and is within close reach of some fine milling timber. It requires about 4 chains of rails to be laid and Mr. Longworth stated that this would be done within the next fortnight and then they will be able to keep the loco more fully employed than has been the case for the past 6 months. A large number of logs have been drawn into two Depots and as other large supplies are handy it is anticipated that much more profitable work will be available and the line from now onwards will prove of immense value to the mills. The class of logs was on the whole satisfactory. Good sprinkling of tallowwood, grey gum and a few mahogany and box. I promised to send Longworth's an order for grey gum. This timber would make an excellent substitute for ironbark for the Frisco trade

Rails: As the steel rails are almost unprocurable, except at ridiculously high prices, I advised Mr. Longworth to use wooden rails to complete the line to the new Depots. It is his intention to run two trips with the loco daily.

Loco: I discussed the working of the Loco very fully and explained that a much better return would be expected by Head Office. Unless a considerable improvement was made keen disappointment would be expressed by our Chairman [Sir Allen Taylor]. Mr. Longworth appeared to realise the necessity of keeping the wheels of the loco busy in future.

Permanent Way: I gather that 7ft sleepers used throughout the line have not given satisfaction, and on the flats and on other places where the line has not been properly ballasted they have been compelled to replace the 7 foots with 8 foots. It will be remembered that our Chairman strongly advised them

at the outset to use 8 foot sleepers, but Longworth's followed the advice of Engineer Bennett and now acknowledge that a mistake was made which will be gradually rectified as opportunity offers. The more I see of the proposition the more I am convinced that with proper business management the investment must show excellent results. It requires a better grasp of the work that should be done by a loco of the type which they were fortunate indeed in having installed on the line.

Dividend: Considering that Allen Taylor & Company has about £8000 invested it is hardly to be wondered that we are rather keen on their returns.

September 1917. Inspection by Mr. F. A. Sargeant:

I visited the scene of the of the recent fire at the Concord sawmills, Laurieton. It was a clean sweep, practically the whole of the woodwork was destroyed... Their other mill, [on the other side of the river] called the New Holme Mill, will be ready for operation about the end of October.

I did not visit the tramline on this occasion as Mr. Longworth was so busy organising matters for a start at the new mill. He reported that no alterations have been made since my last visit. The loco is working satisfactorily but he was unable to tell me the cost of logs along the line. There is a large capital outlay involved here and am sure it is not bringing in anything like a satisfactory return.

I must confess these bush tramlines involve very heavy expenditure and need proper working if they are to be successful. In our [Wootton] tramline at Port Stephens there is considerable anxiety concerning capital outlay in this direction. In order to make tramlines pay, large output is essential, and in order to get this heavy capital expenditure is needed. No doubt Longworth's have big fields for operation in the Comboyne forests, but I feel confident they will never secure proper returns from their investment as they have not had the experience necessary for this class of work. Our Chairman Sir Allen [Taylor] tried to put them wise when he visited the district some 2 years ago, and although the advice tendered was valuable, Longworth paddles along in his own way, and has been tackling the tramline proposition like a novice.....

November 1917. Half Yearly Report by Mr. K Longworth:

Loco & Tramline: The loco is still running satisfactorily but owing to the late strike and mill fire we have not used to full capacity. Our experience is that there is a big wear and tear on wooden rails and would recommend when favourable opportunity offers that these be gradually replaced with steel. The extension of the line has been practically suspended since the fire, only two men being employed on earth works. With an extension of ½ of a mile we would be in virgin timber and all work on the line could be suspended for 12 months. Hauling would be cheaper and altogether we would profit by this extension which I propose to carry out at an early date.

Bullock Teams: During winter months it was found necessary to feed the bullocks twice daily. Many days being wet, bullocks had to be fed, but could not be worked. Owing to the [mill] fire I propose to sell about 80 and hold on to three teams of the pick to work in conjunction with the Tramline as we are not far enough advanced to use steam haulers.

August 1920. Inspection by Mr. F. A. Sargeant:

Inspected tramline with Mr. Longworth. Whole of wooden rails have now been replaced by steel. Line in fairly good order but requires re-fastening in places. The Climax is in good condition but does not run very regularly because log supplies are not available. Mr. Longworth expects to get line extended to fringe of Comboyne Forest by end of year. Necessary to install log hauler as he thinks this method much better than teams he has had to use in bush up to date. Some excellent tallowwood will be coming along early from this forest....

August 1931. Inspection by Mr. F. A. Sargeant:

Laurieton: The mill at Laurieton was idle and had not been working for some weeks. Mr. Longworth stated that there was no possibility of them competing with Ellis's mill on the north or Langley's mill on the south or the South Coast mills and he was of the opinion that the only policy to adopt was that the mill to remain dormant until there was a prospect of at least getting prices from the Metropolitan area which would at least cover the cost of production.

April 1934. Statement of Assets: Longworth's (Laurieton) Limited:

(Tramway Assets only)	Book Value		Realisable Value
Tramline	£6721	}	
Steel rails, etc.	£5436	}	£500
Loco & Rolling Stock ...	£1017	}	
Tramline Houses	£155		£25
Log Hauler.....	£803		£200

February 1936. Inspection by Mr. F. A. Sargeant:

This concern is gradually pulling round. It has been necessary to discard locomotive and tramline altogether, and as these items are represented in the balance sheet by £12,539 it has not been an easy matter to re-organize the whole show.

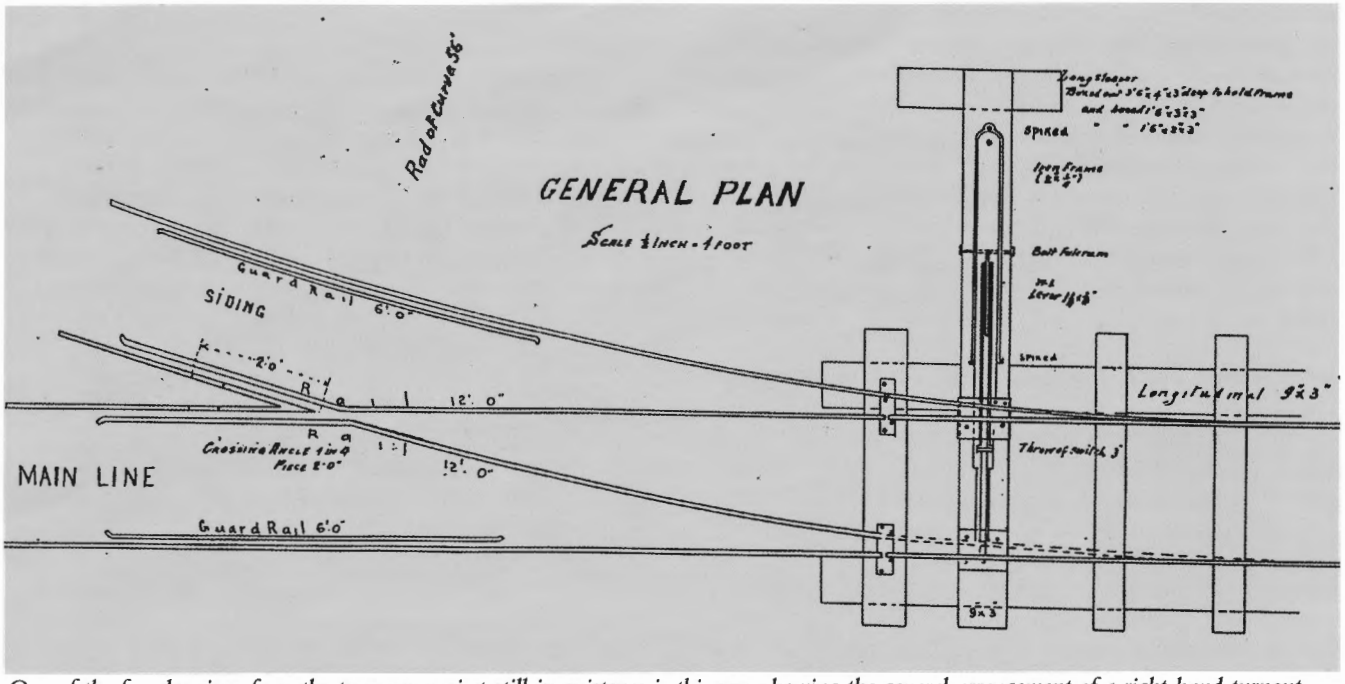
Log haulage by motor lorry has revolutionised costs altogether and wrought a drastic change in mill operating costs. Mr. Longworth Sen., Managing Director has realised this for years and has been considering the advisability of constructing a mill in the forest. Work has been commenced and a mill is now being built in the heart of the forest in the Upper Camden Haven and Comboyne areas. Mr. Longworth was very keen on me visiting the proposition, and I'm very glad I did so. Although I am of the opinion that the final costs will be much greater than he anticipated, there is no doubt, providing he can get assistance from the Forestry Department with the roads, that Longworth's (Laurieton) Ltd. will be on as good a wicket as any mill on the coast...

The road into the forest has been partly constructed and lends itself admirably, as the grade is with the load, out of the forest. Mr. Longworth intends to use log haulers to work the forest, and motor lorry to cart sawn timber about 16 miles to Kendal.

They propose to close down the Laurieton Mill altogether later on and work the Comboyne Mill plant. Mr. Longworth contends that by working in the forest they can handle large logs profitably, whereas these logs could not be hauled to Laurieton except at a loss.

Finale

As recorded in Ray Cooper's article (LR 131) the Climax loco languished at the head of the tramline at Cataract before being sold to a scrap dealer. After being stripped for scrap, probably in 1934 or 1935, only the boiler and smokebox were left, to rust silently in the bush (see LR 133, p.23). The steel rails were pulled up and sold, allegedly for more than was paid for them, which enabled Longworth's to finance the establishment of a new sawmill further into the Comboyne forests. This mill, however, was served by road transport. For the Comboyne forests, the era of the logging tramway was finished.



One of the few drawings from the tramway project still in existence is this one, showing the general arrangement of a right-hand turnout.

A 'Going Concern'
Perth's Sanitation Tramways

by David Whiteford

Preface and introduction.

Ian Crellin's article "The rise and fall of the North Perth Sanitation Tramway" appeared in *Light Railways* 71, January 1981. Subsequent research has enabled this enlarged history to be written but Ian's initial research is gratefully acknowledged. The introductory paragraph is largely taken from his article.

Perth was only a small city in the 1890s compared to the bustling modern city of today. It was separate and distant from communities such as Fremantle, Armadale and Midland which today may be regarded as suburbs of the metropolis. Despite its infancy and small size, the city fathers were faced with problems of waste disposal, which threatened to get more severe as the city grew with the influx of population and business attracted by the promising strikes of the Eastern Goldfields. Health problems were posed by continuing the existing method of night soil disposal using covered pans removed by municipal officers or contractors who subsequently conveyed their cargo by horse-drawn wagon to a burial site away from the urban area. Deep drainage by a proper sewerage system was the obvious solution but the cost of such a scheme was prohibitive. A number of interim solutions were tried in the following years; none was truly successful. A tramway into the bush was tried and abandoned. It was replaced by a hydraulic system with a pumping station and pipeline, both of which had frequent breakdowns. A Select Committee of Parliament was set up in 1901 to investigate the whole sorry business. It recommended a return to the horse and cart as a temporary measure, pending speedy construction of a proper underground sewerage system.

Perth Commonage Railways.

In the 1895-96 financial year the Public Works Department surveyed a tramway for the proposed conveyance of night soil from the City of Perth to a point on Commonage Reserve (Reserve 591A) about 1½ miles west of Subiaco railway station. An alternative survey was made from Third Swamp Reserve (now Hyde Park) to the Commonage. £38.10.3d was provided from Consolidated Revenue for the survey work.

The first survey began just north of the West Perth railway station at Charles Street and proceeded largely along drain reserves, the southern edge of Lake Monger, and through undeveloped land until the Commonage terminus was reached at 4 miles 2 chains. Perth City Council's major sanitary depot was on Reserve 884 off Vincent Street, where the Beatty Park swimming complex now is, and the route from Third Swamp went past the depot.

The Commonage featured in another tramway proposal when on 6 November 1896 Messrs Smith & Young applied unsuccessfully to the Perth City Council (PCC) for a permit to make a tramway across the Commonage.[1] The line is thought to have been to service a limestone industry. The next month a deputation from the PCC met the Premier of Western Australia, Sir John Forrest, to "*suggest that the Government should carry out its promise to aid in laying down a tramway to the Perth Commonage where [rubbish] would be properly treated.*"[2] A sum of £1500 had been placed on the estimates for that purpose but the Legislature had forbidden them using that site. As the present sewerage site (Reserve 884) was becoming unsuitable, something would have to be done.

The PCC Health and Sanitary Committee minutes for December 1896 and January 1897 called on the Town Clerk to communicate with the Government to urge the carrying out of the tram line to the Perth Commonage as there were increasing complaints regarding the offensive nature of the existing site. At the meeting of 25 February 1897 the committee recorded that if the sanitation tramway was built to the North Perth site, the Council would still require a tramway to the Commonage in order to bring in material for road making etc. A 3ft 6in gauge railway to the Commonage was estimated to cost about £7000.[3]

The *Morning Herald* newspaper of 15 March 1897 reported an inspection of the Commonage's capstone quarries by the PCC City Engineer, Mr Deverell. There was an almost inexhaustible supply of road making material and if a tramway were constructed stone could be delivered on the roads in Perth at about 2s 6d per yard, whereas the present cost was 10s per yard.

The same month, March 1897, the PWD advised they would construct a westward tramway for quarrying purposes. The offer was accepted by the PCC and the West Perth to Commonage line was constructed, but for a purpose other than the original night soil.[4] The workings of and gauge (likely 2ft) of this line are presently unknown but on 21 May 1897 the PCC adopted the report of a Special Committee appointed to study the Commonage tramway and agreed to concessions being given to WA Builders' Lime & Stone Co. Ltd:

[T]o connect their tram with Subiaco railway station across Commonage, they to keep all lines in thorough working order; Council to have full running powers over same without let or hindrance, and have power to connect with said line at any place. Concession to last until end of lease granted to WABL&S Co. [1.2.1902]. Council then having right of purchasing whole of lines for £600 or give 6 months notice that they intend to take over the lines or otherwise. After said 6 months lines to become property of Council. Whole of works to be completed within 3 months after signing agreement.[5]

The company would build their tramway and have a five-year lease from the Council of the Commonage over which it passed, while the Council reserved the right of using the tramway for the purpose of carrying road material, etc. One week later the conditions were amended with the £600 clause being deleted and the lines simply to become Council property at expiry of the lease. The BL&SCo was given permission to transfer their tram concession to Mr J Nesbit in February 1901.

The actual PCC line appears to have been in disuse by mid-1899 as, on 26 June 1899, Robert Maggs Jnr and George McPhee of Bulwer Street, Perth, wrote to the PCC's Health and Sanitary Board:

We respectfully beg to make application for the use of the sanitary tramway line running from the sanitary works, West Perth, to end of line. We will guarantee to keep this line in repair; to pay the Council a certain rental per week, and to hand over the line in the same condition at the expiration of 12 months. Our intention is to use this line for carting firewood. If you will grant us the use of this line we will give you security that we will comply with the above conditions if the rent asked by the Council is not too heavy.[6] Maggs and McPhee were unsuccessful in their application, and again in July when asking for use of the line for 6 or 12 months at 10s per week and to supply the West Perth sanitary works with wood at 1s 6d per cord.

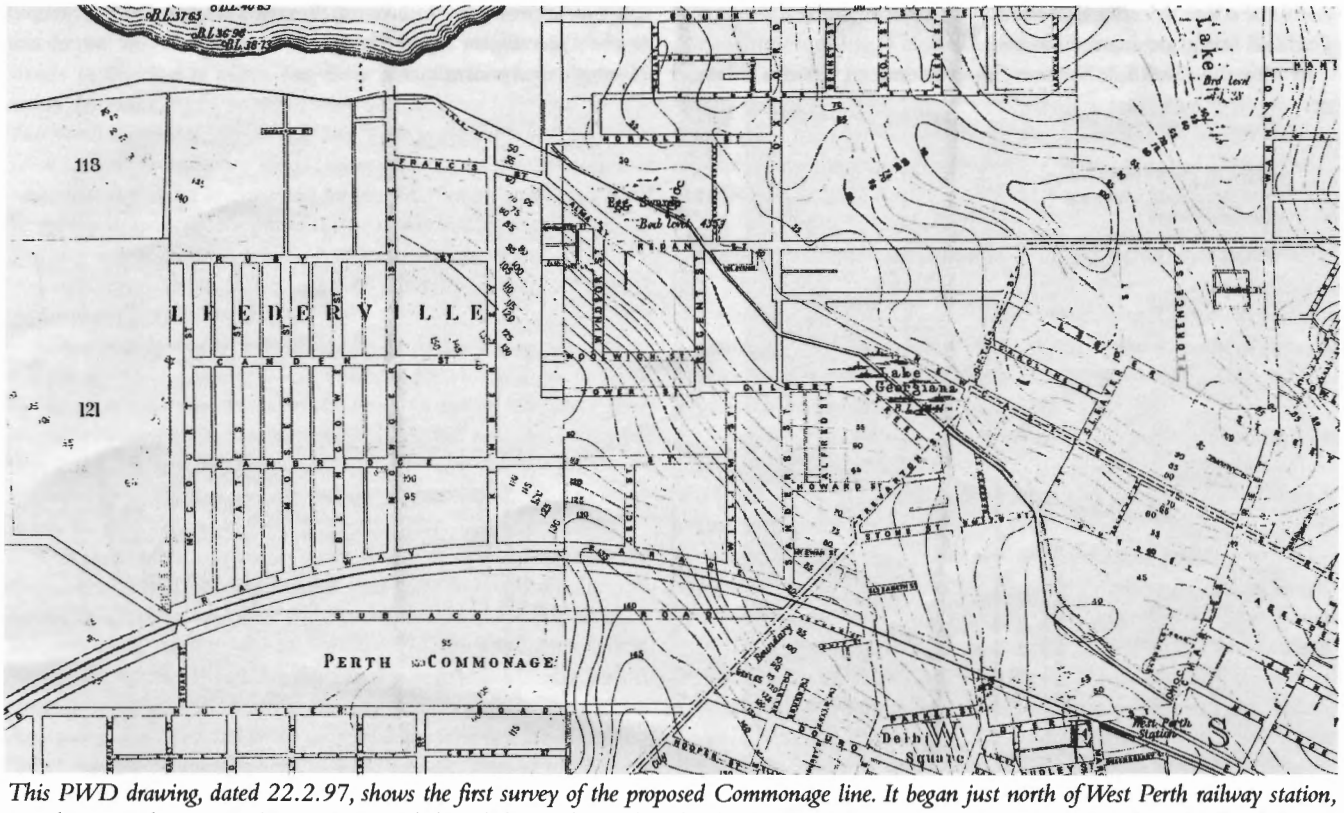
The West Perth line poses more questions than research has so far been able to answer and the whole story of its construction, existence and removal remains largely untold.

North Perth line

While there was no action on disposing nightsoil to the west of the city, there were large tracts of bushland to the north and within only a few kilometres of the city boundary. Reserve 884 was gazetted on 4 December 1890 for PCC sanitary use. As well as containing the sanitary pan depot, the reserve was used for nightsoil disposal and it was the combination of the congestion of the disposal area and its closeness to expanding urban development within the three municipalities that was the catalyst for the North Perth sanitation tramway. Gazettal of Reserve 943 as a Public Utility Reserve followed on 18 September 1896.

Reserves 884 and 943 became not only PCC's focal points for Perth's nightsoil disposal but a focal point of protest from neighbouring municipalities and the bane of the Public Works Department. The Sanitary Depot Reserve, 884, on Vincent Street was actually outside the Perth Council boundary and would later be vested with the North Perth Municipality, while Leederville Municipality's boundary was close by.

Reserve 943 was outside of all three municipalities and later would be part of the Perth Roads Board (now City of Stirling). Although the PCC commenced use of the reserve for the purpose much earlier, a sanitary depot within the reserve was not gazetted until 15 June 1900. It was beyond the bounds of close urban settlement, although only a few kilometres from the centre of the city, and was seen as a trouble-free site for sanitary disposal. The sandy nature of the soil enabled long trenches to be dug and the nightsoil flowed into these trenches for quick absorption and burial.



This PWD drawing, dated 22.2.97, shows the first survey of the proposed Commonage line. It began just north of West Perth railway station, ran along mainly existing drain reserves and skirted the southern edge of Lake Monger before terminating at a total length of 4 miles 2 chains.

An August 1896 PWD plan shows two surveyed routes for the North Perth line from Fitzgerald Street, Perth, near Third Swamp reserve (now Hyde Park) to a point in Reserve 943, a distance of just over 2 miles.[7] No action was taken on either of these routes. The Perth terminus was a streetside location, not within (but close to) Reserve 884, and was intended as a transfer point from cart to train.

The PCC's Health and Sanitary Committee was council's planning body for sanitary works, passing recommendations and requests for dealings with higher government authorities to the Council while also dealing directly with other council committees. In February 1897 the Committee received a letter from the Central Board of Health (later the state government's Health Department) requesting closure within 60 days of the existing nightsoil site (Reserve 884) and suggesting incineration until a deep drainage system was an accomplished fact.[8] The Under-Secretary of Public Works also wrote to the H&SC in February stating that *they would commence construction of the tramway immediately the Council decided upon the route and site for the works depot.*[9]

By March 1897 the PWD had surveyed another, and the final, route for the sanitary tram. The line left the Vincent Street depot along an existing wooden-railed tramway that connected the sanitary pan establishment with the stables on the corner of Wanneroo Road (now Charles Street) and Vincent Street. It then ran east along Vincent Street, north up Fitzgerald Street and across Perth Location Z to Reserve 943, terminating 2 miles 20 chains from the start. However, debate still occurred over many aspects of the tramway and at the H&SC meeting on 4 March: "*A discussion took place re tramway to new site and unanimously decided that a 3'6" gauge be asked for instead of 2ft as proposed by the Government also that the said tram might start at a nearer point from the city.*"[10] Up until this point, planning for the line had always been for a 2ft gauge line.

Despite the above concerns, construction began quickly, for the *Morning Herald* newspaper of 24 March 1897 was able to report that a supply of sleepers and rails was being taken along the route in order that the work might be started at once. The rails weighed from 12lb to 14lb.

In May, the Health & Sanitary Superintendent, Charles E Lee, inspected the tramway and reported that it had several steep grades and would be much more profitably worked by steam motor.[11]

On 21 May, the PCC wrote to the PWD requesting that construction of trucks be delayed a few days pending particulars re gauge of rails and amount of slack given in curves. In a true 'Catch-22' situation, the PWD had informed PCC that they would not put a turnout at 92 chains until the particulars of truck dimensions and wheelbase was provided. Each body assumed the other was constructing the trucks![12]

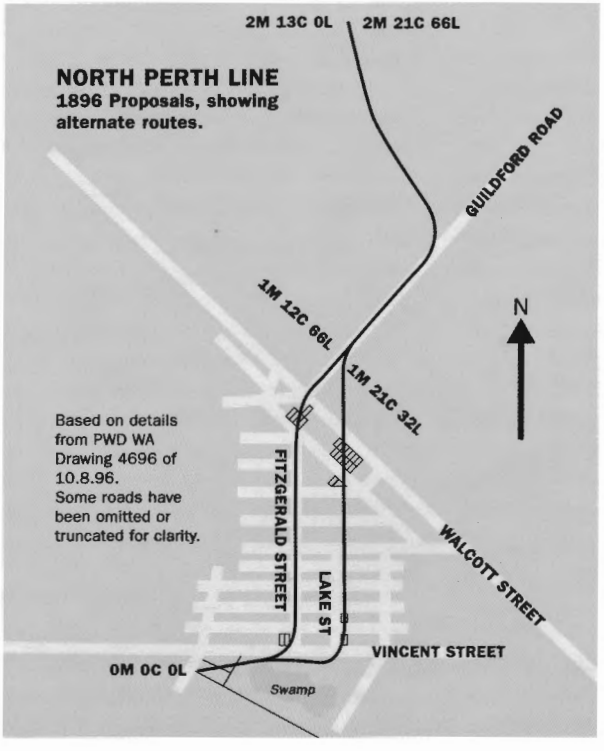
The gauge was confirmed as 2 feet at a meeting of the H&SC on 27 May, and the Chairman said "*it was never understood the City Council would have to provide their own trucks. He understood from the Premier that the Government would furnish everything required.*"[13]

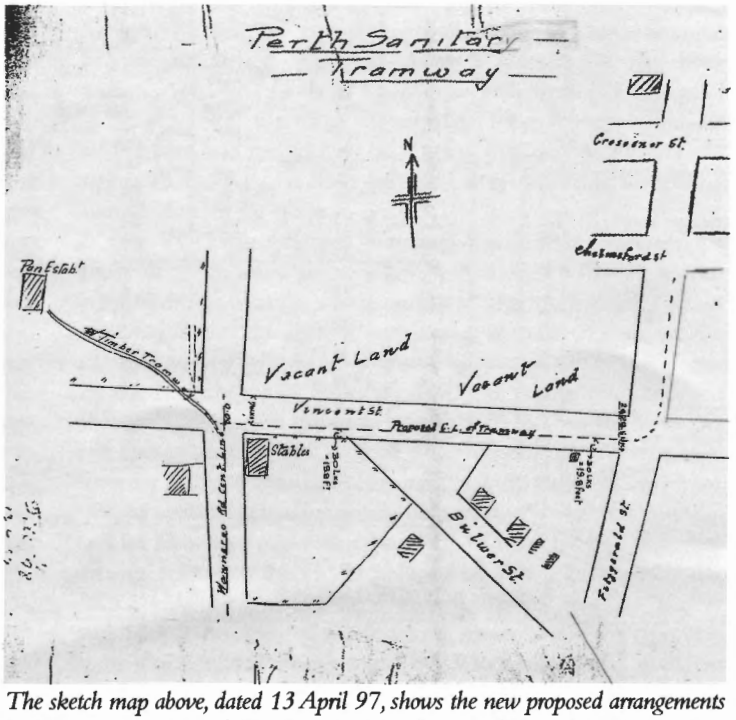
The removal of 2000 pans nightly would require at least 26 trucks and the Sanitary Superintendent again suggested the advisability of using a steam motor and strengthening the line by laying intermediate sleepers. The Town Clerk wrote to the Engineer for Roads & Bridges at the end of May saying the Government would furnish the required trucks, estimated at 30, and he mentioned Mr Lee's steam motor proposal.[14] This proposal was then submitted to The Commissioner of Public Works for his consideration but nothing came of it. Mr Jull, Under Secretary for Public Works, wrote to the Town Clerk on 20 October 1897 saying that it had always been understood that horse power would be used and would be provided by the council.[15] The PWD had, on 12 October, officially notified the PCC:

that the City Sanitary Tramway has been completed, and, as previously intimated [on 15 September] *the trucks are ready* [26, each capable of holding 42 pans]. *This Dept. is now prepared to hand same over to your Council at anytime on receipt of an intimation that you are ready to assume control.*[16]

The Central Board of Health enquired of the PCC in November 1897 as to why the new sanitary depot was not yet in use. The reply stated:

the new tramway constructed by the Government is practically useless for our purpose, the rails being too light and the sleepers too far apart for a locomotive to be used thereon. This fact was pointed out to the Government before the line was started but no notice was taken of our representations.[17]





The sketch map above, dated 13 April 97, shows the new proposed arrangements for the starting point of the line, including the use of the existing tramway.

The PCC's discontent resulted in a PWD engineer preparing a report on the tramway, sent to the Council on 4 February 1898. It stated:

[T]he rails, sleepers and ballast are all too light for loco traffic. The grades are also very steep, the steepest being 1 in 30. The load a loco will draw on this grade is not more than 1/6th or 1/7th of what it will draw on a level. Unfortunately... an upgrade of 1 in 30 occurs immediately on starting with a loaded train from the...depot, and the engine must be capable of drawing the load up with a steady pull. More work could be got out of the line by lengthening it 5 or 6 chains up in the rise of the sanitary reserve to the west of Wanneroo Road but this would not be convenient. Steel rails of 18 to 20lb/yard would be required instead of the 12 & 14 lb iron rails laid. An additional sleeper between each two (built with 2'9" gaps between sleeper centres) could preserve the rails as laid for some years but vigilance would be required for overstrained rails or sleepers. The cinders ballast thinly covered the sleepers and the line would need to be raised 2 - 3 inches to allow insertion of sleepers, then extra ballast could be put on. The ballast should continue to thinly cover the sleepers, being advisable as in case of accident to locomotive it would be necessary to keep the traffic going with horses.

Traffic estimates were 2400 pans nightly or 57 truckloads of 42 pans each. Each truck weighed 12cwt empty and loaded trucks would weigh 27cwt (allowing 40 lbs per pan).

The report continued : *Traffic is at present restricted to the hours of 11pm - 5am ... the hours might be extended without grave objection. With closed pans the traffic is in other places carried on at all hours of the day.*" [It is assumed that the reference to traffic was to the city night soil collectors and their horse carts and not to operating trams.]

Possible operations by locomotive could be 3 trains of trucks in use, one loaded at one end, another emptied at the other and one in transit. The distance could be run in 15 minutes each way, and allowing 15 minutes for shunting it would take ¾ hour per trip out and back. The first full train could not be expected to be ready before 1am so only 6 trains could run before 5am requiring 10 trucks or 13½ tons to be drawn each trip.

It is, I think, very inadvisable to put an engine on the line that would pull this load, it would be about 9 tons weight and the rails would be knocked to pieces. The extra cost of such a large engine & set of 10 extra trucks ... must also be considered. To suit the line two small engines might be run and there is a siding half way that would allow for trains crossing. But on account of this crossing and trains slowing down and waiting for one another the work that could be got out of two engines would not be nearly double the work of one and the risk of accident would be somewhat greater.[18]

The Engineer Sewerage & Town Water Supply's recommendations were:

Larger size loco of type 1 quoted for by Messrs Barre Johnston & Co. (or similar) be obtained. Weight about 5½ tons to draw 6 loaded trucks at a time, 18 trucks in all being in use at the same time, requiring 10 trips. The first train need not be full and could leave the depot at 12.45pm, the last at 7.30am.[19]

Unfortunately, no details of the locomotive quotes have been located.

The continued use of Reserve 884 was so objectionable to the Leederville Board of Health that they instructed solicitors Stone & Burt to write to the Perth Board of Health seeking removal of the sanitary site to Reserve 943, the present site being "*a menace to the Public Health*" and a reminder being given "*that you have promised from time to time to remove the site but have failed and neglected to do so.*" Should steps not be taken by "*next Saturday morning*" a writ would be issued and an injunction sought from the Supreme Court restraining the use of Reserve 884. The letter was written on 16 March 1898.[20]

The pumping system.

The Public Works Department did take preliminary steps towards putting the tramway in working order but funds were withheld in April due to the Leederville/Perth Councils' dispute. Following a deputation from the PCC upon the Minister for Railways (and Public Works) on 5 April, *The West Australian* newspaper reported on 6 April that

The Minister promised to place the line in a better condition and to order a locomotive for use upon it. The cost of the repairs, which were estimated at between £1200 and £1400, will for the present be deducted from the Council's drainage vote of £20,000 and the Minister will recommend a refund of the amount being placed upon the next estimates.

Inactivity, other than letters and threats being sent to and fro, continued. In mid July 1898 the Mayor of Perth met with the Director of Public Works and discussed the sanitary depot transfer together with options of repairing the tramway or adopting a pumping system.[21]

Tenders for a pumping scheme were called, and were opened on 29 August 1898. Mr JH Clemenger's tender for cast iron pipes at £1529.6s.8d was accepted.[22] The tender for the actual pumping station was awarded to Tomlinson Bros. at £69,523 and the pumping system commenced operating on 24 September 1899. The Perth Local Board of Health expended over £13,000 on sanitary services in the year 1898-99 and, although the pumping scheme was included in this, there was still an item of £16.2s.5d for *Repairs to Tramline.* In his 1899 report the Chief Health Inspector and Sanitary Manager of the PCC said:

The Pumping Scheme has now been working about 10 weeks, and some difficulties have arisen through the use of sand in the closet pans, which, when emptied into the pump has blocked the pipes. I feel sure...that if about £300 to £400 be expended on proposed alterations for preventing the sand from getting into the pipes, and means adopted whereby the pipes may be inspected at points where depressions occur ...the scheme will be a success. The new reserve could then be converted into a farm capable of supplying a very large amount of the fodder required for the horses employed in the Sanitary and Rubbish Services.[24]

However, like the tramway, the pumping scheme was not a success. The pipes were laid with joints facing the wrong way causing clogging. There was frequent bursting - and bubbling up of sewage to run all over streets - and the 6in pipes were too small. By mid January 1900, after less than four months of operation, the Council's Health Committee was proposing abolishing the pumping scheme and constructing a new road to Reserve 943.

Replacement proposals & a Select Committee.

The replacement of the pumping system was as confusing a process as replacing the failed tramway. The Government wrote to PCC in March 1901 to say there were no funds for constructing a "tramway" to Reserve 943 - yet PCC had written for construction of a road![25]

But despite all the earlier negative experiences, tramways were still under consideration, as a plan was suggested to use a portion of the Perth Commonage at Subiaco for a sanitary site in preference to Reserve 943 and that "*nightsoil might be conveyed on the [electric] tram lines to Subiaco, and then by the existing light line or an extension of the tramway system to the Commonage.*" Perth Council still had the right to use the light line operated by Briggs and Rowland (successor to WA Builders Lime & Stone Co.) for limestone extraction. The committee resolved to ask Subiaco Municipality whether they would permit tramlines within their boundaries to be used for nightsoil and also to ask the Government whether they would permit a tramline to cross the railway at Subiaco.[26] The proposal to use the Commonage turned ideas back full circle to 1895!

The situation was so out of hand that a Select Committee of the Legislative Assembly was appointed on 23 October 1901 to consider the question of the removal of the city sanitary depot from its present position and to recommend a suitable site for such purpose. The report was tabled in Parliament on 14 January 1902.[27]

Mr Albert Card, Secretary of the North Perth Roads Board, in his evidence wanted Walcott Street as the carting route to Reserve 943 and reported the frequent failures of the pumping scheme. Alternatively a light railway or electric tram providing a daylight service would be acceptable. The existing WAGR line to Bayswater could be used and a light line built from there to Reserve 943. If an electric tram was used it could remain after the night soil dumping ceased and be used for other purposes. Mr Thomas Shafto, Chairman Perth Local Board of Health, preferred a 3ft 6in gauge railway line along Fitzgerald Street, linked to the electric system.

PCC had the right to use the Perth electric tramlines and pans could be picked up and sent along by horse traction. A Mr Rogers had some years before submitted a plan to supply current to a new sanitary tramway if PCC would lay lines and supply trucks. It was estimated to cost £7000 to lay the line and £1500 a year for operation.

Numerous other schemes involving roads, electric tramways and the WAGR lines were presented to the Select Committee. Mr John Short, Acting General Manager of Railways, agreed that use of the WAGR was feasible, but perhaps in a cautious vein he added "*It is quite a new idea to convey this sort of business by rail.*"[28]

There was also concern over urban encroachment towards Reserve 943 although some did not foresee any development for many years. Councilor Stinton of Perth (and a Health Board member) when asked about the original line responded *It was no use: it was only a toy ... It was simply a contractor's line for hand shunting a few trucks. It was a waste of the Department's money to put it down.*[29]

Mr Charles Lee, by then Chief Inspector Perth Local Board of Health, said that there were 8lb and 10lb rails, iron nails for dogs in some instances, and two inches of ashes for ballast. At one time he, the late Councilor Paterson and Mr Deverell, City Engineer, and some other gentlemen:

went out to have a trial trip. One horse was put onto a car. We filled the pans with water. When the car got to the curve it capsized. That was the last of the tramway.[30]

The Committee recommended that Reserve 884 Pumping Station be removed. There was no objection to temporary use of Reserve 943 provided proper arrangements were made for conveyance of pans. Deep drainage was the only permanent solution.

The sanitary tramway had by this time been removed, the PCC Sanitary Committee resolving on 15 May 1901 to take the line up. In July 1899 Messrs G McPhee, Nicholson & Hensman sought use of and purchase of rails at North Perth but their offer was declined. It is unclear whether they intended to use the line or remove it for laying elsewhere.

Deputations have been noted earlier in this article. Another was made by representatives from Perth and North Perth municipalities upon the Minister for Works on 24 January 1902, shortly after the Select Committee report had been handed over, in order to ask the Government to grant a sum of money with which to construct a road from the present sanitary depot to the new site.

The Mayor of Perth said that they desired to ask the Government to construct a roadway or tramline from the present...site to a site some mile and a half further out... He had been informed that the best method of dealing with the question would be by constructing a tramline along Fitzgerald Street![31]

A tramline and cars would cost £6625 while alternative road works along Fitzgerald Street would cost £2250 and Walcott Street £2750. It was recognised by all that any moves would only be of a temporary nature due to the impending deep sewerage work. However, the Mayor of North Perth said that his council preferred the Walcott Street route of the two roads but that they thought the tramline along Fitzgerald Street should be constructed. The Minister asked whether, if the Government advanced the municipality the cost of the tramline, they would be prepared to pay interest and sinking fund upon it, amounting to about £350 a year. The tramway would necessarily effect a great saving in the cost of the sanitary work for they would be able to do away with a number of horses and drivers. The Minister could only say that the fullest inquiries would be made and that the Councils had made out a very good claim.[32]

It was not until August 1906 that the State Government announced firm plans for the treatment of Perth's sewage and work began immediately, although even by the 1920s the pan system remained in use for the majority of Perth households.

In only eight years, from 1895 to 1902, the issue of disposing of Perth's nightsoil created two expensive, short lived public works, and a lot of animosity between neighbouring councils. Perth City Council stood its ground on the use of what it saw as reserves granted for its exclusive use. There are intriguing references to light lines to the west, through the Perth Commonage, and further research is needed to write the history of these lines. The actual nightsoil tramway existed for less than four years. Although it was considered an abject failure, there is a little evidence that it was used for a time, though this is inconclusive. With less bickering, and better planning could the North Perth line have been a 'Going Concern'?

Acknowledgements:
Ian Crellin for his initial research and article.
Jeff Austin for providing additional references.
Bob McKillop for editorial advice.

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1 Perth City Council minutes book. State Records Office consignment 2826/8.
2 PCC minutes, 2826/8.
3 PCC Health & Safety Committee minutes book, 2894/1.
4 PCC minutes, 2826/8.
5 PCC minutes, 2826/8.
6 PCC Administration file, cons. 2501/86, Sanitary services. Despite the quote from the Maggs and McPhee letter, I do not believe that the line was ever used for sanitary purposes. There has been no further reference in the records to a West Perth sanitary depot.
7 PCC H&SC minutes, 2894/1.
8 The routes were 2 miles 13 chains and 2 miles 21 chains 66 links from the start for the Palmerston and Lake Street routes respectively. The Palmerston Street route was along the centre of the road reserve while the Lake Street route, which left the first survey at 0m. 11ch. 4L, rejoining at 1m. 12ch. 66L., was through subdivided blocks.
9, 10, 11 PCC H&SC minutes, 2894/1.
12 PCC minutes, 2826/8.
13 PCC H&SC minutes, 2894/1.
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A Time of Fire

by John Shoebridge (photos by the author)

Some may think that having one's own private railway can be fun. At times it provides some interest, but there are down sides.

During the 1960s I spent three years as Colliery Manager at Maitland Main Colliery, at that time the furthest outpost of the South Maitland coalfield. This mine owned its own branch railway, operated by South Maitland Railways Limited. A mere four kilometres long, the line was a small but essential component in the coal supply chain.

Maitland Main Colliery branch

On the line there were three creek crossings. Barely more than open culverts, they comprised conventional sleepered track carried on twin timber bearers on concrete piers and abutments. We also owned some 200 wooden coal hopper wagons, of which it was usual to have 50 or so in the colliery sidings at any time. Four or five would be under repair, the remainder awaiting loading or despatch. Our only other item of rolling stock was a demountable trolley used by our sole fettler/shunter when re-sleepering.

I took over as manager in mid-1967. I remember it was dry all year and in October we had the first warning. By strange chance, I had ridden in the van of an outgoing coal train to have a look at the junction points. Walking back along the track, I came upon a fire in one of the main timbers on the largest bridge. With some difficulty I managed put it out with water from a stagnant creek. Back at my office I phoned the SMR Engineer, Bert Reynolds, quoting his locomotive number and berating him regarding the state of its ash pan.

As a precaution, I arranged for the fettler to take some galvanised steel sheets and nail them over the exposed timbers. At the same time, I had several oil drums of water placed near the bridges. Although it was not my intention, they provided excellent targets for the local rabbit marksmen!

Full Coal Standage Maitland Main Colliery. The locomotive has set off the van and is about to back onto a loaded train. Note the two roads of small coal.

The '68 firestorms

For a year or so we had no more trouble. Then one day in November 1968, several big fires came together and rushed through the bush west of Millfield. We could see the smoke but had no idea of the location of the fires. Around three in the afternoon, the wind changed and the fire swung in from the thick scrub at the north of the property, setting fire to the residences at RW Miller's old Millfield Colliery.

Although this mine had been closed for some years and the houses were vacant, I felt it was a shame to see them burnt so I took some of our surface hands and we made a vain attempt

Maitland Main Colliery Pit Top. The dragline is cleaning out the washery sludge pond. To the right, empty wagons wait to be gravitated under the screens for filling. December 1967

Above: The remains of Millfield Colliery screens after the November 1968 fire. The circular object atop the concrete foundation is the skip tumbler. Left: Some we saved! Coal wagons smoulder on Maitland Main sidings after the fire. Below: And some were Lost! Burnt-out wagons on Millfield Colliery sidings, November 1968.

to save them. With our resources limited to two knapsack pumps and some wet bags, we were well outclassed and late that evening we stood back and watched all three dwellings burn to the ground.

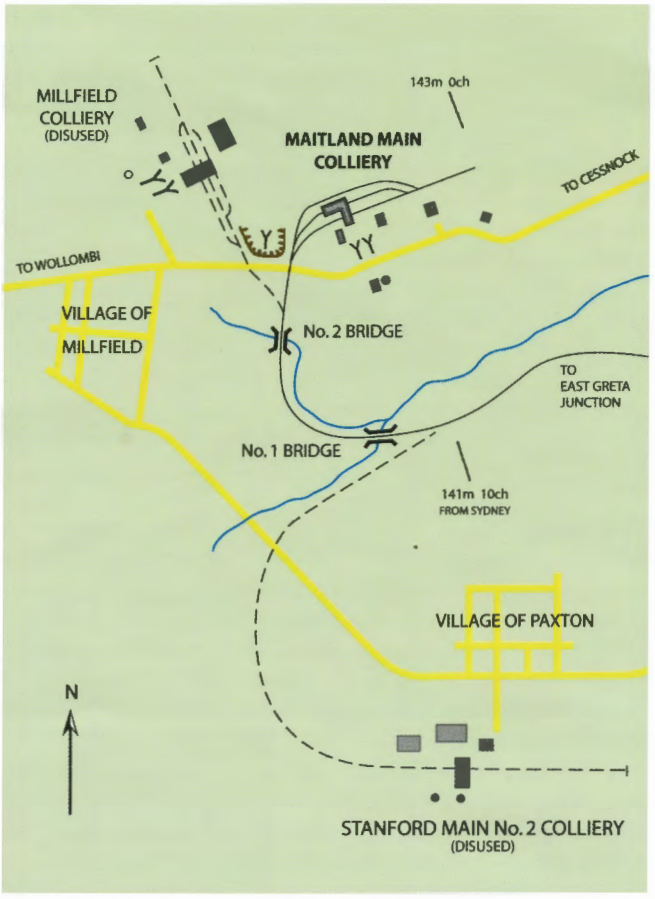
By then the wind had abated so we mopped up what embers we could see and retired for the night. As a courtesy I phoned RW Miller's Superintendent, Bede Kelly, to let him know of the incident. He thanked me and in the course of our conversation (fortuitously as it happened) agreed that I could help myself to any salvageable material around the old mine site.

Next morning all was still. Some matter underground occupied my attention until noon and when I came back to the surface there was a new fire across the road from the mine. Before I could draw breath there was fire everywhere. Most of the surface hands had departed to save houses on the outskirts of Millfield township, leaving behind only five or six of us to do what we could at the mine.

The surface structures of Millfield Colliery were soon well alight – screens, bathhouse, office and workshops. Nothing could save the old dry timbers and the flying brands soon set fire to abandoned wagons in the yard. The rising smoke against the blood-red sun as it rose high in the sky presented an awful spectacle as we watched the destruction across the paddock.

Suddenly the loaded train on our sidings was on fire. With no time to spare, we let off the brakes, barred the wheels and managed to run most of the train across the level crossing onto the siding near No.2 Bridge. Somehow we missed the motorists creeping though the smoke and once the wagons were stationary we were able to beat out the flames with wet bags. Meanwhile the wagons at Millfield perished.

By now the fire had crossed Wollombi Road and it was obvious that our railway and especially the bridges were at serious risk. We loaded two oil drums of water onto the hand trolley and I sent two men to push it down the line to do what they could for the No.1 Bridge, giving them our two knapsack pumps. Meantime we filled the drums on the yard lorry and I suggested to the driver that he back down the line (so as to be able to escape if necessary) onto No.2 Bridge. I similarly took my utility truck down the creek bed, as close as I dared.



Maintenance work on No.1 Bridge Maitland Main Colliery branch. The wagon repairers, carpenter and fettler bar a new longitudinal bearer in place in October 1969

For a time things got very hectic indeed: the fire came from the west and set fire to the bridge; the smoke was blinding; the loaded train re-ignited; the lorry driver panicked and took off with our water supply; and I only just managed to save the utility by a blindfold dash through the smoke.

When the immediate fire front was past, the coal trucks and main bridge girders were well alight. I made the decision that the wagons were the more valuable and whilst we clambered for a second time atop the burning train to beat out the flames with bags, No.2 Bridge was totally consumed, leaving only the concrete piers, festooned with hot and twisted rails.

As the fire moved away into the bush, things settled down. Three of us extinguished the fires on the wagons, and the trolley crew saved No.1 Bridge. I gave everyone a lift back to the bathroom on back of the utility where we brewed a welcome billy of tea.

The aftermath

Back at Maitland Main, I phoned the SMR traffic office and cancelled the next day's trains. Then I arranged for motor lorries to stockpile coal at the dumps and ordered a bulldozer and a mobile crane to be on site at 7am. I had a bite of dinner, then refilled the drums in the utility with water and with a knapsack spray worked till midnight extinguishing smouldering sleepers and fence posts.

When I arrived at the pit at six next morning the bulldozer was being unloaded and the crane was rattling down the main road from Cessnock. I saw my underground crews off below, then as the coal started rolling up the conveyors, I took the dozer driver and set him to work cleaning up the site of the culvert we would have to build to replace the destroyed No.2 Bridge. The pit-top hands, having no coal to handle, were sent to select the best rails from our meagre stock and to bring them down to the break. Luckily we had a stack of sleepers that had been destined for relaying part of the full roads – that task would have to wait!

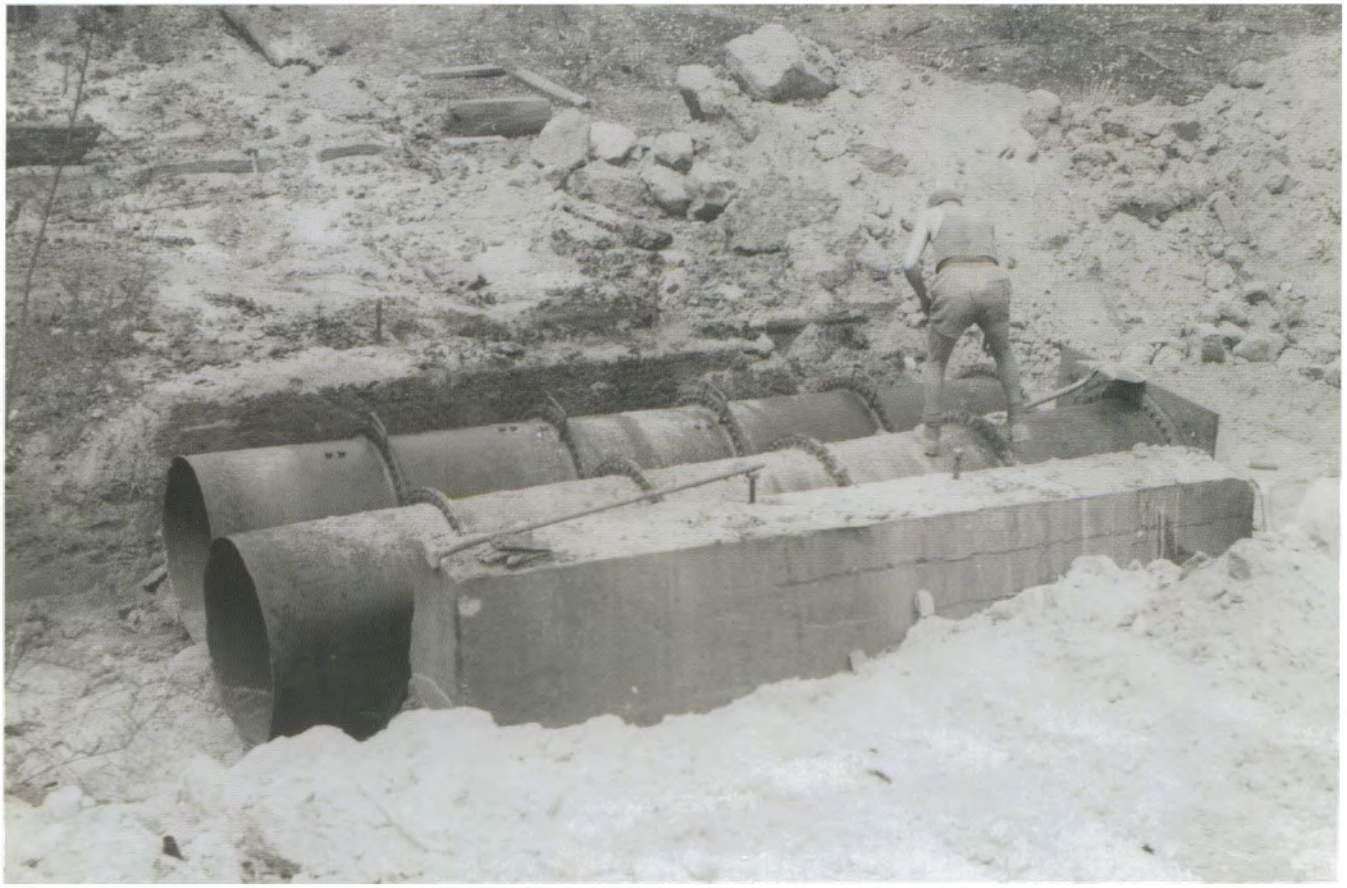
The welder and I loaded his gas bottles into the utility and, with the crane following, we cautiously picked our way through the still smoking embers of Millfield screens to the old boiler house there. Here the old smokestack, made up from a Lancashire boiler flue, complete with Adamson rings, was still standing. It came down easier than I had expected. We undid the guys and when the crane driver inadvertently hit the jib against the chimney, the weld on the base plate broke clean off. The welder and I leapt aside as the whole lot came down with crash! As the dust cleared, the oxy made short work of the joints and we soon had the stack cut into two sections and snigged out behind the crane.

By now the hole had been cleaned out and the dozer pushed the temporary culvert in place. I called our front-end loader and one of the lorries off the coal run to bring in fill from the new open cut and we were soon tipping, rolling and watering the new track bed.

By midday with the trackbed filled and consolidated, I left the gang laying out the sleepers and hastened to the office to phone the SMR Traffic Manager, Jack Delaney, asking for a train of empties. 'Bad luck!' Jack responded. 'You've lost your turn . . . the jobs are all allocated . . . anyway Bert wants to inspect the line first.'

So the afternoon shift continued to put coal to the dump. Sure enough, next day, Bert Reynolds and Jack Delaney both turned up to check on our handiwork and with their blessing, SMR No.18 worked the first train across the repaired line.

The improvised culvert saw us through several floods and at least one more fire until the mine closed in 1972. I went back in 2005 to see how it had fared. The property has been subdivided and amidst the smallholdings I could find no trace of the culvert or even the level crossing.



Expediency. Boiler flues in place between the original piers and ready to backfill.

Above: Spreading and watering the fill. The wheels on the water cart would be a collectors' item today. Left: Fill in place, ready for sleepers. Below: First train over the new bridge. SMR No.18 pauses for a photo on the finished job. Despite the small waterway, the culvert sufficed until the mine closed.

Steamy J

by Joh

Indonesia's sugar industry is fast becoming the last significant outpost of industrial narrow gauge steam in the world, and fortunately it is close to our shores. As pointed out by one participant, you can get a sense here of what things in Queensland must have been like 50 years ago. Rob Dickinson's *Steamy Java* trip in August 2008, advertised in *Light Railways*, attracted a few Australian participants. Most on the tour came from the UK, retired and sprightly gentlemen for the most part. And what a magnificent tour it was, well organised and full of variety. Over 40 industrial steam locomotives were seen in operation, including two at the 1067mm gauge Cepu Forest Railway.

In spite of the cautionary travel advisories posted by the Australian Government, we found Java to be a very friendly place, where economic prosperity is growing. The widespread availability of public transport means that the intrepid traveller can access the sugar mills relatively easily, but on tour we had two well-appointed air-conditioned minibuses to take us around under the leadership of expert guides. The march of globalisation means that such modern conveniences as plastic money, mobile phones and the internet are increasingly in evidence if you need to use them.

The track gauges used by the sugar mills are 600mm, 700mm, and 720mm. 700mm was adopted by the Dutch as the narrow gauge of choice and so predominates. Steam locomotives can be seen in use at no more than 15 sugar mills now, out of more than 50 that once used them. There are large numbers of disused steam locomotives. Diesel locomotives are used, but th older ones are generally unserviceable. German locomotives, steam and diesel, made up the bulk of units supplied, but the modern diesels in use tend to be Japanese.

Only a few mills operate field lines with harvested cane being loaded directly into cane trucks. In most cases, the rail operation are to transport the cane a few hundred metres from a transfer statio to the mill, with road trucks bringing the cane to the transfer poin for reloading onto cane trucks. There are two reasons why thi arrangement persists. One is because the mill operates 24 hours day, with harvesting limited generally to the daytime, so the loaded cane trucks are in effect a mobile storage system to enable nigh time cane deliveries to the mill. The second reason is because there is little inclination to invest capital altering the tried and tested rail-based cane delivery system to the carrier.

Clockwise, from below: Regular steam but 700mm gauge Orenstein & K steamed on 18 July 2008 in prepa following day. ❑ Sragi Mill's Jung empty trucks in the transhipment yar following a routine derailment on 20 at Jatibarang would not be out of pl 600mm gauge Schoema 4wDM A ❑ In the empty truck yard at Sumbe gauge Orenstein & Koppel 0-8-0T 5857 of 1912) spend a generally Pangka Mill. A load of cane is lifte cane truck that has been run underne (See the back cover of this issue for

ava 2008

Browning

There are advantages in this to the railfan in that it is not hard to find the locomotives, and there is a reasonable amount of action to see. The transfer station yards are usually sufficiently distant from the mill itself to provide varied photographic opportunities and the possibility of locomotives exerting themselves. However, the photographic attractions of the few field lines that remain are irresistible to those with a little more time to spend.

Cane is loaded longitudinally in Java, and often lengthy overhangs at either end of the trucks can make coupling up a challenge. Some locomotives even have the equivalent of bull bars to make propelling these loads a little easier. Speeds are low and derailments endemic.

Unfortunately, I was not able to do the full tour, but the highlights for me were the 600mm gauge operations at Sragi, with no less than eight steam locomotives seen in use, and at Pangka, with three delightful brick red steam locomotives sharing duties with four vintage and well cared-for diesels.

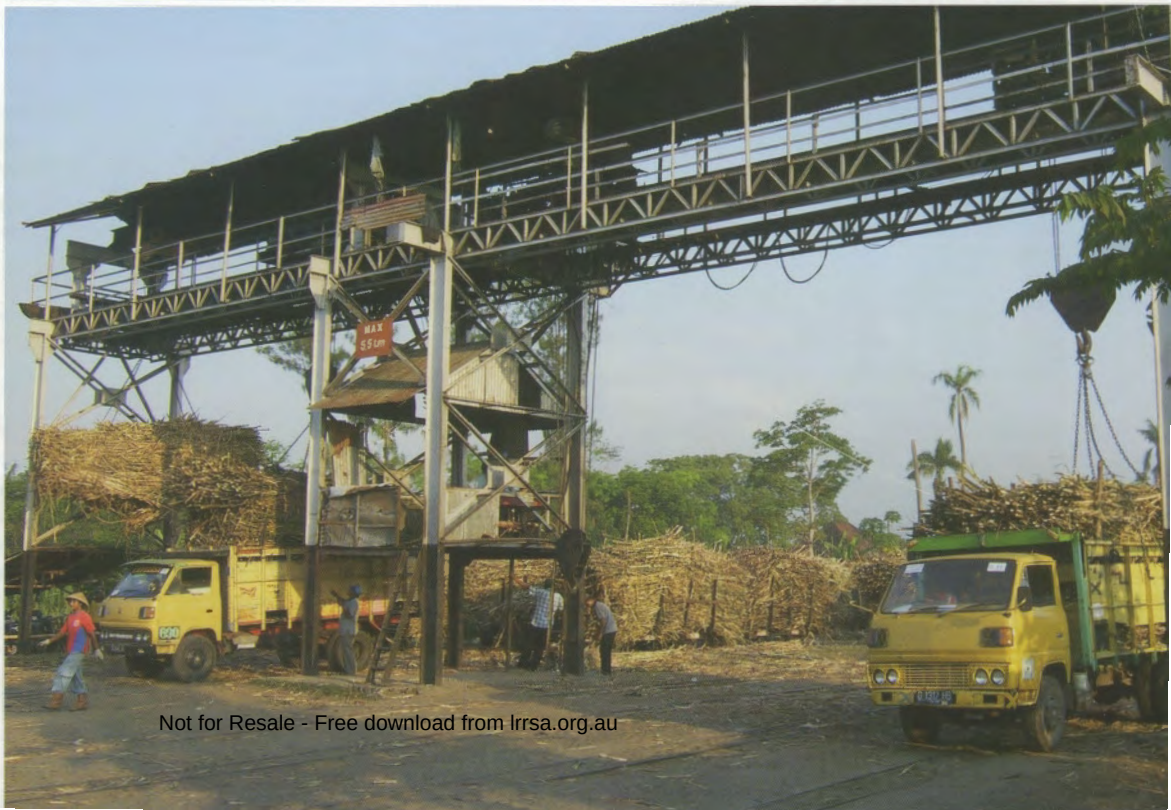
The widespread adoption of flexible wheelbase steam locomotives with eight or ten axles was Java's answer to increasing haulage power on light track. Klien-Lindner axles and Luttermöller gearing are still very much in evidence, while one last Mallet was also seen in operation. Fuel is generally bagasse, supplemented by firewood and in one case even by coconut husks, so most locomotives are fitted with tenders to carry the large quantities of low-calorific value fuel required.

The mills themselves are wonderful monuments to an earlier age, with reciprocating steam engines in profusion that are a significant attraction in their own right, but it is increasingly obvious that 100 year old industrial buildings become worn out as the years go by.

All this cannot last – so I'd recommend a visit while you still have a chance. It is close, cheap and relatively easy to do. Rob Dickinson is hoping to arrange tours over the next few years so watch this space. In the meantime you can enjoy John Raby's blog of the trip at http://www.users.waitrose.com/~jraby/blog1.html and Roderick Smith's photographs on the LRRSA Yahoo site at http://au.ph.groups.yahoo.com/group/LRRSA/photos. More information can be found on Rob Dickinson's international steam site and the FarRail site.

Thanks to John and Rod for information used in this report.

orking has ceased at Tersana Baru Mill, el 0-8-0TT 6 (10459 of 1929) was on for a visit by a Japanese group the 3-0 17 (Jung 1699 of 1911) shunts Here it is being eased back onto the track y 2008. ❑ *The spectacular roundhouse in South America. On 19 July 2008, 170 of 1950) sits near the turntable. jo Mill on 20 July 2008, two 700mm omotives 4 and 3 (4143 of 1910 and surely existence.* ❑ *The transloader at m each small lorry and lowered onto a 19 July 2008. Photos: John Browning. e photos.)*



Industrial Railway NEWS

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NEW SOUTH WALES

PACIFIC NATIONAL, Port Kembla Steelworks
(see LR 202 p.16)
1435mm gauge
GEC Australia Bo-Bo DE D42 (A.270 of 1974) appeared in early July with the Pacific National logo applied to each side of the hood. It had also been fitted with flashing marker lights which appear to be an LED type.
Chris Stratton 7/08

QUEENSLAND

BUNDABERG SUGAR LTD, Bingera Mill
(see LR 202 p.17)
610mm gauge
It is confirmed that Bundaberg Sugar has now closed all rail lines on the old Fairymead system beyond Booyan on the left bank of the Kolan River. This includes the Tegege line (all that remained of the old Invicta and Bucca line) and the line to Yandaran and Littabella. The cane from these areas now appears to go to Millaquin Mill by road transport. It seems extremely regrettable that at the same time as the Australian taxpayer is contributing a very large sum of money to upgrade the lines between Fairymead and Bingera, Bundaberg Sugar is choosing to remove nearly 20 kilometres of line elsewhere in the district and divert the cane onto road transport.
Rod Milne 8/08; Editor

BUNDABERG SUGAR LTD, Millaquin Mill
(see LR 202 p.17)
610mm gauge
The realignment of the main line for new ring road works has involved the section between Bargara Road and Telegraph Road being shifted about 400 metres to the east with the old trackbed now being the course of the road. This also appears to involve the elimination of the old Kalkie line. Work on the new Strathdee's line is still only progressing slowly.
Rod Milne 8/08; Lincoln Driver 8/08

BUNDABERG SUGAR LTD, Innisfail District
(see LR 202 p.17)
610mm gauge
At **South Johnstone** Mill, work on the new concrete bridge across the South Johnstone River is well underway for completion by the 2009 season. This bridge will replace the former Innisfail Tramway Queensland Bridge, a few kilometres downstream and may also replace the 'Silver Bridge', about 2km upstream. Both these old bridges are life-expired and have serious maintenance problems. In mid-August the formation at South Johnstone for the link to the new bridge was noted complete and a small length of track had been laid.
As part of the works for the new line connecting the old Mourilyan lines to the new South Johnstone bridge, a new concrete bridge has been built across Daru Creek to allow trains from the south to run onto what was the old Mourilyan No.2 branch. The old concrete loco water tank just south of the creek crossing here was demolished in mid-July to make way for the track realignment that will be required.
South Johnstone Mill's EM Baldwin B-B DH *LIVERPOOL* (10385.1 8.82 of 1982) is not in use this year because of the reduced amounts of cane coming up the range from Japoon caused by a reduction in cane growing (much of it for trees) and defections of growers to Tully. Prof Engineering B-B DH *NYLETA* (PSL 25.01 of 1990 rebuilt South Johnstone 1993) is in use on the range two shifts a day, hauling bins up the 1 in 30 grades. It cannot cross the Silver Bridge and as a result is being fuelled from a road tanker at Japoon and is serviced at Silkwood. It is rumoured that this locomotive might be transferred to the Bundaberg district in 2009. *LIVERPOOL*'s engine was removed at South Johnstone mill and on 27 August it was towed to **Babinda Mill** for refurbishment. From 2009 it may be used on the steeply-graded Nerada line.
Clyde 0-6-0DH locomotives 12 (55-60 of 1960), 14 (63-288 of 1963) and 20 (63-289 of 1963) were noted parked at Silkwood depot on 16 July during a wet weather stoppage. Clyde 0-6-0DH 11 (55-64 of 1955) was based at Silkwood in mid-August, as a replacement for 14, which was under repair at South Johnstone at that time.
In mid-July Clyde 0-6-0DH 16 (56-93) was under overhaul at the workshop at Babinda and 13 (59-203 of 1959) was spare there. Com-Eng 0-6-0DH 4 *HARVEY* (AD1138 of 1960), fitted with new cab, was at that stage based at the old Mourilyan Mill depot. However, in mid-August it was noted at both Babinda and South Johnstone. Com-Eng 0-6-0DH 5 *BRAMSTON* (AH2460 of 1962) was also back in service with a new cab in August, based at Babinda.
Babinda Mill's Com-Eng 0-6-0DH pair 6 *ALLISON* (C2234 of 1959) and 7 *MORRISON* (AD1239 of 1960) were involved in a derailment at Garradunga on 5 August. *MORRISON* sustained serious engine damage when a full bin of cane landed on its bonnet, and it is likely to be out of use for the remainder of the season.
'George' 7/08, 8/08; Shane Yore 7/08, 8/08, 'Yardie' 8/08; Carl Millington 8/08

On 5 July, Inkerman Mill's EM Baldwin B-B DH IYAH *(6558.1 6.76 of 1976) eases its train across the temporary span of Invicta Mill's Landers Creek bridge in remote control mode pending approval for manned crossings to be made.* *Photo: Scott Jesser*

CSR SUGAR (HERBERT) PTY LTD, Herbert River Mills
(see LR 202 p.17)
610mm gauge
Up until mid-July, the 8-tonne bins had been run indiscriminately with 4-tonne bins at **Macknade Mill** but this had to be changed because the weighbridge computer insisted on dividing up the statistics of mixed consignments, adversely affecting the cane juice sampling system on which farmers are paid.
Macknade Mill's Clyde 0-6-0DH 12 (65-434 of 1965) had a serious engine failure on 30 June and was towed back to the mill. It was then fitted with the 92-series V6 engine that came out of EM Baldwin 0-6-0DH 14 (6/2490.1 7.68 of 1968) in the slack season pending the rebuild of its own

engine. Macknade Mill's EM Baldwin 0-6-0DH *HOBART* (4413.1 7.72 of 1972) suffered a torque converter failure in the middle of August and was fitted with the spare unit that also came out of 14, returning to service by the end of the month.
Victoria Mill's Clyde 0-6-0DH *CANBERRA* (65-433 of 1965) was noted out of use from mid-July, apparently with a broken axle.
A new type of coupling has been implemented with the two pairs of permanently-coupled small brakewagons at Victoria Mill. It is referred to as a 'rope coupling' and consists of multiple coils of steel cable.
Two of the old Clyde 6-wheel brake wagons have had the middle axle removed as a result of axle-box or wheelset failure. These are Macknade Mill's BV4 (CQ3426 of 1975) and Victoria Mill's BV5 (CQ3477-1 of 1976). One of the two new Corradini bogie brake wagons was noted outside the Victoria Mill locoshed in mid-August with flashing beacons and other accessories fitted so commissioning may have been imminent.
An accident occurred at Longpocket on 1 July when a loaded train hauled by *GOWRIE* collided with a 62-year old motorcyclist travelling in the same direction on the Herbert River bridge. The 1000-tonne train dragged the rider for about 400 metres before being stopped.
Chris Hart 7/08; 8/08; Steven Allan 8/08; Carl Millington 7/08; *Herbert River Express* 3/8/08

CSR SUGAR (KALAMIA) PTY LTD

(see LR 202 p.18)
610mm gauge
With transport operations at Invicta Mill disrupted by flood damage to the Expeditation Pass Creek bridge, Com-Eng 0-6-0DH *CHIVERTON* (C1030 of 1958) was loaned to shunt cane bins at Dalbeg for road transport and was observed there on 7 August. On the same day, Clyde 0-6-0DH *KALAMIA* (67-569 of 1967) was noted at Inkerman Mill, presumably to replace an Inkerman locomotive also on loan to Invicta.
Scott Jesser 8/08

Top: *Construction work on Isis Mill's new Gordon Road line has barely finished as Isis Mill's Walkers B-B DH* ISIS No.3 *(600 of 1968 rebuilt by Walkers 1994) pushes its brake wagon and a rake of empty bins across Gillens Creek Road on 4 July 2008. Photo: Lincoln Driver* ***Above:*** *Racecourse Mill's EM Baldwin B-B DH* NORTH ETON *(6780.1 8.76 of 1976) hauls two failed Clyde Model DHI-71 0-6-0DH locomotives back to the shed for repairs on 22 August.* TE KOWAI *(56-103 of 1956) nearest the camera, and* RACECOURSE *(65-440 of 1965), carry vestiges of their former mill liveries, Pleystowe and Racecourse respectively. Photo: Carl Millington*

HAUGHTON SUGAR CO PTY LTD

(see LR 202 p.18)
610mm gauge
The repaired Landers Creek bridge was reopened to traffic on 28 June with a temporary steel beam in place. This allowed Millaroo farmers to commence harvesting and one of the Dalbeg harvesting groups commenced transporting cane by road from Dalbeg to Millaroo at the same time. However, difficulties have been encountered with the Expedition Pass Creek bridge repairs meaning that other farmers at Dalbeg suffered further delays. After the temporary steel beam was installed on the Expedition Pass Creek bridge, load testing revealed some lateral movement in three piers that had not previously been detected. As a result, plans were put in place for the road haulage of all Dalbeg cane to Millaroo.
On 5 July, it was noted that Inkerman Mill's EM Baldwin B-B DH *IYAH* (6558.1 6.76 of 1976) was working shuttle trains between Millaroo 6 and Clare 7, with the *SELKIRK* brake wagon (rebuilt from Com-Eng 0-6-0DH C1015 of 1957). At the Landers Creek bridge, the driver left the locomotive and it proceeded across the bridge in RSU (remote control) mode, the driver being transported to the other side by mill vehicle. This arrangement appears to have been later discontinued as on 18 August, EM Baldwin B-B DH *SELKIRK* (6750.1 8.76 of 1976) was noted working as far as a temporary terminus at Millaroo 8, paired with the *MINKOM* bogie brake wagon, and *IYAH* was seen at the mill, where it had also been noted on 10 August.
On 7 August, Kalamia Mill's Com-Eng 0-6-0DH *CHIVERTON* (C1030 of 1958) was in use at Dalbeg to shunt the sidings there feeding into semi-trailers taking cane to Millaroo, bypassing Expedition Pass Creek. At Expedition Pass Creek, a test train was seen in use. At the northern end was EM Baldwin B-B DH *SELKIRK* (6750.1 8.76 of 1976) coupled to 40 empty 6-tonne bins so that it did not have to venture onto the bridge. Coupled to the rear of the empty rake were the *GIRU* brake wagon, a loaded 6-tonne bin, the *MINKOM* brake wagon, another loaded 6-tonne bin and the *SCOTT* brake wagon. These are large bogie brake wagons and should have provided a substantial load.
The Advocate (Ayr) 4/7/08; *Townsville Bulletin* 5/7/08; *The Burdekin CANEGROWER* 7/08; Scott Jesser 7/08, 8/08; Carl Millington 8/08

ISIS CENTRAL SUGAR MILL CO LTD

(see LR 202 p.19)
610mm gauge
According to Isis Mill, the Gordon Road tramline extension in the south Bundaberg area totals eight kilometres. This figure probably includes

sidings. It was built at a cost of $2m and was ready for use by the start of crushing on 30 June, with the assistance of a $700,000 Federal Government Regional Communities Program grant. Construction commenced on 26 April so the line has been put in extremely quickly. It crosses Gillens Creek Road about a kilometre south of where Bundaberg Sugar's Gillens Creek line (built in 1999) crosses. A temporary siding has been put in near Gillens Creek Road and on 4 July this housed EM Baldwin B-B DH 10 (7267.1 6.77 of 1977), two ballast wagons and the rail welding wagon. Much finishing off work was still required, including to track geometry.
Isis Town & Country 3/7/08; Lincoln Driver 7/08

MACKAY SUGAR LTD
(see LR 202 p.19)
610mm gauge
About 85% of Mackay Sugar's shareholders voted in early July to support the transformation of Mackay Sugar Co-operative Association Ltd to an unlisted public company, Mackay Sugar Ltd. The intention is to allow the company to raise capital for diversification projects, and explore new income streams such as electricity generation.
A few days after the successful vote, it was announced that Mackay Sugar was seeking a merger with the Proserpine Co-operative Sugar Milling Association. It is understood that this has been a long-term goal but was untenable for taxation reasons under the previous Mackay Sugar company structure.
On 31 July, it was announced that **Pleystowe Mill** would close from the end of the 2008 crushing season as part of ongoing rationalisation. The selection of this mill for closure is logical from a geographic point of view and reflects the choice made in previous years for it to be mothballed when the district crop did not justify the operation of all four mills. On those occasions, Pleystowe was retained as a locomotive depot, so may still be in the future.
It is understood that 2008 will be the last year that 4-tonne bins are used by Mackay Sugar. From 2009, only 5-tonne, 6-tonne and 15-tonne bins will be used.
Locomotive numbers, although still carried in many cases, are no longer used for official identification purposes. Locomotive allocations seem to be quite stable relative to last year. The changes noted appear to be as follows:
Clyde 0-6-0DH multi-unit *HABANA* (60-215 of 1960) and the former *MARIAN* (56-104 of 1956) from **Racecourse** to **Marian.**
Clyde 0-6-0DH *NELLIE* (58-188 of 1958) from Pleystowe to Marian.
Walkers B-B DH *WALKERSTON* (672 of 1971 rebuilt Pleystowe 1994) from Marian to Pleystowe.
Clyde 0-6-0DH *CHELONA* (59-201 of 1959) from Pleystowe to Racecourse.
Pleystowe Mill's Clyde 0-6-0DH *SEAFORTH* (61-233 of 1961) has been fitted with a vertical front radiator grille.
On 1 August, Marian Mill's Clyde 0-6-0DH *BASSETT* (67-596 of 1967) was noted on a road transport vehicle at Racecourse Mill. On 22 August, Pleystowe Mill's Clyde 0-6-0DH *DEVEREAUX* (67-568 of 1967) was noted hauling Racecourse Mill's failed Clyde 0-6-0DH *TE KOWAI* (56-103 of 1956) and a rake of full bins to Cowley's loops, just south of the Racecourse mill yard. At the same time, Racecourse Mill's EM Baldwin B-B DH *NORTH ETON* (6780.1 8.76 of 1976) was hauling failed Clyde 0-6-0DH *RACECOURSE* (65-440 of 1965) out of the full yard. *NORTH ETON* propelled both failures across the Peak Downs Highway to the Racecourse locoshed and a crew was sent over to Pleystowe to bring back *CHELONA* which had been in use there.
Walkers B-B DH locomotives CC02 (587 of 1968) and DH25 (607 of 1969), sold to the Emerald Tourist Railway Board, were removed from storage at the old North Eton Mill site and transported to Victoria in July and August respectively. These locomotives had been obtained by Mackay Sugar for possible conversion to 2ft gauge. DH25 is without an engine.
ABC News 8/8/08; *North Queensland Register* 10/7/08, 4/08/08; *Sydney Morning Herald* 31/7/08; *Daily Mercury* 1/8/08; Peter Murray 6/08; Brian Millar 7/80; Brad Peadon 7/08; David Rowe 7/08; Frank Stamford 7/08; Carl Millington 7/08, 8/08.

THE MULGRAVE CENTRAL MILL CO LTD, Gordonvale
(see LR 202 p.19)
610mm gauge
The takeover by Maryborough Sugar Factory Ltd was approved by more than 90% of Mulgrave shareholders in July. In August a working group was set up with Tully Mill to explore the possibility of a merger, and there are also continuing rumours of discussions with Bundaberg Sugar about the possible acquisition of its north Queensland assets. In the meantime, Mulgrave Mill is following Tully's example in aggressively seeking to obtain cane supplies at the expense of its rival, Bundaberg Sugar. A number of farms in the Babinda Mill area have been purchased and cane is being trucked north to Mulgrave.
ABC News 7/7/08 & 14/8/08; Editor

PIONEER SUGAR MILLS PTY LTD, Inkerman Mill
(see LR 200 p.30)
610mm gauge
EM Baldwin B-B DH *IYAH* (6558.1 6.76 of 1976) was on loan to Invicta Mill from around the start of July to haul shuttle trains between Millaroo

Top: *Tully Mill is trialling a bogie 10-tonne bin as a possible replacement for the current 4-wheel design. Number 1711 was sighted at Pietrobons loop in the El Arish area on 13 August. Photo: Carl Millington*
Above: *A new 762mm gauge Schöma 4wDH tunnelling locomotive, L01, awaits the commencement of its subterranean duties on John Holland's Northern Sewerage Project at De Chene Reserve, Coburg North, on 8 July 2008 (see page 21). Photo: John Browning*

and Clare, as explained above. Presumably in connection with this, Kalamia Mill's Clyde 0-6-0DH *KALAMIA* (67-569 of 1967) was noted with engine running at Inkerman on 7 August. Also noted at Inkerman, on 17 August, was Invicta Mill's Com-Eng 0-4-0DH *INVICTA* (CA1040 of 1960). Significant amounts of cane were noted at this time being road hauled across the Burdekin Bridge to Inkerman Mill in 2ft gauge bins, presumably as a result of the stoppage at Pioneer Mill.
Scott Jesser 8/08; Luke Horniblow 8/08

PIONEER SUGAR MILLS PTY LTD,
Pioneer Mill
(see LR 202 p.19)
1067mm gauge
Following the temporary closure of Pioneer Mill following the collapse of two clarifiers, use of the Pioneer Mill rail system resumed to bring cane to the mill for transfer to road transport and haulage to Invicta and Inkerman mills. The cane was weighed and tipped in the normal way but then carried by conveyor for tipping into a waiting B-double truck.
With repairs to the mill completed ahead of schedule, commissioning trials were under way by late August in preparation for an early resumption of crushing.
The Advocate (Ayr) 16/7/2008; *Queensland Country Life* 26/8/08; Scott Jesser 8/08

TULLY SUGAR LTD
(see LR 202 p.20)
610mm gauge
The former single line siding at King's, on the end of a short branch off the main line at the northern extremity of El Arish, has been rebuilt with two lines and tipping pads to receive cane from the Silkwood area. It is normally serviced by new Corradini tipper elevators which run on a private haul road and transfer cane directly into the bins. At times of heavy demand, cane can also be brought in by a multilift system that dumps the cane on the ground in shed where it is scooped up and placed in a smaller tractor-hauled tipper which then tips it into the bins, a somewhat less efficient procedure.
A prototype 10-tonne bogie bin is being trialled. Currently, four-wheel 10-tonne bins are in use but they have some disadvantages. The large diameter wheelsets are expensive and tend to bind on curves. Bogies can use the small wheelsets used on the 4-tonne bins.
The new section of Bruce Highway that has displaced the cane railway south of Tully is open for most of the way between Euramo and the start of the north side of the Murray flats.
Chris Hart 8/08; Carl Millington 8/08

VICTORIA

JOHN HOLLAND PTY LTD,
Northern Sewerage Project
(see LR 200 p.21)
762mm gauge
A tunnel boring machine began work in June 2008 to connect the shaft at De Chene Reserve, just off Bell Street in Coburg North, to the Carr Street shaft. This is the first tunnel boring machine put into use on the project and it is expected to reach Carr Street by the end of 2008.
A visit on 8 July to the De Chene Reserve site revealed a Schöma 4wDH locomotive, numbered L01, in as new condition in the surface stock yard, together with three Mühlhauser four-wheel flat cars. A visit to the same site on 20 July did not find the locomotive, but two of the flat cars were visible (with one numbered FC01). On 2 August a large new Mühlhauser spoil wagon, numbered 02 and lettered 'Northern Sewerage Project Stage 1', and a man riding car numbered MR01 were noted there. Two similar spoil hoppers (one numbered 01), had been seen stored at the Newlands Road site on 20 July.
Editor 7/08; Colin Harvey 7/08 & 8/08; http://www.nsp.net.au/

WIMMERA CONTAINER LINE PTY LTD,
Horsham
1435mm gauge
This company has purchased ex-NSWGR Walkers B-B DH 7334 (696 of 1972) from QR National to assist with the handling of containers at its Horsham freight depot. QRN is taking up the container service following the withdrawal of Pacific National from local rail operations at the end of July. The locomotive had been acquired by QRN as part of the assets of CRT Bulk Haulage Pty Ltd in 2005. It arrived in Horsham on 11 August.
Wimmera Mail Times 28/7/08 & 28/8/08; http://members.wimmera.com.au/wangara/

WESTERN AUSTRALIA

BHP BILLITON IRON ORE PTY LTD
(see LR 202 p.21)
1435mm gauge
McMahon Holdings subsidiary MVM Rail is currently constructing 7km of new track and associated civil works at Newman Loop, Orebody 25, Jimblebar Wye and Jimblebar Mine.
Australia's Mining Monthly 4/08 via Ray Graf

THE PILBARA INFRASTRUCTURE PTY LTD
(see LR 202 p.19)
1435mm gauge
Fortescue Metals plans to more than double its annual production capacity, from 55 million tonnes to 120 million tonnes, with a further expansion to 180 million tonnes likely. The railway capacity will be expanded through the provision of additional crossings places, and it will be extended from the Cloud Break mine to the Christmas Creek deposits. Meanwhile FMG has made a third-party agreement with Atlas Iron by which it will transport ore from the Pardoo project to port on behalf of Atlas.
The Australian 7/8/08; *West Australia Business & Mining* 9/8/08; *Sydney Morning Herald* 12/8/08

PILBARA RAIL
(see LR 202 p.19)
1435mm gauge
Macmahaon Holdings has been contracted by to construct civil works for approximately 47km of new railway line to link the existing Deepdale line to the new Mesa A Mine, as well as for a 3km

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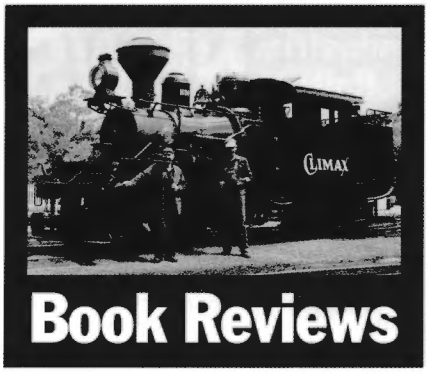
siding at Churdy Pool, for completion in May 2009.
Rio Tinto has signed an agreement with Iron Ore Holdings which will allow the junior miner to deliver ore to Rio's Yandicoogina Mine. The ore will be purchased by Rio at the mine gate and will be shipped to port by rail as part of its own production.
Following serious accident damage at Maitland Siding in January 2007, repairs to GE Co-Co DE 9406 (54156 of 2003) have been completed by United Rail Group in Perth and returned to the Pilbara by road transport late in August.
Herald Sun 25/7/08; "pm1225" 8/08; *Australia's Mining Monthly* 4/08 via Ray Graf

FIJI

FIJI SUGAR CORPORATION
(see LR 202 p.20)
610mm gauge
Rail transport difficulties have continued to be highlighted by cane farmers. During June in the early part of the season, a crushing stoppage at **Rarawai Mill** was caused by the breakdown of four locomotives. Lack of cane trucks and lack of portable line were also a source of grievance among farmers trying to get their crops to mills.
The Fiji Sugar Corporation stated that it is committed to an improvement program aimed to increase the percentage of cane transported by rail from 35% to 50% by 2013. This program will necessitate some rationalisation of rail lines.
A visit in July revealed that the locomotives that have been sent to Ontrak Engineering in NSW for refurbishment are two Clyde 0-6-0DH locos, **Lautoka Mill's** 1 (57-140 of 1957) and Rarawai Mill's 8 (62-271 of 1962), with **Labasa Mill's** EM Baldwin 0-6-0DH 13 (9442-1-4-81 of 1981).
Lautoka Mill's derelict Clyde 0-6-0DH locomotives 3 (57-173 of 1957) and 8 (63-290 of 1963) have been removed to the scrapyard as stripped shells with no wheels.
Lautoka Mill's Hunslet 6wDH 18 (9285 of 1987) has been transferred to Rarawai Mill and is dumped outside the locoshed there without an engine as a source of spare parts.
Locomotives stationed at the out-depots in July were as follows:
Navo (Lautoka Mill) Clyde 0-6-0DH 5 (58-189 of 1958), 20 (64-385 of 1964) and 21 (58-191 of 1958)
Cuvu (Lautoka Mill) Clyde 0-6-0DH 2 (57-146 of 1957), 4 (57-174 of 1957), 9 (64-380 of 1964) and 22 (59-204 of 1959)
Tavua (Rarawai Mill) Clyde 0-6-0DH 9 (64-378 of 1964) and Hunslet 6wDH 22 (9274 of 1987).
Fiji Times Online 3/7/08, 4/8/08 & 6/8/08; Scott Jesser 8/08

CORRECTION

The bottom photograph on the back cover of LR 202 should have been credited to Richard Montgomery



Book Reviews

The Railway Products of Baguley-Drewry Ltd and its Predecessors

by Allen Civil and Roy Etherington

A4 size, hard cover. 372 pages on art paper with colour dust jacket. 487 black & white photos, 20 diagrams and maps. Published 2008 by the Industrial Railway Society. Recommended retail price £29.99. Details and PayPal credit card ordering facility at:
http://www.irsociety.co.uk/books/books.htm

In 1974, the Industrial Railway Society published the late Rodney Weaver's book *Baguley Locomotives 1914-1931* and it is a fitting tribute to him that this current volume is dedicated to his memory. It is a massive compendium featuring steam, petrol, diesel and electric locomotives as well as a multifarious range of railcars of every shape and size, ranging over production extending from 1905 to 1984. It brings together all the railway products of the various incarnations of the Baguley companies, but also McEwan Pratt and the extensive range of products carrying the name of the Drewry Car Company. Many of these were built by Baguley but they embraced early production by Drewry on their own account and also by BSA, English Electric, Kilmarnock Engineering, Vulcan Foundry, Robert Stephenson & Hawthorns, and Birmingham Railway Carriage & Wagon. By contrast, Baguley's products included items built for a range of other locomotive manufacturers including FC Hibberd ('Planet'), Crossley, English Electric, Metropolitan-Vickers, AEI and GEC Transportation.

A rich variety of rail equipment from these sources reached Australia, for industrial and government railways, with Christmas Island and Fiji included in the list of destinations. Apart from Drewry, another major supplying agent was the Railway Mine & Plantation Equipment Co Ltd. This led in the early 1950s to the simultaneous appearance on Queensland's cane railways of two types of mechanically very similar diesel locomotives produced by Baguley but of quite distinct outward appearance, labelled either RMP or Drewry, and with a slew of agents each taking their percentage.

Drewry had a significant role in the early production of narrow gauge industrial diesel locomotives in Australia, providing power and transmission packages for Malcolm Moore's post-war production of locomotives for the Illawarra collieries of Australian Iron & Steel and for the Victorian State Electricity Commission's Kiewa hydro-electric scheme.

This book contains a vast amount of technical information as well as builder's lists, and so is a great research tool. Its huge variety of builder's photos provide a wonderful illustration of the range of Baguley and Drewry products. There is also a selection of locomotive scale drawings.

I found the cover design a little disappointing and the book is afflicted by that recent scourge, lack of a proper index, although it does include an index of customers and of illustrations. The standard of proofreading is high although the reporting of Australian Proprietary Company names in the South African manner must be an editorial error, either by the compliers or in the Baguley records.

It was gratifying for me to find a mystery posed by the writers that could be solved (in part at least) by an observant reader of *Light Railways* No. 199.

This beautifully produced book can be highly recommended. *John Browning*

COMENG: A History of Commonwealth Engineering

Volume 2: 1955-1966

by John Dunn

336 pages on art paper, A4 size, hardcover with dust jacket. Profusely illustrated with black-and-white and colour photographs, and diagrams. Published 2008 by Rosenberg Publishing Pty Ltd, PO Box 6125, Dural Delivery Centre NSW 2125, www.rosenbergpub.com.au $59 95.

Volume 1 of this book, covering the period 1921 to 1955 was reviewed in *Light Railways* 191. Volume 2, covering a period of only 11 years, 1955 to 1966 has now been released. It is a very impressive looking publication, and as with the first volume I found its 336 pages to be well researched, clearly written and easy to read. I also found it very interesting, from start to finish.

Whilst building railway rolling stock was Comeng's major activity, the company was involved in a huge range of activities, for example: road vehicles, navy patrol boats, curtain walling for high-rise buildings, steel bridges, cranes, and fibreglass furniture. Its activities were spread over plants in four states, Queensland, New South Wales, Victoria and Western Australia, whilst in 1957-58 it expanded to South Africa.

The author worked for Comeng from 1956 until the company's closure in 1989. The book commences with a biographical note explaining the unconventional way he was taken on as an apprentice draftsman. This introduction was both interesting and relevant, particularly details of the author's model making activities as a teenager, which gave him skills which he was able to use to advantage at Comeng in the design of rail cars.

If you purchase this book seeking in-depth details of the narrow gauge industrial locomotives produced by Comeng, you will probably be disappointed. I was hoping to find something approaching the level of detail in *Built by Baldwin*, but it is not there. There is only about one-third of a page of text describing locomotives for the sugarcane industry. This is supported by eight-and-a-half pages of very good photographs. Like all photographs in the book, these have very well written and detailed captions.

The book tells us Comeng built about 130 small industrial locomotives from 1955 to 1976, the largest group being 16 to 25 ton 0-6-0DHs and 0-6-0DMs. All were built at Comeng's Rocklea plant in Brisbane. In the period covered by this book, Comeng's biggest competitor for this type of locomotive was Clyde Engineering. Clyde only supplied locomotives with GM engines, Comeng's competitive advantage was that it would fit engines and transmissions from a wide range of makers to meet the customer's preferences.

Other industrial railway items include enormous hotmetal cars for the steelworks of BHP and AI&S. The problems associated with the building and delivery of these are described in some detail. On the other hand, less than a page of text is provided on underground locos used in mining and tunnelling, but this is supported with three pages of photographs, all well captioned.

From the point of view of the narrow gauge or industrial railway enthusiast the problem is that in the overall scheme of Comeng's activities, this type of equipment played a very small part, so in a book of this nature it is swamped by other material.

This 'other material' includes: pioneering work in the development of fibreglass materials; pioneering work in the development of stainless steel rolling stock – such as interurbans for New South Wales, and suburban cars for Brisbane; broad gauge rail cars for India; refrigerator vans for New Zealand; stainless steel passenger cars for the Brisbane Limited Express and Southern Aurora; passenger cars for Commonwealth Railways; 0-6-0DH shunting locomotives for WAGR, NSWGR, MRWA, Mount Isa Mines, and WA SEC; and assembling Clyde-GM locomotives destined for Queensland Railways and the WAGR.

With the sale of the Commonwealth Government's shares in the company in 1957, Comeng was free to make the most radical move in its history – the establishment in South Africa of the Union Carriage & Wagon Co. (Pty) Ltd in December 1957. Comeng owned 51% of UCW and provided many of the managers and much of the expertise which made it a hugely successful, though initially risky undertaking. Early in 1958 UCW won a tender from South African Railways (SAR) for 332 "Officers and artisans" cars. This was shortly followed with winning tenders for 322 sleeping cars, 449 suburban cars, and 130 Bo Bo electric locos. By the end of 1966 UCW had received orders for well over 3000 items of rolling stock (including 555 mainline electric locomotives) almost all for the SAR.

There are a huge number of facts in this book, and inevitably there are occasional mistakes, for example the Emu Bay Railway is described as a BHP Company. But considering the monumental size of the task this is a quibble, and the author is to be congratulated on the work he has done. It is a valuable contribution to Australian history, and very good value for the price. There are another two volumes to come, and I believe volume 3 is well under way. *Frank Stamford*

A selection of books from the LRRSA Sales Department ...

Furnace, Fire and Forge

Lithgow's Iron and Steel Industry 1874 -1932
by Bob McKillop

The story of Australia's first and only inland heavy industrial centre, from its beginnings with the opening of New South Wales' Great Western Railway into the Lithgow Valley in 1869 and the establishment of the first blast furnace there in 1874, to the final closure of the iron and steel works in 1932. It covers the technical, commercial, industrial and political history of the operation.

G.& C. Hoskins and its predecessors used twenty locomotives at Lithgow steel works and associated plants. The works railways, and those of the limestone quarries, iron ore mines, and collieries which supplied the raw materials, are described and illustrated in the book.
320 pages, hard cover, A4 size, over 250 photographs, 80 maps, plans and diagrams

$59.95 [LRRSA members $44.96] Weight 1,600 gm.

Bellbrakes, Bullocks & Bushmen

A Sawmilling and Tramway History of Gembrook 1885-1985 - by Mike McCarthy
104 pages, soft cover, A4 size, 71 photographs, 17 maps and diagrams, references and index.
$26.00 (LRRSA members $19.50). Weight 500 gm.

Settlers and Sawmillers

A History of West Gippsland Tramways and the Industries they Served 1875-1934
by Mike McCarthy
168 pages, soft cover, A4 size, 96 photographs, 17 maps and diagrams, 6 graphs, one loco diagram, references and index.
$31.90 (LRRSA members $23.93) Weight 700 gm.

The Golden City and its Tramways

Ballarat's tramway era
by Alan Bradley.
Published by Ballarat Tramway Museum Inc.

Using the wealth of the 1850s goldrushes, the founders of Ballarat built a magnificent provincial city. This book is not a dry technical history but describes how the citizens of Ballarat used the trams in their daily lives. It brings to life the difficulties experienced in the second world war, when lights were dimmed and petrol severely rationed. The book also addresses the technology, economics, politics, working conditions, and competition from other forms of transport. Many wonderful photos dating back to the 1880s. 144 pages, A4 size, hard cover, 119 photographs (15 in colour), 4 maps, bibliography, index.
$43.95 (LRRSA members $39.56) Weight 900 gm

The Bellerive to Sorell Railway Revisted

Second Edition. Published by the Bellerive Historical Society

The Bellerive to Sorell railway was an endearingly eccentric 3ft 6in gauge line operated by the Tasmanian Government Railways. Separated from the rest of the TGR system by the Derwent River, it was opened in 1892, and closed in 1926. In its 23.7km it included: a terminal station on the end of a pier; a 164m long stone-lined tunnel; a 256m long stone causeway; a 582m long timber viaduct; and the 400m long Shark Point cutting.

204 pages, 255 x 187mm, hard cover with dust jacket, 132 photographs, 26 maps and diagrams, many reproductions of historic documents.

$45.00 (LRRSA members $40.50) Weight 950 gm

Laheys' Canungra Tramway

by Robert K. Morgan, revised by Frank Stamford.
Describes Queensland's largest timber tramway with one Climax locomotive and 3 Shay locos.
32 pages, soft cover, A4 size, 28 photographs, plus maps and diagrams, references and index.
$9.95 (LRRSA members $7.46) Weight 220 gm.

The Innisfail Tramway

The History and Development of the Geraldton Shire Tramway and the Mourilyan Harbour Tramway
by John Armstrong & G.H. Verhoeven. 128 pages, A4 size, 99 photos, 22 maps/diagrams.
$37.90 Hard cover (LRRSA members $28.43) Weight 650 gm.
$29.95 Soft cover (LRRSA members $22.46) Weight 470 gm.

Mountains of Ash

A History of the Sawmills and Tramways of Warburton - by Mike McCarthy

Describes a network of over 320 km of tramways which linked 66 major mills to the Warburton railway.
320 pages, A4 size, 280 photos, (incl. 52 duotones), 50 maps/diagrams, (incl. 14 four-colour maps).
$59.95 Hard cover (LRRSA members $44.96)

The Aramac Tramway

By Peter Bell & John Kerr

The history of the 41 mile long 3 ft 6 in gauge Aramac Tramway, almost in the centre of Queensland. Built in 1913, it operated for 62 years, providing the Shire Council a major challenge to keep it going.

48 pages, A4 size, 49 photos, 5 maps and plans, references, bibliography and index.

$15.00 Soft cover (LRRSA members $11.25) Weight 350 gm.

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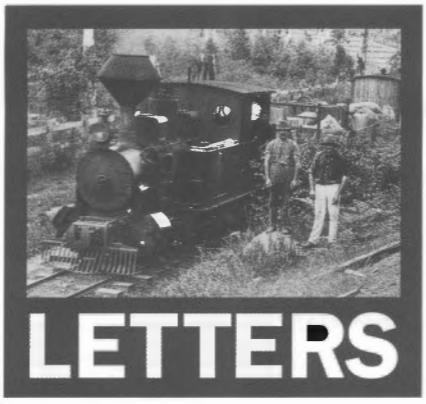


LETTERS

Dear Sir

Mining Railways of Cobar (LR183)

In Part 8 of his interesting history of Cobar's railways and tramways, Bob McKillop details the New Occidental Revival from 1932 to 1952. He relates that in 1937 two Mancha battery electric 'Little Trammers' were introduced and notes that no local reports of their operation had been found. Readers may be interested, then, with the following excerpts from Senior Inspector PH Warren's 1937 mining report which sheds some light on their use at the New Cobar mine:

'*This mine* [New Cobar] *was de-watered to No.5 level by bailing, and the water is being held at that horizon by means of a pump on No.4 level. This is a four-stage Thompson 60-hp centrifugal, having a capacity of 10,000 gallons per hour . . . the water is conveyed to the mill at the New Occidental Mine, and used for treatment purposes. The shaft was reconditioned throughout, new runners of tallow wood were placed where required, and the service compartment was completely stripped and refitted. A new head frame of hard wood, 60 feet high, was erected and the shaft and head frame equipped for skip haulage, the skips having a capacity of 1½ tons. The skips tip direct to a No.5 Gates crusher . . . the ore is crushed to 2½ inches, and delivered to a 200-ton bin by means of a conveyor, then by means of 8-ton Diesel-engined lorries to the flotation section of the New Occidental mill. Electric power is obtained from the New Occidental power plant.*'

'*Stopes at the back of No.4 level are being worked for a yield of 150 tons per day. The ore is conveyed on the levels in ball-bearing box trucks of 1½ tons capacity. These are handled by a Mancha electric storage battery locomotive, running on an 18-inch gauge* [track]. *The ore as mined contains copper 1.70 per cent, and 7 dwt of gold per ton. A floatation concentrate containing 20 per cent of copper and 4 oz of gold per ton is obtained.*'

Ref: 1937 Annual Report, Department of Mines, New South Wales; Cobar Division – Inspector's Reports.

Many NSW Mining Inspector's reports and other mining records may now be consulted online (http://digsopen.minerals.gov.nsw.au/) and provide a useful resource for the patient researcher.

Phil Rickard
Ringwood, Vic.

Dear Sir,

The restoration of Hunter Valley district non-air hopper wagons (LR 202)

I read Graham Black's article in LR 202 with great interest. The restored non-air hopper wagon 467 is a real credit to those who did the restoration.

I noted that these unique wagons were in use until September 1987, and I enclose a photo (below) taken at Hexham a month later.

I remember Newcastle reasonably well in the period from mid-1952 to April 1956. I was working on the Australian Shipping Board 'River Ships' on what was known as the 'black and tan trade'. We used to load coal at Carrington from the non-air hoppers.

Coal loaded on the 'River Ships' was destined for:

- Melbourne Gas Works - located on the Yarra River, or South Wharf.
- Portland - a one-time visit to this port in western Victoria (about 1000 tons discharged).
- Geelong - unloaded at Cunningham pier and discharged into VR opens.
- Port Adelaide - for Osborne power station.
- Fremantle - 6000 tons loaded. A stop was made at Port Adelaide to top up with 1000 tons of general cargo for WA.

There were 13 'River Ships' - 12 of which were engaged on coal, iron ore or limestone. There were also vessels on the coast on a two-year charter from the UK - these included Ropener vessels SS *Firby* and SS *Swainby* (Hartlepool), the SS *Amicus* (Cardiff, Wales) and SS *Wynchwood Hill* (London).

Finally. one must mention the '60 Milers', that loaded coal at Newcastle for Sydney. The SS *Birchgrove Park* is remembered - this collier was lost at sea in the winter of 1956, on a voyage from Newcastle to Sydney.

John Reid
Gundagai, NSW

Long rows of 4-wheel non-air coal hoppers set aside in the sidings at Hexham, 31 October 1987. Photo: John Reid

Dear Sir,

The *Red Shoes* missile tramway, Woomera (LR 199)

I was recently very pleased to obtain a copy of the new book "The Railway Products of Baguley-Drewry Ltd and its Predecessors" by Allen Civil & Roy Etherington. On page 183, I came across comments regarding rail equipment manufactured by EE Baguley Ltd under their builder's number 4051. The separate 4000 series of numbers had been set aside for general engineering products and its use included numbers allocated to tramcar bogies built for English Electric. The authors comment as follows:

4051 covered a particularly interesting job that was ordered in February 1953 and described as six 'mule bogies'. Weighing only half a ton each, they were of about 30in gauge and had provision for mounting a power unit (electric motor?) to drive a rather crude spur gear on one axle. The wheelsets were connected by coupling rods and a form of centre pivot of very light construction was fitted. We are puzzled as to the intended use of these bogies.

There are two photographs of these 'mule bogies' on page 197 of the book, each showing just two of them, and there is no doubt that that they are identical to the ones fitted to *THE FLIER*, the battery electric flat car that was used on the missile launcher tramway at Woomera.

EE Baguley Ltd was closely involved in collaboration with English Electric in the production of narrow gauge railway equipment in this period, especially battery locomotives, so it is not surprising that they were involved in this work. Nor is it surprising, given the secrecy of the missile project, that the purpose of these bogies remained somewhat of a mystery to those researching the Baguley records.

A number of unanswered questions remain. What happened to the other four 'mule bogies' if indeed six were built? Was it also Baguley who built the rather more sophisticated bogies for the launcher trolley? Was the order for B/n. 4051 really for six identical bogies?

John Browning
Annerley, Qld

Dear Sir,

Standard gauge industrial sidings in Sydney: Lower North Shore (LR 202)

Jim Longworth's article in LR 202 was of interest to me, particularly with regards to the PFA's Darling harbour store and the car float serving those premises. From the illustration on p.6, this vessel was obviously unpowered, and also does not seem to have any means of steering. It would have had to be moved and manoeuvred, not by a tug with a line, but by a powered vessel lashed alongside. Looking at the photo, one can see below the centre of the left hand wagon, a silhouette of the upper part of a boat's hull on the starboard side of the float, which was probably something similar to the small steam vessel shown in the engraving on p.7.

An arrangement such as described would be necessary to manoeuvre the float into the dock in the PFA's building, and indeed, with the width of the dock being twenty-four feet, it is unlikely that both vessels could enter the dock still lashed together.

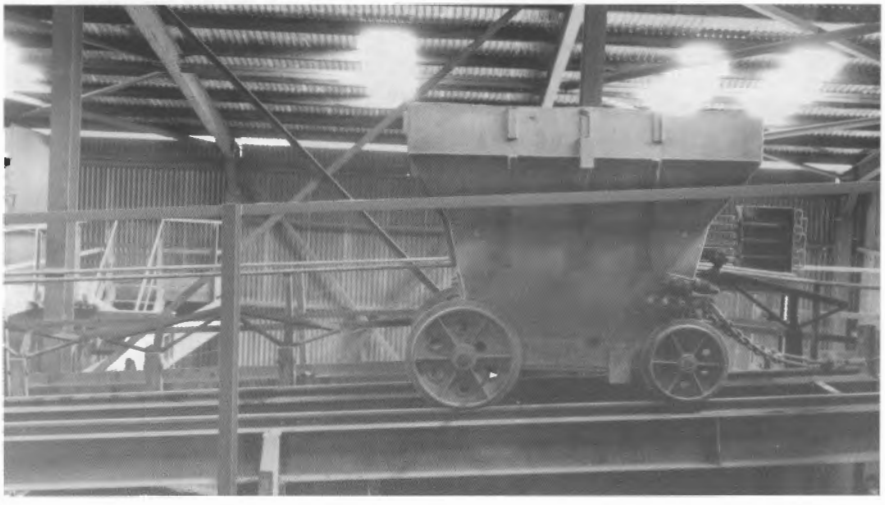
The intended design of the dock, with the entrance at right angles to the building, as indicated in the p.7 engraving, would have been completely impracticable. It would have been impossible for a float the length of the one illustrated to negotiate the sharp change of direction involved, which is probably why the actual design as built, allowing straight in, straight out operation, was adopted.

WA Pearce
Kensington, Vic

Dear Sir,

Standard gauge industrial sidings in Sydney: Lower North Shore (LR 202)

The article by Jim Longworth, in the August issue of *Light Railways*, reminded me of visits to the North Sydney Brick & Tile Co Ltd's brickworks in St Leonards in 1975 and 1976. A single-track cable incline along a trestle was working and had a gauge of about 2ft 11in or 2ft 11½in. Shale from a stockpile was dumped into a four-wheel skip by front-end loader (through a hopper) and hauled up to the works along the incline for processing and manufacture of bricks. The shale was trucked from another site. There were also the remains of 18in gauge timber framed side-tipping skips. A painting of the brickworks by F Howells dated 1925, at the site office, showed four inclines, three of which are marked on the plan in LR. Light railway lines were shown in the painting radiating from the quarry ends of the inclines.



Other similar inclines, but of 3ft 0in gauge, were operating at Brickworks Ltd's Eastwood and St Peters brickworks around the same time. Out of service 3ft 0in gauge inclines were at Brickworks Ltd's Thornleigh, Burwood and Ashbury brickworks, and Punchbowl Brick's brickworks.

The attached photos (below) show:

1. A skip at St Peters in the loading position under the hoppers, 23 August 1977.
2. The hoppers at St Peters on the right and a skip running up the incline to the left, 23 August 1977.
3. At the top of the incline at Thornleigh, with a skip in the discharge position, 22 August 1977.

Tony Weston
Melbourne, Vic

Dear Sir,

***Light Railways* magazine**

Just a little note to say how much I enjoy reading Australia's magazine of Industrial and Narrow Gauge Railways – *Light Railways*. The August 2008 issue was particularly interesting, especially that section dealing with the John Brown coal hoppers and locomotives.

I am chairman of Hunter Valley Training Company, which is a not-for-profit Training Company 50% owned by the NSW Ministerial Holding Corporation. This Company now has 2000 apprentices in training throughout NSW and our Training Centre occupies the site of South Maitland Railways at East Greta Junction.

We also have two 10 class locomotives in full operational condition accredited for mainline operation. They are No.10, the first of the line; and No.18.

Keep up the good work and I shall look forward to receiving this most readable publication.

Milton Morris
Maitland, NSW

LRRSA – Its Future

For those who have not had the pleasure of participating, *Light Railways* mailouts tend to be quite social occasions but also events interspersed with the odd piece of semi-serious chat about all things important to the LRRSA. It was at one of these a couple of months ago where the idea was born for the Council and other Society workers to enjoy a journey on Puffing Billy's Night Train. It was to be a fun night for all but also an opportunity to discuss some concerning issues related to the Society's future.

The trip took place on 9 August and in all we had 10 attendees including Bob McKillop and Ross Mainwaring from New South Wales.

Details of the trip can be found elsewhere in this issue but importantly, despite the best efforts of the one-man rock band at the Packing Shed, we did get an opportunity to kick around our concerns and suggest a course of action. In essence the key issues raised were:

- Our ageing Council and succession of LRRSA management
- The ongoing relevance of the LRRSA in its current form
- The ongoing sustainability of the LRRSA in its current form
- Succession of LR production team
- Future forms of publications
- The increasing significance of the internet and our use of it

These are only some of the issues facing the Society and none are new. In fact most have formed a part of similar discussions in the past as the Society moved from one phase of its existence to another. However, it is clear that before long we may need to pass through another such phase and we need to prepare for it. For this reason we believe the time is ripe for another national conference where our future might be discussed and strategies developed. The thought is to hold such an event in 2009.

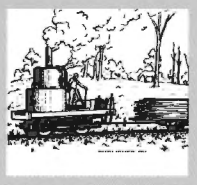
Traditionally we have made these conferences open to all who want to attend and this would again be the intention. We also welcome suggestions from anyone about topics to be covered and indeed the nature of the conference itself.

If you have any bright ideas or comments we would like very much to hear from you. You can write to the subscription address given on the inside cover of LR or email your thoughts to **conference@lrrsa.org.au**.

Mike McCarthy

LIFE MEMBERSHIP AWARD

As reported in LR 202 (p. 21), Peter Evans has made outstanding contributions to the administration and activities of the LRRSA past 24 years. In recognition, Peter was awarded Life Membership of the Society at its Annual General Meeting on 14 August 2008. Bill Hanks presents Peter with his award at the meeting.



LRRSA NEWS

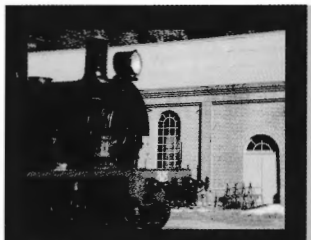
MEETINGS

ADELAIDE: "'Register of light railways in South Australia"
All contributions on any light railway topic are welcome. Discussions will continue on creating a complete register of light railways in SA, and more of Doug Fletcher's DVDs will be shown.
Location: 150 First Avenue, Royston Park.
Date: Thursday 25 September at 8.00pm.
Contact Arnold Lockyer on (08) 8296 9488.

BRISBANE: "Bundaberg Cane Trains"
Greg Stephenson will be showing slides of cane trains in action in the Bundaberg district during August 2008.
Location: BCC Library, Garden City Shopping Centre, Mount Gravatt. After hours entrance (rear of library) opposite Mega Theatre complex, next to Toys'R'Us.
Date: Friday 10 October at 7.30pm. Entry from 7pm.

MELBOURNE: "Completion of Annual General Meeting, then Trolls, Timber and Trains"
The adjourned AGM will be completed with the presentation of the annual financial statements. Frank Stamford will the give a presentation based on his recent trip to Norway, which will include - amongst other things - steamboats, mining towns, and ferries, as well as railways.
Location: Ashburton Uniting Church Hall, Ashburn Grove, Ashburton.
Date: Thursday, 9 October 2008 at 8.00 pm

SYDNEY: "Preserved Tasmanian Narrow Gauge, plus Climax 1694 in action."
A medley of edited DVDs will be presented showing highlights of present-day Tasmanian narrow-gauge railways, featuring *Wee Georgie Wood* at Tullah, and Krauss operations at the Redwater Creek Steam Society at Sheffield. Followed by a trip in the cab of the Climax loco on a Commissioner's Special on the Puffing Billy Railway.
Location: Woodstock Community Centre, Church Street, Burwood, (five minutes walk from Burwood railway station).
Date: Wednesday 22 October at 7.30pm



Heritage & Tourist

Living without *THOMAS*?

THOMAS the Tank Engine has made an enormous contribution to the promotion of railways in recent decades, particularly in introducing children to a fascination in railways and in assisting heritage railways to promote their attractions to a wider audience. In Australia, as elsewhere, licensed 'Day out with Thomas' or 'Friends of Thomas the Tank Engine' (FOTTE) Days have become the premier revenue-raising event of the calendars of a number of our leading heritage railways.

During 2008 the new owners of the rights to 'Thomas the Tank Engine', HIT Entertainment, changed the license requirements for Thomas-themed events, requiring much tighter controls on the equipment that can be used and the staff permitted to run them, together with hefty increases in royalty payments. Numerous heritage groups in the United Kingdom have stopped running Thomas-themed events because of these restrictions and Australian groups are following suit.

The planned FOTTE event at the Richmond Vale Railway on 20-21 September this year, for instance, suddenly became a 'Family Fun Fest' due to the demands placed on the group by HIT Entertainment that were seen as unrealistic. Graham Black has provided a delightful account in the June 2008 issue of *The Link Line* of the frustrations experienced by an Australian heritage railway in trying to deal with the ever-changing demands of HIT and its agents. The stringent demands of HIT were, it claimed, the result of a new approach so that 'children attending any 'Thomas' event would have an "IMMERSIVE" experience at them'. Graham responded in "straight Australian Language", asking 'what happened to the children having a happy and enjoyable experience?' I understand also that the 'Thomas Days' at the Puffing Billy Railway in October-November will not provide children with the experience of riding on a Thomas train due to new restrictions.

A challenge faced by the Richmond Vale Railway and other Australian heritage train operators is that their locomotives are not really suitable as the characters in the quintessentially British *THOMAS* books. In my editorial for this section in LR 141 (June 1998) I noted that the *THOMAS* phenomenon was based on railway heritage that is remote from the real life of Australian railways and asked was there potential to develop locomotive characters for children based on local experience? *SANDY the Cane Train* was noted as an opportunity for our heritage railways based on the sugar industry and it was suggested that there must be opportunity for productive liaison between the sales managers at our heritage railways and the writers of children's stories and/or television producers to develop characters that relate to other Australian industries that can bring joy to future generations of Australian children – and contribute to the finances of the heritage group.

Evidently the power of the corporatised *THOMAS* was such that a search for an alternative at the time was too difficult. Now, a decade down the track, it may be time to look again. *Bob McKillop*

News items should be sent to the Editor, Bob McKillop, Facsimile (02) 9958 8687 or by mail to PO Box 674, St Ives NSW 2075.

Email address for H&T reports is: rfmckillop@bigpond.com

Digital photographs for possible inclusion in *Light Railways* should be sent direct to Bruce Belbin at: boxcargraphics@optusnet.com.au

NEWS

Queensland

ARCHER PARK RAIL MUSEUM, Rockhampton 1067mm gauge
Rockhampton Regional Council

Formerly the Archer Park Station & Steam Tram Museum, this heritage operation now has a new name, as indicated above. Following completion of the rail accreditation process, the former Rockhampton Tramways Purrey steam tram commenced regular operations again in August 2008. It operates on Sundays between 10am and 1pm (except December and January). Volunteers provide complimentary tea, coffee and biscuits to all visitors. Entry is $6.60 for adults, $4.50 concession, $3.30 children/students and $15 for a family.

Lynn Zelmer, 08/08

BALLYHOOLEY STEAM RAILWAY, Port Douglas
610mm gauge

The BSR 0-6-2T+T locomotive *BUNDY* (Bundaberg Foundry 2 of 1952) had an extended stay in Cairns due to the lack of Cairns-based members to carry out the required major repair work (see LR 196, p.35). Accordingly, the BSR arranged to transfer the locomotive to the Mossman Sugar Mill, where it arrived on 10 June 2008. With the help of several tradesmen and many hours of hard work the repair work was completed on 22 July, with a boiler inspection being carried out two days later.

BUNDY passed its test and was steamed at the Mill before making the transfer to Port Douglas by rail on 4 August. Overgrown tropical jungle ensured that sections of the trip were challenging. The locomotive joined sister locomotive *SPEEDY* (Bundaberg Foundry 6 of 1953) on Sunday 24 August to haul the BSR service trains. The train left the depot at 9.30am, with departure from St Crispins at 10.20am. Both locomotives performed well on the day.

Chris Stephens, 08/08; Peter Lloyd, 08/08

MOUNT MORGAN HISTORIC RAIL COMPLEX 1067mm gauge
Rockhampton Regional Council

As a result of recent amalgamations, Mount Morgan is now within the Rockhampton Regional Council area and the historic station complex is under council management. The station complex was being cleaned up in August 2008 and the website (http://qldrailheritage.com/cq/mtmrgn.htm) indicates that section car rides have been reintroduced within the station area. In the longer term, it is proposed to gain full accreditation for the remaining railway track, locomotives and rolling stock in order to resume operations over the 3.5km line. The centre is home to former Mount Morgan Mines 0-4-0ST locomotive No. 3 (Hunslet 845 of 1903), which was restored to operating condition in 1996.

Lynn Zelmer, 08/08

New South Wales

ILLAWARRA TRAIN PARK, Albion Park 610mm gauge
Illawarra Light Railway Museum Society

The ILRMS project to upgrade the track at Albion Park is now nearing completion. The Society extends its thanks to all the gallant team of track workers who have toiled on this task throughout the extended period of weekdays and weekends.

Operating days over recent months have drawn good attendances, despite the absence of 610mm train operations. Some lucky visitors have enjoyed a traditional bush cooking display and food tasting, thanks to the Albion Park Chamber of Commerce who provided this attraction. The miniature railway has continued as a faithful operation, providing a ride experience whilst the main railway is closed for repairs.

Brad Johns, 06/08

RICHMOND MAIN HERITAGE PARK, Kurri Kurri
1435mm gauge
Richmond Vale Preservation Cooperative Society Ltd

This year the RVR has been operating trains for the public every Sunday between May and the end of September. Steam locomotives have operated on most days, with only one Sunday to the end of August when diesel locomotives were operated instead.

A 31-member group from the Australian Railway Historical Society (NSW Division) on an Ed Tonks-led 'Mines & Lines of the South Maitland Coalfields' tour was

hosted for a barbecue lunch by the RVPCS on Sunday 27 July 2008. The group then travelled on the 2pm train to Pelaw Main and return headed by ex-SMR 2-8-2T 30 (Beyer Peacock 6294 of 1924) with Graham Black and Grahame Swanson on the footplate. On arrival at Pelaw Main, passengers disembarked and the crew set the train back to make a spectacular charge up the grade for the benefit of photographers.

There was also time to inspect the Richmond Main Mining Museum in the grand administrative building at the mine site. Following closure of the Richmond Main Colliery on 7 July 1967, public support for preservation of the pit-top and powerhouse buildings resulted in the Cessnock City Council placing a temporary conservation order on the site and in 1976 the company transferred the land on which the buildings are located to the Council. The RVPCS was established in 1969 to restore the railway, but development of the planned mining museum was a more drawn out process. It now has displays relating to the development of the Richmond Main Colliery and the South Maitland coalfield generally in a number of ground floor rooms, but additional resources are needed to upgrade the interpretation and presentation.

With the additional demands of running days, the mechanical crew at the museum has managed to keep up with maintenance requirements, but work has slowed on restoration tasks. Ex-SMR 2-8-2T 30 has been the main operating locomotive with work continuing on the ex-Lysaghts 0-4-0ST *MARJORIE* (Clyde Eng 462/1938) in readiness for its return to service. The 1.5km Mulbring Road branch (part of the original line to Hexham) has had over 300 sleepers replaced to bring it up to first-class standard.

Graham Black, 08/08; Bob McKillop 08/08; *The Link Line* No. 147

Victoria

ALEXANDRA TIMBER TRAMWAY & MUSEUM

610mm gauge

Work on returning the John Fowler 0-6-0T (B/N 11885 of 1909) to operations continued through July and August. Following the successful hydrostatic test of the boiler, the exterior of the boiler was needle-gunned and painted by Bryan Slader. Bruce Alsop has completed the new brake block and this has been fitted. Several new brake pins have been manufactured and the brake system was re-assembled and adjusted on Sunday 13 July prior to the boiler being replaced in the frames. Work is now underway to assemble a new smokestack for the locomotive using the original general arrangement drawing as a guide. Both Kelly & Lewis 0-6-0DM locomotives handled all major running duties while the Fowler has been out of action. 4271 has performed well during the year and 5957 was also giving good service until starter motor problems were encountered in April.

The former Cheetham Salt 4wPM locomotive No.1 returned to Alexandra on 31 May and the engine was fitted to the frame on 7 June. Since then, the clutch, throttle and gearbox linkages have been repaired and fitted, and following repairs to broken studs in the top water inlet, the refurbished radiator was fitted, leaving only the fuel lines, exhaust pipe and electrics awaiting completion prior to a test run of the engine.

Reports tabled at the ATT&M AGM show that the museum was hit hard by outside factors during 2007-08 which have included rises in interest rates and food and petrol prices resulting in a loss in the numbers of patrons during the year as they try and save money. The lack of a steam locomotive during the year has also probably had an effect due to the lack of the steam whistle through the town to drum up extra customers. Consequently passenger numbers (2885 for the year) were 20 per cent down on the previous year. An increase in donations, together with reduced insurance premiums, contributed to an improved financial result.

The centenary of the opening of the railway to Alexandra will occur on 28 October 1909, while the John Fowler locomotive will also celebrate the centenary of its arrival in Australia around the middle of the year, so the museum is planning a major event to celebrate these two happy coincidences. Further details will be announced at a later date.

Timberline 103, August 2008

PUFFING BILLY RAILWAY

762mm gauge

Emerald Tourist Railway Board

A party of 10 LRRSA members was among the 36 passengers who joined the first class Mt Lyell carriages on the Dinner Special train at Belgrave station for a 7pm departure to Nobelius Packing Shed on Saturday 9 August (see also item on page 26). Several of the group had arrived early to observe the NA 2-6-2T locomotive 8A being prepared for the run and the arrival of 6A with the last regular passenger train of the day. A crisp winter's night meant that passengers were keen to get on board early and settle into savouries and pre-dinner drinks during the run to the Packing Shed, with the LRRSA group vacating their carriage 'to pat the engine' at Menzies Creek. Our friendly passenger attendants ensured that we were all well catered for.

On arrival, passengers quickly moved into the warmth of the packing shed where they tucked into a hearty three-course carvery-type meal and drinks accompanied by an entertaining musician/singer. There was ample time for relaxed conversation, while the more energetic danced to the live music up to departure time for the return journey at 10.30pm. Our attendants kept up a good supply of cheese platters, port and tea or coffee during the return trip, so it was a very satisfied group who left the train and posed for photos with Les Thompson, the driver of 8A, before departing in their respective directions.

Updating the report in LR 200 (p. 3), the first of the additional ex-QGR B-B DH locomotives, CCO2 (ex-DH5: Walkers 587 of 1968) arrived at Menzies Creek on 21 July. It was

Coming Events

OCTOBER 2008

1-12 Fort Glanville Steam Railway, Semaphore, SA. Daily 457mm gauge steam train operations during school holidays through to 12 October. Information and bookings National Railway Museum (08) 8341 1690.

2-6 Kerrisdale Mountain Railway & Museum, VIC. This scenic narrow gauge railway and steam museum is open to the public from 1000-1700 Thursday to Monday and public holidays. Information, phone (03) 5797 0227 or website: www.kerrisdalemtnrailway.com.au.

4-5 Red Cliffs Historical Steam Railway, VIC. Narrow gauge train operations using Kerr Stuart steam and EM Baldwin diesel locomotives, 1100-1600 and the first weekend of following months. Enquiries: (03) 5024 1345.

5 Cobdogla Irrigation Museum, SA. Open Day with Humphrey pump and narrow gauge steam train operations day. Phone (08) 8588 2323.

11-12 Alexandra Timber Tramway & Museum, VIC. Market & Woodturners Day with narrow gauge trains 1000-1545. Also diesel-hauled trains 26 October. Information: Bryan 0407 509 380 or Peter 0425 821 234.

11-12 Puffing Billy Railway, Belgrave, VIC. *A Day out with Thomas* – Thomas the Tank Engine returns to Emerald for the Spring Season. Also on 18-19 and 25-26 October. and 8-9 November Bookings (03) 9757 0700.

18-19 Campbelltown Steam & Machinery Museum, Menangle, NSW: Oil, Steam & Machinery Open Days with operating narrow gauge steam railway, traction engines, steam rollers, stationary and portable engines. Email: big-trev@bigpond.com

NOVEMBER 2008

1 Cobdogla Irrigation Museum, SA. Twilight narrow gauge diesel train at the haunting time of Halloween. Phone (08) 8588 2323.

8-9 Alexandra Timber Tramway & Museum, VIC. Narrow gauge train operations with market and diesel trains on Saturday and steam on Sunday 1000-1545. Also diesel-hauled trains 23 November. Information: Bryan 0407 509 380 or Peter 0425 821 234.

16 Richmond Vale Railway, Kurri Kurri NSW. Open Day with Santa Special steam-hauled trains operating. Enquiries: (02) 4955 `904.

29 Puffing Billy Railway, Belgrave, VIC. Santa Special train departing Belgrave at 11.05am. Bookings: (03) 9757 0700.

DECEMBER 2008

6 Puffing Billy Railway, Belgrave, VIC. *Santa Special* train departing Belgrave at 11.05am. Also on 13 and 20 December, together with *Santa's Sunset Special* train departing Belgrave at 5.10pm on 13 December. Bookings: (03) 9757 0700.

13-14 Alexandra Timber Tramway & Museum, VIC. Narrow gauge train operations with market and diesel trains on Saturday and steam on Sunday 1000-1545. Note: no services on 28 Oecember. Information: Bryan 0407 509 380 or Peter 0425 821 234.

20 Cobdogla Irrigation Museum, SA. Experience a twilight narrow gauge train ride behind a diesel locomotive. Phone (08) 8588 2323.

Note: Please send information on coming events to Bob McKillop – rfmckillop@bigpond.com - or the Editor, Light Railways, PO Box 674, St Ives NSW 2075. The deadline for the December issue is 2 November.

joined by DH25 (Walkers 607 of 1969), which does not have an engine, on 13 August. It is planned that when DH31 goes into the Belgrave Workshops for a 'D examination', its bogies will be placed under CCO2. It appears that D25 will serve as a source of spare parts. The centre section of the former South African Garratt NG16 locomotive No. 129 was moved into the workshops during July for work to commence on its conversion to 762mm gauge. A new boiler will be required due to corrosion around the firebox rivets of the existing boiler.

Editor; Frank Stamford, 07-08/08; *PBR Monthly News* No.419, June 2008

Tasmania

IDA BAY RAILWAY
610mm gauge

The rail motor previously at the Ida Bay Railway has been restored at a private location. The Chevrolet engine was completely rebuilt and tested prior to being installed in the chassis during August 2008. The completed rail motor is to be returned to the Ida Bay Railway for an unveiling in the spring.

James Shugg, 08/08

South Australia

COBDOGLA IRRIGATION MUSEUM 610mm gauge
Cobdogla Steam Friends Inc.

As reported in LR 187 (p.30), the Cobdogla Steam friends acquired a second 'Simplex' Model 20/28hp 4wDM (Motor Rail 9861 of 1953) 4wDM in December 2005. Work on restoration of this locomotive, now named *PETER*, to assist with traffic demands on the Loveday extension is now well under way.

Soon after the loco's arrival, the old cab and a lot of accumulated dirt, grease etc was removed. After some basic maintenance carried out by Mac Mitchell, the engine was started successfully and a quick trial run was made. John Reed commenced building a new cab with some assistance from Denis Wasley, who fabricated a control panel for the switches, gauges and fuses etc, along with extension shafts for the two gear levers to bring them inside the cab. A new radiator and water pump have been fitted and were being plumbed up during August.

Work on the track extension has been delayed due to administrative difficulties within the local council concerning the handover of the land required for the balance of the extension to Loveday. A meeting between Council and the Society was held to determine the exact location of the next road crossing and a time has been fixed for the road works to be done. When the paperwork is finally sorted out, work can proceed with the laying of more track. The track maintenance gang has been working on the last section of track laid to rectify a number of the rough joints which occurred when second-hand rails of differing wear profiles were laid end to end. This has resulted in a smoother ride and less shock wear on the wheels and bearings of the rolling stock.

Representatives of the CFS have made several visits to the Rail Safety Unit in connection with accreditation matters, particularly the format of documentation and the items to be recorded. A Level Crossing audit was carried out and notices issued for work to be carried out to meet the new standards. All the accreditation work required of the Society has now been completed.

Denis Wasley, 08/08

A locomotive in the tropical jungle! The Ballyhooley Steam Railway's BUNDY *(Bundaberg Foundry 2 of 1952) encounters some heavy going during its transfer from Mossman Mill to Port Douglas by rail on 4 August 2008.*
Photo Chris Stephens

A section of recently laid track at the Illawarra Train Park in August 2008 which utilises concrete sleepers from Queensland sugar mills. *Photo: Robert Marczan*

Western Australia

BENNETT BROOK RAILWAY, Whiteman Park 610mm gauge
WA Light Railway Preservation Assoc. Inc.

Some interesting statistics were presented at the WALRPA AGM on 17 August 2008. While rising fuel costs have impacted on the financial results for 2007-08, passenger numbers at 29,765 were only

slightly down on the previous year. The six locomotives in service travelled a total of 8237km during the year, the 0-6-0DM *ROSALIE* (1341km) and 4wDH PW27 (1277km) topping the list. Diesel locos were called on to perform additional duties over winter with steam locos *BETTY THOMPSON* (1189km) out of service for its 10-year inspection and 2-8-2 NG123 (648km) having restricted track availability.

Track upgrading was the major activity during the year, with 2000 sleepers replaced. The last of the ballast for track upgrading was dropped in place on 26 July, but tamping was delayed by mechanical problems with the tamper. Skilled Engineering was scheduled to commence tamping the final 1.5km of track on the Bushland Loop from 8 September.

Recent workshop activities have focused on getting 0-4-2T *BETTY THOMPSON* ready to return to service. On 22 August, the trailing axle was collected from Gemco Engineering following overhaul and the night crew worked on reassembling the truck. The smokebox equipment was also re-installed.

The BBR will celebrate the 25th anniversary of the commencement of train operations at Bennett Brook in December 2009 and the society will celebrate its 25th anniversary exactly 12 months later. Accordingly WALRPA plans a number of special celebrations during this 12 month period. A range of ideas are being assessed and announcements regarding specific events will follow.

BBR website news, 23/08/08; *BBR Newsletter* August 2008

Ex-QGR B-B DH locomotive DH25 (left) was photographed at Menzies Creek by Frank Stamford shortly after its arrival at the Puffing Billy Railway yard on 13 August, while sister unit CCO2 looks on.

Restoration of the Simplex 4wDM locomotive PETER *(Motor Rail 9861 of 1953) is making good progress at the Cobdogla Steam Friends Society depot. John Reed is depicted here working on the cab of the locomotive. Photo: Denis Wasley*

Members of the 'Friday Night Crew' in action at the Bennett Brook Railway depot on 22 August 2008. Simon Mead is driving the crane, while Derek Ruston balances the load, which is part of the trailing truck assembly for the Perry 0-4-2T locomotive BETTY THOMPSON *in the background. Photo: Neil Blinco* ❑ *The crew prepare the Puffing Billy Railway's NA 2-6-2T locomotive 8A for duty on the Dinner Special train on Saturday 9 August 2008. Photo: Bob McKillop* ❑ *The LRRSA group pose at Belgrave station with locomotive 8A and driver Les Thompson at the conclusion of the Dinner Train journey on 9 August. Photo: Bill Hanks*

JAVA 2008: *Pangka's Jung 0-6-2TT 2 (2388 of 1915) runs back light engine to the transhipment yard, displaying its classic lines, 19 July 2008.* ❑ *Sragi Mill's 7* SRAGI VII, *a powerful-looking Berliner 0-10-0TT (9318 of 1928), leaves the loco shed yard for the transhipment area, 20 July 2008.* ❑ *720mm gauge Japanese 0-6-0DH locomotives work the yard at Sindanglaut Mill. Here 2 (Keio 2 of 1983) and 1 (Keio 1 of 1983) manoeuvre trucks at a transloader on 18 July 2008. Photos: John Browning*

Steamy Java 2008

by John Browning

Indonesia's sugar industry is fast becoming the last significant outpost of industrial narrow gauge steam in the world, and fortunately it is close to our shores. As pointed out by one participant, you can get a sense here of what things in Queensland must have been like 50 years ago. Rob Dickinson's *Steamy Java* trip in August 2008, advertised in *Light Railways*, attracted a few Australian participants. Most on the tour came from the UK, retired and sprightly gentlemen for the most part. And what a magnificent tour it was, well organised and full of variety. Over 40 industrial steam locomotives were seen in operation, including two at the 1067mm gauge Cepu Forest Railway.

In spite of the cautionary travel advisories posted by the Australian Government, we found Java to be a very friendly place, where economic prosperity is growing. The widespread availability of public transport means that the intrepid traveller can access the sugar mills relatively easily, but on tour we had two well-appointed air-conditioned minibuses to take us around under the leadership of expert guides. The march of globalisation means that such modern conveniences as plastic money, mobile phones and the internet are increasingly in evidence if you need to use them.

The track gauges used by the sugar mills are 600mm, 700mm, and 720mm. 700mm was adopted by the Dutch as the narrow gauge of choice and so predominates. Steam locomotives can be seen in use at no more than 15 sugar mills now, out of more than 50 that once used them. There are large numbers of disused steam locomotives. Diesel locomotives are used, but the older ones are generally unserviceable. German locomotives, steam and diesel, made up the bulk of units supplied, but the modern diesels in use tend to be Japanese.

Only a few mills operate field lines with harvested cane being loaded directly into cane trucks. In most cases, the rail operations are to transport the cane a few hundred metres from a transfer station to the mill, with road trucks bringing the cane to the transfer point for reloading onto cane trucks. There are two reasons why this arrangement persists. One is because the mill operates 24 hours a day, with harvesting limited generally to the daytime, so the loaded cane trucks are in effect a mobile storage system to enable night time cane deliveries to the mill. The second reason is because there is little inclination to invest capital altering the tried and tested rail-based cane delivery system to the carrier.

There are advantages in this to the railfan in that it is not hard to find the locomotives, and there is a reasonable amount of action to see. The transfer station yards are usually sufficiently distant from the mill itself to provide varied photographic opportunities and the possibility of locomotives exerting themselves. However, the photographic attractions of the few field lines that remain are irresistible to those with a little more time to spend.

Cane is loaded longitudinally in Java, and often lengthy overhangs at either end of the trucks can make coupling up a challenge. Some locomotives even have the equivalent of bull bars to make propelling these loads a little easier. Speeds are low and derailments endemic.

Unfortunately, I was not able to do the full tour, but the highlights for me were the 600mm gauge operations at Sragi, with no less than eight steam locomotives seen in use, and at Pangka, with three delightful brick red steam locomotives sharing duties with four vintage and well cared-for diesels.

The widespread adoption of flexible wheelbase steam locomotives with eight or ten axles was Java's answer to increasing haulage power on light track. Klien-Lindner axles and Luttermöller gearing are still very much in evidence, while one last Mallet was also seen in operation. Fuel is generally bagasse, supplemented by firewood and in one case even by coconut husks, so most locomotives are fitted with tenders to carry the large quantities of low-calorific value fuel required.

The mills themselves are wonderful monuments to an earlier age, with reciprocating steam engines in profusion that are a significant attraction in their own right, but it is increasingly obvious that 100 year old industrial buildings become worn out as the years go by.

All this cannot last – so I'd recommend a visit while you still have a chance. It is close, cheap and relatively easy to do. Rob Dickinson is hoping to arrange tours over the next few years so watch this space. In the meantime you can enjoy John Raby's blog of the trip at http://www.users.waitrose.com/~jraby/blog1.html and Roderick Smith's photographs on the LRRSA Yahoo site at http://au.ph.groups.yahoo.com/group/LRRSA/photos. More information can be found on Rob Dickinson's international steam site and the FarRail site.

Thanks to John and Rod for information used in this report.

Clockwise, from below: Regular steam working has ceased at Tersana Baru Mill, but 700mm gauge Orenstein & Koppel 0-8-0TT 6 (10459 of 1929) was steamed on 18 July 2008 in preparation for a visit by a Japanese group the following day. ❑ Sragi Mill's Jung 0-8-0 17 (Jung 1699 of 1911) shunts empty trucks in the transhipment yard. Here it is being eased back onto the track following a routine derailment on 20 July 2008. ❑ The spectacular roundhouse at Jatibarang would not be out of place in South America. On 19 July 2008, 600mm gauge Schoema 4wDM A (1170 of 1950) sits near the turntable. ❑ In the empty truck yard at Sumberharjo Mill on 20 July 2008, two 700mm gauge Orenstein & Koppel 0-8-0T locomotives 4 and 3 (4143 of 1910 and 5857 of 1912) spend a generally leisurely existence. ❑ The transloader at Pangka Mill. A load of cane is lifted from each small lorry and lowered onto a cane truck that has been run underneath. 19 July 2008. Photos: John Browning. (See the back cover of this issue for more photos.)