

# FARES PLEASE!

April 2013

*News from the Ballarat Tramway Museum*

## 2013 Begonia Festival



With Robert Paroissien at the controls, No 38 arrives at Gardens Loop with another load of passengers followed closely by No 18. Nos 14 & 661 are ready to depart as soon as the track is clear. Neil Lardner captured the action on Saturday 9/3/13.

*Ballarat Trams are Ballarat History*

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# Around the Museum

### Our Recent Volunteers

Last edition we mentioned the welcome additions to our volunteer workforce.

Tony Bidwell has joined the workshop crew in the maintenance area, usually working with Allan Snowball dealing with the day to day struggle in keeping a fleet of century old trams in good working order. He has had a varied career here and in his native England, latterly in maintaining bread making machinery at a major bakery.

Reece Carter has forgone a career with *Hungry Jacks* to return to school and volunteer in traffic at the Museum. Just turned eighteen, Reece has been a great addition to our volunteer staff. He writes:

*I am a Ballarat High School student with a big amusement for anything public transport mostly trains and trams. I stated volunteering when I was 11 in my home town of Clunes at the local neighbourhood centre, barbeques and any event that needed volunteers my hand was up and out there. When Booktown came along I joined in where I could, helped set up the community bookshop and worked alongside Mr R. Gilbert. In 2010 I was forced to move to Ballarat and soon discovered paid work. This was a bad decision as they expected me to work until 0000hrs at night on a school night. While trying to complete my VCE last year I put work first hence my grades went down. I ended up failing, so it was one or the other. I quit my Hungry Jacks job after three long years and started volunteering at the tramway museum where there is no obligation to work after 6pm and I can focus more on my study. I would like to thank Mr P. Winspur, Mr R. Gilbert and Mr G. Gardner for your support in my orientation along with the rest of the crew you have made me feel very welcome and I look forward to decades of fun times sharing my ideas and keeping history alive. You will find me at the museum or conducting on the trams on most weekends as I enjoy it so much. Once again thank you for welcoming me. I am honoured to be here.*

Roger Gosney has proved to be another enthusiastic new volunteer. Looking very smart in his uniform, he is already an excellent depot guide, covering alternate Saturdays to Austin Brehaut. He is about to undertake conducting duties and is keen to assist with our weekday group visits. Roger's pride and joy is his BMW motorbike which provides his transportation to and from the depot.

Shiori Uwagawa is an effervescent Japanese lady who has taken on the unenviable task of keeping the Museum display and mess room areas in a fit state, no small task. She tackles the cleaning with great gusto, and members are advised to keep out of her way when she is wielding the big yard broom or they will be swept out with the rest of the rubbish.

### Overhead bucket truck.

As many would be aware the Museum's overhead maintenance truck is some 60 years old. It is inadequate for many tasks. An overhead bucket truck became surplus to *Yarra Trams* requirements and has, through the facilitation of Adrian Ponton, Registrar Tourist & Heritage, been donated to the Museum by the Victorian Government. Thank you Adrian for your assistance. This truck will be invaluable in the coming years as we replace much of our overhead wires.

### Trams

Tram No 13 has received much attention in the last two months. Bendigo Tramways' painter, Les Woodford gave many hours of his time over three weekends before applying the final top coat of green on Saturday 6<sup>th</sup> April. Since then much of the 'fiddly bits' have been completed and most of the edge lining, numerals and SEC logos have been applied by Brian Wood. The car should be back in Wendouree Parade riding on its new springs in a few weeks.



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**The new bucket truck**

*Photo: Alastair Reither*



**Begonia Festival – Neil Lardner supervises**

*Photo: Peter Winspur 10/3/13*



**Photo opportunities – Begonia Festival** *Photo: Peter Winspur 10/3/13*



### Do you remember 1913?

Austin Brehaut posed this question when he photographed Trams 18 & 40 together on 20<sup>th</sup> April. The two were built 100 years ago.

The Museum is planning to celebrate the anniversary on the 2<sup>nd</sup> November 2013.

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### Vale John Clowes

It with great sadness that the Museum reports the passing of John Clowes after a short battle with cancer. John is the third of our members to be taken this way in just under twelve months. It was only last January 21<sup>st</sup> that John drove a tram for the Museum. Shortly after this he called me to let me know that he had been diagnosed with Ross River fever, a debilitating condition which could see him out of action for many months. The far more serious diagnosis did not come until late February.

John joined the Museum in September 1997 and qualified as a driver on the 22<sup>nd</sup> February 1998. For the next fifteen years John became one of our most regular drivers, and usually with Merle behind collecting the fares. They were an inseparable team. His contribution to keeping our wheels turning was very significant and he will be sadly missed. Ironically, when the funeral came, I was unable to attend due to a group visit to the Museum. John would have been there if he had still been well.

*Peter Winspur*

*Len Millar has offered the following more complete story of John's life:*

With great sadness we record the passing from this life (on April 23<sup>rd</sup>) of John Clowes - a stalwart of Ballarat and Bendigo Tramways. We are the poorer for losing him, but are very grateful for knowing this big man. At 1.91 metres (6'4"), Big John was a man who had a wonderful big personality. He, and his loyal wife of 52 years, Merle, gave hundreds of days to both tramways - dating back to 1997!

John was born 74 years ago in Melbourne, and spent his working life with the former State Electricity Commission of Victoria, and he retired aged 53 when the Commission was dissolved in 1993. Upon retirement, John and Merle committed themselves to some 20 years of volunteered

time at Ballarat's Sovereign Hill, spending Wednesdays of each week dressed up in "gold rush" period costume. John was bedecked in a long coat and top hat, Merle with bonnet and lace. They wandered the "streets" and the buildings at Sovereign Hill, bringing the gold rush alive for thousands of visitors.

In 1997, through a cousin, Bill Whitford, John and Merle got onto "the trams" at Ballarat. While it was not possible to find an SEC cap (much less pants) that fitted, John was soon fitting into the narrow cabins of the BTM's single-truckers. Merle was his conductress, and they were the roster officer's dream - always available for a mid-week charter - especially at short notice. The roomy driver's cabins of Melbourne "W4" car 671 made that tram his favourite at Ballarat. At Begonia Festival and Springfest, John and Merle could be found providing generous help throughout those busy days. Often the Clowes provided a barbecue dinner at their Smeaton home for the tired Begonia "trammie" troops.

In 2001, Bendigo Tramways beckoned, and for the next 11 years, John and Merle would motor some 90 kilometres north from home on Tuesdays and Fridays, to further indulge in John's new-found love of trams. The Clowes made friends on and off the trams. Bendigo Tramway's Shirley and Peter Turner became fast friends, and the two couples toured extensively around Australia together.

At Bendigo (and Ballarat), John made a point of greeting passengers and making them very welcome. One wonders how many times he asked "Where do YOU come from?" This friendliness and warmth resulted in many long friendships. One couple from England who rode the Clowes' tram in Bendigo subsequently came back and visited John and Merle, and vice versa.



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John's favourite tram in Bendigo was another tram with roomy cabs – "SW5" 808 – although he was quite "partial" to the comfortable seats and technology of "Z1" 74. Single trucker No. 19 in Bendigo was NOT popular with him!

John and Merle raised three fine "children" – David, Barry and Sandra (all three have children of whom John and Merle were proud grand-parents). An annual trek to the Gold Coast to visit Barry and his family was always welcomed – but those sojourns north left a month or so's gap in the Ballarat and Bendigo rosters! The love, pride and support for their family was always evident in John and Merle.

John's brief and awful battle with cancer was unsuccessful, despite surgery and other treatment. The funeral service for John was held on Monday, April 29<sup>th</sup> in Ballarat. Some 200 people were in attendance (including 20 or so from the Ballarat and Bendigo Tramways). John's life, his generosity, his never-ending good humour and his love for life were fondly remembered.

To know John was to know a "big man", in all senses of those two words! He was friendly, he (with Merle) volunteered thousands of hours to three major Victorian tourist attractions. And as a team he and Merle gave pleasure to un-told numbers of people. We sincerely wish Merle and the family to know that we support them at this sad time.

*Len Millar*

## Membership News

The Museum welcomes the following new members and junior supporter:

842 Shiori Uwagawa of Canadian  
843 Adam van Lieshout of Lake Gardens  
5063 Elijah Kolls of Ballarat

We trust their time with us is long and fruitful.

## An Invitation

In 2004, 2007 and 2010 the Museum held Strategic Planning sessions which were very successful in helping to guide it forward. It is now time for the Museum's Strategic Plan to be revisited and updated. To enable this, a workshop day is planned for Saturday 27<sup>th</sup> July 2013 from 10:00am to 4:00pm at *Seymours on Lydiard* (the old North Star Hotel). Lunch, morning and afternoon tea will be provided.

If you are free on the day and a member of the Museum, and would be able to attend, the Board would value your input. Could you please rsvp by 8<sup>th</sup> July by email to [secretary@btm.org.au](mailto:secretary@btm.org.au) or by calling Paul Mong on 0418 182 536? A reminder will be enclosed with the June issue of *Fares Please!*

## A Bequest and an Unexpected Donation

A sizeable bequest from the Estate of the Late Bruce Worthington was received earlier this month. Bruce, who passed away exactly a year ago, was an enthusiastic supporter of several tramway museums around Australia. Initially, the bequest will be placed into our term deposit with the Bendigo Bank while the Board determine the most suitable specific project for it.

In early March, the Museum was visited by a group of enthusiasts from the 20<sup>th</sup> Century Electric Railway Foundation based in California. They arrived on a non-operating day when we happened to be running a charter. A special tram ride was organised for them and several spent up in the shop. A letter of thanks arrived some six weeks later, signed by Arthur E. Jones, the leader of the visit. To our surprise it contained a cheque for U.S. \$2,000! The Foundation is a charitable organisation which supports the efforts of railway and tramway museums in restoration projects. It can be assured that the donation will be well spent.

# The “Forest City” Signalling System in Ballarat

By Alan Bradley

### Introduction

This article looks at the “safe working” systems that applied in Ballarat, the first being the hand staff system. As a result of four serious collisions, the “Forest City” colour light system was adopted and this system is examined in detail.

### Background

What is a “safe working” system? Put simply, it is a means of ensuring that collisions do not occur between two tramway or railway vehicles on a length of track. The type of safe working considered for this article is that intended to prevent collisions on a length of single track.

There is no evidence that the Ballarat horse tram system had a safe working system. It probably wasn't needed. The speeds were low, hardly above walking pace. If two horse trams met between loops there was no real danger apart from bad language and inconvenience.

The Electric Supply Company (ESCO) electrified both the Bendigo steam tram system (in 1903) and the Ballarat horse tram system (in 1905). With electrification came higher speeds, with a resultant risk of damage to vehicles and injuries to passengers in the event of a collision.

On 29 May 1903, little over a month after the commencement of the Bendigo to Eaglehawk electric service, two trams collided head-on at 11 pm at California Gully on a stretch of single track. The ex-Bendigo tram was carrying about 20 passengers returning to Eaglehawk from an evening at the theatre. The ex-Bendigo and ex-Eaglehawk trams were clearly visible to each other, but did not stop in time to avert a collision. The impact was great, but fortunately only one passenger was injured, although several suffered from shock. The

motorman of the ex-Bendigo tram was dismissed for not waiting at the Needle loop.

Two collisions took place on the Ballarat system in 1906. Both took place in Wendouree Parade, west of the old Showgrounds (near Haddon Street), on an S-bend curve with visibility restricted by trees and a large hedge. The first collision on 9 February 1906 took place just before midnight, when two trams were returning to the depot. The leading tram was hauling a trailer, and stopped after a signal from a passenger. The following tram ran into the back of the trailer and telescoped it, and two passengers on the trailer were injured. Motorman Jackson, in charge of the leading car, was suspended as he had neglected to sound the gong five times before stopping. Motorman Clemens, in charge of the following tram, followed only 50 yards behind, whereas regulations stated he had to follow at least 200 yards behind. However Clemens had been instructed to follow close behind in case of a crossing at a loop with another car.<sup>1</sup>

In the afternoon of 4 March 1906 a head-on collision occurred, close to the scene of the first collision, between an east-bound “summer car” and a west-bound “standard car” (similar to our No. 12). Both cars were travelling quickly, and the force of the impact jammed both cars together. Motorman Hofsted, in charge of the standard car was thrown onto the road, and four passengers were injured.

Tramway officials and two police officers investigated the collision. Both motormen claimed that they stopped their cars at the loops at either end of the single track section, believed the line ahead was clear, and then proceeded. Motorman Hofsted was initially accused of not having rung the

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bells on the curves when the collision took place, but a witness claimed both motormen had rung the bells there.<sup>2</sup>

### Hand staffs

The circumstances of those three serious collisions showed a lack of a reliable safe working system. With the higher speeds of electric trams, it was essential for public safety to prevent more than one tram being on a length of single track at any one time. The solution was one dating from the earliest days of 19th century railway operation - the staff system. A tram could not enter a section of single track without receiving the hand staff, which was either held by the motorman of the oncoming tram or left on a pole near the loop. Each brass staff was inscribed with the names of the loops at each end of the section.

On the section of track from the corner of Sturt and Pleasant Street, around the lake to "Hospital corner" the following staff would be used, depending on the service:

- Series 1 (30 minute service, 3 trams):  
Pleasant Street to Hamilton Avenue;  
Hamilton Avenue to Showgrounds;  
Showgrounds to Hospital.
- Series 2 (5 trams, 20 minutes): Pleasant Street to Gardens; Gardens to Carsheds; Carsheds to Hospital.

Former employee Les Edwards recalled:

*"Each loop had a staff and you couldn't go through that loop unless you had the staff. Your loop staffs were numbered. There was a dangerous position where we were supposed to stop and hand them over, but you got that way where you could twirl your leg around the dash, hang out and change over one hand. Of course if you got caught look out, we never got caught. It was a dangerous thing to do but we got away with it".<sup>3</sup>*

### The 1936 Collision

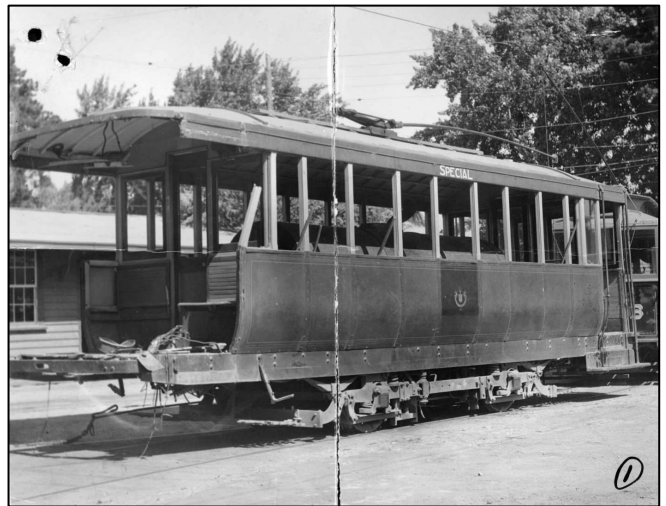
During the 1930s the State Electricity Commission (SEC) commenced an extensive rehabilitation of the Ballarat and Bendigo tramway systems. This included replacement of rolling stock, and renewal of track and overhead wire. By 1936 nearly all of the old rolling stock had been scrapped – but the hand staffs remained in use.

On 5 February 1936 a head-on collision between tram No. 26 and the scrubber car occurred in Wendouree Parade, near where the 1906 collisions occurred. Passenger Elizabeth Clarke was trapped in No. 26. Her left leg was nearly severed in the collision, and it was amputated that day. Two days later she died of "gas gangrene", a deadly condition in the days before invention of penicillin.



A Hand Staff – This one was from the Carlton Street Loop to the Loop near the Depot

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### The 1936 Collision

No 26 & the  
Scrubber Car after  
the collision.

The man standing in  
the two photos is at  
the location of the  
collision

*BTM collection*



Evidence at the Coronial inquest showed that motorman of No. 26 received a hand staff allowing him to proceed on that length of single track. However the scrubber did not run to a timetable, and if meeting another tram between loops the scrubber would reverse and run to the last loop it had passed. On this day the regular scrubber driver was on holidays, and his stand-in had only been driving for three days. The rheostatic brake was incorrectly applied, and the scrubber wheels locked and skidded.

The hand staff system had been compromised by the practice of the scrubber meeting passenger trams in between loops. In a location with limited visibility neither driver could pull up in time to avoid a collision – especially with an inexperienced driver in charge of the scrubber. Clearly a much safer system was needed. At the inquest Tramway Inspector Vic Mawby said that “the installation of automatic signals operated by trams approaching such curves was under consideration”.<sup>4</sup>

### Colour light signalling

Colour light signals had been used for many years on some other Australian tramway systems with single track. On the Perth tramways the Nedlands line, opened in 1915, was protected by Nachod signals. Various other Perth lines with single track were also protected by Nachod signals, and Forrest City signals were installed on the Wembley line.

In 1916 the Brisbane Tramway Company introduced colour light signalling on the single line at the outer end of the then Paddington terminus. "Forest City" and "Nachod" signalling was introduced by the Brisbane City Council in 1928, and eventually all sections of regularly used single line were protected with these appliances. By 1943 no less than 26 sections of single line in Brisbane were operated with this method of safe working.<sup>5</sup>

Colour light signalling was used in several locations in Melbourne. In 1920 colour



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light signalling was installed on the single track bridge over the railway line at East Preston (known as “The Hump”, or “Mount Buggery”). In 1935 Ruddick signals were installed on the single line at the outer end of the Wattle Park line, and around the same time on the end of the East Coburg line.

The SEC decided to install “Forest City” colour light signals on its three tramway systems at Ballarat, Bendigo and Geelong. It intended to relay the single track in Bridge Street in double track, but after opposition by the Royal Automobile Club of Victoria the Ballarat Council refused permission. The Bridge Street single track was relaid early in 1937, and that appears to have been the first section fitted with Forest City signals. Other lines followed over the next year.

In August 1937 the “Ballarat Courier” reported that the “Forest City” system had operated in Geelong for the past six or seven years. The system was now operating on several sections of Wendouree Parade,

and inspection revealed a marked improvement compared to the old staff system. “It will be some time before all lines are completed, but when completed the efficiency of through services will be assured”.<sup>6</sup>

### Who was the Forest City Company?

The Nachod signalling system was the first used in tramway operation in Australia. The signals were built by the Nachod Signal Co. Inc., of Louisville, Kentucky, USA (better known in later years for its most famous son, “Louisville Lip” Muhammad Ali.). Compared to the Forest City signals, the Nachod signals were very complicated and had a counting system to indicate the number of cars in a section. Three different signals were displayed, and up to 15 cars were allowed in a section.<sup>7</sup>

The Forest City signals were simpler, in that only two signals were displayed. Up to 10 cars were allowed in a section. The official Perth instructions commented:



Single truck trams crossing at the Bell St loop on the Sebastopol line  
The signal is on the pole to the right *Photo: John Phillips c1970*

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*“These signals therefore vary from the Nachod signals inasmuch as shunting back under the contact, without going through the section, will not restore them to neutral. Where cars are tabled to a certain loop to turn, such as No. 2 loop Wembley, the trolley must be pulled down, and car allowed to coast under contact between 2 and 3 loops, both ways, when running around the loop”.*<sup>8</sup>

Correspondence from the Forest City company quoted its official name: “The Forest City Electric Co. Limited, 4 Longford Court, Stretford, Manchester”. The SEC received catalogues from the Company listing various products for use on trams, trolleybuses and motor buses, such as stop signs, automatic point controllers and traffic control signals.

### **Forest City signalling in Ballarat**

The Forest City signalling system was operated by the contact of trolley wheels with insulated contactors on the overhead wire. Red and green coloured signals were shown in a box mounted on a pole just past the loop. When a tram entered a loop, and a RED signal was showing, it indicated there was a tram in the section ahead moving towards the loop. When a GREEN light showed it indicated there was a tram in the section ahead moving away from the loop. Where no signal was showing, it meant the section ahead was free of trams. A tram about to leave the loop operated a “setting contactor” which set a GREEN signal, while a RED signal showed at the far end of the section. When arriving at the next loop the tram operated a “resetting contactor” that extinguished the signals.

Where trams ran in duplicate, such as to and from the Depot, the first tram operated and cleared the signal. No trams could follow another tram through a single track section unless it was “within 100 yards of the preceding tram”. If a greater distance separated trams, the second tram would wait until the first tram had cleared the section,

and obtain its own GREEN signal. [It is worth noting that in Bendigo trams ran in convoy on the Eaglehawk line for the Easter parade. All trams in the convoy, except the last tram, carried white discs on the front.] If the power went off, all signals went out. The motorman was expected to continuously use the gong around corners and blind spots, and proceed through the section with extremely cautious driving. Tips for the motorman for ensuring safety included “continuous use of gong around any curves and blind spots”, or “make use of a motorist to act as a pilot through the section”.

The circuit between the Car Sheds Loop and Gardens North Loop was arranged so that trams running into the depot cleared the signals. Trams running from the depot via Drummond Street North did not operate the signals until leaving the Car Sheds Loop.

At the corner of Sturt and Grenville Streets the double track narrowed to the Bridge Street single track. At the other end of Bridge Street, at Main Road, was a junction for the Victoria Street and Mt Pleasant lines. At Grenville Street was a small pole on which was placed a selector switch, which the motorman could operate without leaving the tram. There were three positions: Victoria Street; Off; Mt Pleasant. Trams shunting at Grenville Street set the switch to the “off” position so that no signal was operated. On the north side of Bridge Street were two signals, one for Victoria Street, the other for Bridge Street only. On the south side were the Mt Pleasant and Bridge Street only box. No tram could proceed if there was a RED signal in the Bridge Street box. The Bridge Street signals were cleared at the Main Road junction.<sup>9</sup>

### **The View Point line**

The anti-clockwise service around Lake Wendouree was for 50 years routed via Ripon Street, but in 1937 it was re-routed via Drummond Street North. The section of track along Ripon Street and Wendouree

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Parade, as far as Macarthur Street, was not intended for regular services, but was kept for special services. Forest City signals were not installed on that section. Regular weekday services were later introduced along that section, on what became known as the View Point line.

The View Point service operated mostly with a single car service on weekday afternoons. There was one crossing loop, in between the Powerhouse and the Lake View Hotel (known as the Mill Street loop). There was occasional heavy traffic on the View Point line, such as for rowing Regattas, during which the hand staff was used for safe working. From photographs, it is apparent that trams entering or leaving the View Point line could actuate or cancel the signals in the Macarthur St Loop to Haddon St Loop section. A signal box was provided at the junction itself.

The Mill Street loop was disconnected in 1954, and the View Point line operated afterwards as only a single car service.

### Was it successful?

The best opinion on whether the Forest City signalling system worked well came from the “trammies” who worked with it each day. Herb Knight recalled:

*“It was very effective, except when power went off the lights went off and it wouldn’t come on with the power. That was the only drawback. The only way you’d get trapped between loops was if the power went off, and that lights would go off! But we had no trouble. It used to be operated on the overhead wire by the pole of the tram. It would hit it and knock it on, and knock it off when it was going out. Knock the light on going in, and knock it off going out. It was very well done wasn’t it?”*

His son Ron Knight was also a “trammie”, and recalled:

*“It was fairly foolproof. There was no argument over who got the light, or anything like that. You’d wait for the green*



The motorman operates the selector switch at the corner of Sturt and Grenville Streets

*Photo: John Webster 1953*



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The original fabricated metal box by the Forest City Electric Co Ltd. fitted with red and blue (for green with a yellow light) signal lenses and the manufacturers name plate

*and that was it. You had to go to the end of the loop to get the light. You'd come in one end of the loop and come into the other section at the other end of the loop. When you come into the loop you'd cut off in one section, you'd get to the other side of the loop and continue into the other section. First car in the morning, you'd have to be careful how you got the lights. You didn't know what was down there, could be the cleaning car down there. It would leave the depot and you wouldn't see it go out. It'd probably go out about half past 5. Six minutes past 6, you'd go away with a tram, you'd get down Sebas and there's the cleaning car down there. You wouldn't even know it was down there. If you had the red light, you'd proceed with extreme caution. You'd give a couple of minutes and see what was coming".*

In over 30 years of operation in Ballarat with the Forest City system, there were no known or reported collisions between oncoming trams.

### **Postscript**

The Forest City signal equipment was dismantled after the closure of the Ballarat system in 1971, except for the section of track retained for the Ballarat Tramway Museum. These have since been taken down, with the intention of repair and re-installation. However this task is a low priority, and it is unlikely to be completed in the foreseeable future. This is unfortunate, given the importance of the Forest City system in proving a reliable safe working method over the many sections of single track.

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**Above:** No. 26 at the start of the Bridge Street. On the right side of the street are the Mount Pleasant signals, and on the left side of the street, the Victoria Street signals. *Photo: John Phillips c1970.*

**Below:** No. 17 at the corner of Victoria Street and Main Road in about 1959. The overhead wire contactor and Victoria Street signal box are visible. *BTM collection*





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### References:

1. Ballarat Courier 12 February 1906
2. Ballarat Star 5 March, 6 March, 7 March 1906
3. Interview by Alan Bradley with Les Edwards
4. This accident is examined in greater detail in my article "Beyond the control of management" in "Trolley Wire" February 2008
5. For an article on the Brisbane system, see the Brisbane Tramway Museum's website: <http://www.brisbanetramwaymuseum.org/colourlights.php>
6. Ballarat Courier 13 August 1937
7. David Brown, Tony Culpeffer-Cooke, Adrian Gunzburg and Ian Pleydell, "Tracks by the Swan: the electric tram and trolleybus era of Perth, Western Australia", Perth Electric Tramway Society, 2010, p 287.
8. Ibid., p. 288
9. From internal instruction *Ballarat Tramways: "Forest City" signals*

## Shelburne Trolley Museum An Update!

In the November 1996 issue of *Fares Please!* we reported that we had received an email requesting assistance with parts to restore Shelburne Falls Colrain Street Railway Company trolley car No. 10, a short 32'9" (~10m) double trucked combination streetcar. This was in the early days of being on the net and having emails. We were unable to assist at the time.

A recent visit to their website, <http://www.sftm.org> shows that the car was restored and running on a short track from one of the original yards of the trolley line in Massachusetts USA.

Their website gives a history of the former railway, which ran from 1896 to 1927 over some eight miles of track, the use of the body as a chicken coop and its subsequent restoration to operational condition. Well worth a visit.

## The Forest City Electric Co. Ltd An update

A web search during March 2013 shows that the name "Forest City" still exists in the UK.

Forest City Generators

<http://www.forestcitygenerators.com/company-profile.asp>

makes Generating Equipment and mobile tower lights. The company profile provides details on the foundation of the company by Samuel Quillam in 1902. The name Forest City Electric Co. went to another offshoot of the original company; Forrest City Signs.

A webpage

<http://homepages.zen.co.uk/home/page/forestcity/page1.html>

not maintained since 1998, says that it was one of the UK's largest independent Road Sign manufacturers. It appears it was taken over by Signature Limited in 2001. An article dated 8/8/2001 in the "Messenger" provides details of a factory closure:

[http://www.messengernewspapers.co.uk/archive/2001/08/08/Trafford+Archive/7228073\\_Sign\\_firm\\_boss\\_defends\\_move/by](http://www.messengernewspapers.co.uk/archive/2001/08/08/Trafford+Archive/7228073_Sign_firm_boss_defends_move/by)

It appears that the company name "Forest City Electric Co. Ltd" still exists as such, but only as a holding company or an entity held by Signature Limited. There is also a Forest City Electric Supply Company in Rockford Illinois USA, but most likely named after one of the five towns named Forest City in the USA.

For a web site version of Alan Bradley's article with more photographs and reproduction of documents from our collection, visit our web site and the On-Line exhibitions page:

[www.btm.org.au/forest\\_city/forest\\_city.html](http://www.btm.org.au/forest_city/forest_city.html)



# 15. FARES PLEASE!



Nos. 21 and 18 running together enter the Car Shed Loop. The red signal is visible between the trams.

*Photo: Carolyn Dean 1970*



**Shelburne Falls Trolley Museum Tram No 10**  
Above: In 1991, Below: Fully restored  
Both photos are from the Museum's web site



**Memphis, Tennessee: 22 April 2013**

BTM member, Paul Nicholson sent this photo of Melbourne W2 553 departing the North Terminal and heading south on Main Street.

The majority of the operating W2s are in the USA and Paul wrote that Memphis: “*should be on the bucket list of any tram enthusiast especially anyone who worked for the MMTB!*”



## 16. FARES PLEASE!

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### A Firm Handshake

The late John Clowes greets Peter Bruce at Gardens Loop on 14 March 2011. John will always be remembered for his warm welcome. *Photo: Peter Winspur*



A well loaded No 40 pauses while the crew change over. *Photo: Peter Winspur 11/3/13*



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