

# SOMERSAULT

NOVEMBER 2021

VOL 44, No 6

SIGNALLING RECORD SOCIETY OF VICTORIA



## SOCIETY CONTACT INFORMATION

Published by the Signalling Record Society Victoria Inc (A0024029F)

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### MINUTES OF MEETING HELD FRIDAY 17 SEPTEMBER 2021.

The SRSV meeting scheduled for Friday 17 September 2021 was held as an online meeting on the internet using the 'ZOOM' application. This was due to the restrictions imposed on public gatherings announced by the Victorian Government in response to the COVID-19 (Coronavirus) pandemic.

Present: – (Online). Ken Ashman, Noel Bamford, Phil Barker, Robert Bremner, Brett Cleak, Graeme Cleak, Glenn Cumming, John Dennis, Michael Formaini, Peter Gerandt, Chris Gordon, Judy Gordon, Graeme Henderson, Bill Johnston, David Jones, Keith Lambert, David Langberg, Neil Lewis, Andrew McLean, Eddie Oliver, Roo Richards, Laurie Savage, Peter Silva, James Sinclair, Rod Smith, David Stosser, Bob Taaffe, Frank Tybislawski, Andrew Waugh, Rob Weiss and Andrew Wheatland. (31)

Apologies: – David Langley.

Visitors: – Floyd Bromley, Jim Gordon and Chris Sullivan.

The Vice-President, Mr. Bill Johnston, took the chair and opened the meeting at 20:08 hours.

Minutes of the July 2021 Meeting: – Accepted as read. Robert Bremner / Rod Smith. Carried.

Business Arising: – Nil.

Correspondence: – Letter sent to Surrey Hills Neighbourhood Centre cancelling the booking for tonight's meeting. James Sinclair / Rod Smith. Carried.

Reports: – Nil.

General Business: –

John Dennis asked about the number of SRSV members attending the Zoom meetings versus face-to-face meetings. A quick snap shot:

|                      |                      |                       |                       |
|----------------------|----------------------|-----------------------|-----------------------|
| July 2018 (f2f) – 19 | July 2019 (f2f) – 22 | July 2020 (Zoom) – 27 | July 2021 (Zoom) – 31 |
| Sept 2018 (f2f) – 16 | Sept 2019 (f2f) – 23 | Sept 2020 (Zoom) – 31 | Sept 2021 (Zoom) – 31 |

*(Front cover) A photo of the back of the 79 lever A pattern tappet frame at Frankston on the occasion of the SRS signal box tour on 17 September 2011. Interlocking frames are heavy, and this one is raised 12 feet 1 inch above rail level (13 feet 3 inches above ground level). Substantial support is consequently necessary. The primary support is two 12"x4" rough dressed Oregon beams that span the width of the box. The two beams were 12 inches apart, centre to centre. Until 1949 timber beams were preferred over steel joists, probably because of the greater ease in field drilling holes. The horizontal beams were supported by a number of vertical posts. At each end of the frame was a 12"x8" Oregon post that extended 3'6" below ground level and rested on a 9"x6" red gum or jarrah sill that extended well beyond the walls. The plans do not show any intermediate vertical posts as these were located as required by the 'interlocking staff'. The intermediate posts appear to be 16" wide Oregon verticals and would be located on horizontal sills. Interestingly, the plans do not show any bracing for the apparatus supports at Frankston. The joists for the operating floor of the signal box are supported by an Oregon trimmer beam on each side of the 2'6 1/2" wide opening for the frame. The 7"x4" rear trimmer beam, seen here, and the 7"x7" front trimmer beam were supported at intervals by 1 3/4" solid steel stanchions. The plans for Frankston are reproduced on Page 103 of this issue. Photo Ray Layton*

Keith Lambert provided details about various projects in the Metropolitan District. A summary of the discussion follows: –

- The level crossing at Parkers Road, Parkdale, has now been added to the list of level crossings to be removed.
- The signal control panel at Lilydale has been abolished. Points and signals at Lilydale are now controlled from Ringwood.
- A new signal box has been provided at Kananook.
- Mordialloc Signal Box will be abolished in October 2021 and control will be transferred to Kananook Signal Control Centre.

Floyd Bromley and Chris Gordon reported that the Lilydale VRI were negotiating with Victrack for a new lease for the VRI at Lilydale.

Chris Gordon noted that commissioning dates for projects in the metropolitan area were being delayed because of supply issues. For example, completion of the Hurstbridge Line upgrade project has now moved to 2023.

Chris Gordon advised that the relay interlocking at Macleod will be replaced by a Computer Based Interlocking (CBI).

David Stosser reported that he had completed entering historical information from the WN Extracts book to the Vicsig website and was now working on entering information from Weekly Notices published between 1994 – 2020.

David Stosser noted that the Lilydale signal control panel is to be placed in the new Lilydale station building as a historical display.

David Stosser asked about the Annett locked hand gates at Lilydale and asked if there were any other examples? Frankston and Kaniva were mentioned as examples but there were others.

Ken Ashman advised that the resignalling of Trentham – Upper Hutt in the Wellington NZ metropolitan area had been delayed and was now planned for November 2021.

Ken Ashman noted that Pukekohe will be resignalled in the future.

Phil Barker provided details about various items from Queensland. A summary of the discussion follows:

- The local signalling control facilities at Callemondah QLD and Jilalan QLD have closed and control has transferred to Rockhampton Control.
- Mackay Control has closed.
- There are now 36 signalling facilities in Queensland:
  - Four (4) Network Control Centres
  - 21 signal control panels
  - Five (5) lever frames
  - Four (4) local UTC facilities
  - Two (2) operations centres – GoldlinQ (Gold Coast light rail) and Weipa (Rio Tinto mine railway)
  - Aurizon is to introduce Level 1 ETCS (European Train Control System) on the Central Line (Rockhampton – Emerald)

Graeme Henderson provided details about changes to New South Wales XPT and Xplorer schedules and rosters as a result of the current COVID-19 pandemic restrictions.

Rod Smith noted a number of recent V/Line services that were cancelled because train crews were being forced to quarantine.

Michael Formaini reported that the Australian Transport Safety Bureau (ATSB) had published an interim report of the investigation into the derailment of the XPT at Wallan Loop in February 2020. The ATSB interim report contains a number of 'ATSB observations' that make for interesting reading.

Glenn Cumming commented on recent entries in the Weekly Notice indicating that construction of the new crossing loops at Boorcan and Murchison East had commenced.

Syllabus Item: – The Vice-President introduced Member Andrew Wheatland to present the Syllabus Item.

Andrew is the Signals and Telegraph Manager at the Puffing Billy Railway and his presentation focussed on two projects at Puffing Billy.

The first part of Andrew's presentation was a progress report on the construction of the new signal box and relay room at Lakeside.

The new signal box features a McKenzie and Holland Style "A" power frame using the frame from Viaduct Junction Signal Box. The illuminated diagram that will hang above the frame is from Windsor Signal Box.

Andrew shared a number of images showing various aspects of the project from trenching for the cabling to the fitting of the mechanical locking and the fitting out of the relay room along with drawings and a view of the illuminated diagram and pull list. A detailed description was provided along with answers to many questions that were asked.

The second part of Andrew's presentation was a report on the commissioning of boom barriers at the School Road level crossing at the Down end of Menzies Creek Railway Station.

This project involved the commissioning of a new relay room and four boom barriers, all interfaced with the existing signalling at Menzies Creek. The unique arrangement of the roadway and side streets at the level crossing required four boom barriers to be provided to close the entire crossing and Andrew provided the reasoning behind this decision.

The presentation was supported by many images showing the various stages of construction and the layout of the level crossing along with a video showing the boom barriers operating.

Comprehensive testing of the operation of the level crossing was conducted including tests for 28 different road traffic scenarios.

Considerable discussion on the subject of level crossings took place during the presentation along with a large number of questions and answers.

At the completion of the Syllabus Item, the Vice-President thanked Andrew for the entertainment.

Meeting closed at 22:15 hours, however discussion continued until the Zoom Controller sent 3-4-3 at 22:35 hours.

The next meeting will be on Friday 19 November, 2021 at the Surrey Hills Neighbourhood Centre, Bedford Avenue, Surrey Hill, commencing at 20:00 hours (8.00pm).

## SIGNALLING ALTERATIONS

*The following alterations were published in WN 34/21 to WN 41/21, and ETRB A circulars. The alterations have been edited to conserve space. Dates in parenthesis are the dates of publication, which may not be the date of the alterations.*

- 20.08.2021**    **Newport – Williamstown** **(LXRA)**  
On Friday, 20.8., services were suspended between Newport and Williamstown to allow work on Ferguson St level crossing at North Williamstown.
- (24.08.2021)**    **Flinders Street** **(SW 606/21, WN 34)**  
Signalling Diagrams 31/21 (Flinders Street (East)) & 23/21 (Flinders Street (West)) replaced 21/19 & 13/13 respectively. The change was the labelling of the existing road/rail vehicle access pads FS1, FS2, FS3, & FS7.
- (24.08.2021)**    **Watsonia – Eltham** **(SW 609/21, WN 34)**  
Signalling Diagram 59/21 (Watsonia – Eltham) replaced 47/18 to correct errors.
- 27.08.2021**    **Meredith** **(SW 157/21, WN 34)**  
On Friday, 27.8., No 2 Road was removed at Staughton St (114.127 km) to allow for the construction of mast and axle counter foundations for the future provision of boom barriers.  
No 2 Road remains booked out of service (TON 142/12) and the status of the signalling is unchanged (SW 3/16).  
Amend Diagram 4/99 (Bannockburn – Lal Lal).
- 30.08.2021**    **Murchison East** **(SW 160/21, WN 35)**  
On Monday, 30.8., Nos 2 & 3 Roads were taken out of use to allow for construction of the extended crossing loop. The new crossing loop will be constructed on the Up side of the line between 146.000 km and 148.850 km.  
The main line Points C (Up end) and K (Down end) were secured normal. Nos 2 and 3 Roads will be removed. The WSA point levers and hand locking bars on the points in No 4 Road were removed.  
Murchison East was changed from a Train Order Crossing Station to an Intermediate Train Order Station and will be available for follow-on movements.

Amend Diagram 84/20 (Nagambie – Toolamba)

**04.09.2021 Murchison East (SW 164/21, WN 36)**

Between Saturday, 4.9., and Sunday, 12.9., the following track & signal alterations took place:

- Points C & K were abolished, together with the associated plunger locks, WSa levers, and rotary detectors.
- The quadrant for Signal 4 at Points K was also abolished.
- The repeater for Signal 2, key switch for Signal 3, key switch for the Murchison – Violet Town Rd (146.999 km), and indicator for the AAWS at Points C were abolished.
- The Home signals on Posts 2 & 4 can only be operated from the quadrants located on the platform. The Home on Post 3 can only be operated from key switches adjacent to the platform quadrants, or the Up end of the platform.
- A right hand set of points (MUT07) facing Down trains was installed at 146.024 km, and a left hand set of points (MUT27) facing Up trains was installed at 148.657 km. Both sets of points are fitted with dual control point machines which are secured normal.

Diagram 50/21 (Nagambie – Toolamba) replaced 84/20.

**04.09.2021 Shepparton (SW 163/21, WN 36)**

Commencing on Saturday, 4.9, construction of a track for the new stabling siding will begin. The new track will be located on the Up side of the main line between 184.450 km and 185.385 km.

The Dookie line will be removed between the junction (184.441 km) and the Grahamvale Road (185.377 km), including the Caltex and Shell Siding (184.450 km to 185.385 km). The WSa levers and derails in the siding will also be removed. The actual junction points will remain, and the Dookie line will be baulked on the Down side of the junction points and on the Down side of Grahamvale Road.

Amend Diagram 76/18 (Mooroopna – Shepparton).

**06.09.2021 Toolamba (SW 162/21, WN 35)**

Between Monday, 6.9., and Tuesday, 7.9., the HLM MkI electric point lock and detector on the junction points was replaced by a HLM MkII mechanism.

The operating instructions in Operating Procedure 109 (Toolamba) remain unchanged.

**(07.09.2021) Mooroopna – Shepparton (SW 164/21, WN 36)**

Diagram 62/21 (Mooroopna – Shepparton) replaced 76/18.

**(07.09.2021) Shepparton – Dookie (SW 164/21, WN 36)**

The Shepparton – Dookie line remains booked out. The Dookie line is baulked at 185.385 km on the Down side of Grahamvale Rd (185.377 km). Track patrol inspections will occur every three months under the authority of the T&C Supervisor at Kilmore East. TON 620/10 was cancelled.

**10.09.2021 Mooroolbark - Lilydale (LXRA, SW 636/21, WN 36)**

Commencing around 2130 hours on Friday, 10.9., the signal box at Lilydale was closed. Control of the Mooroolbark and Lilydale interlockings was transferred to Ringwood.

Train services were suspended between Ringwood and Lilydale to allow grade separation works to continue at Manchester Rd, Mooroolbark, and Maroondah Hwy, Lilydale. These level crossings were permanently closed.

**12.09.2021 Swan Hill (TON 458/21, WN 37)**

Commencing Sunday, 12.9., a signaller will be in attendance:

Monday – Friday .....0615 – 0800 hours & 0830 – 1715 hours  
 Saturday.....0615 – 0800 hours & 0900 – 1345 hours  
 Sunday ..... 0615 hours – 0800 hours & 1130 -1645 hours

**15.09.2021 Kananook Signal Control Centre (SW 640/21, WN 37)**

On Wednesday, 15.9., the Kananook Signal Control Centre (KSCC) was opened.

The KSCC will be responsible for the signalling of all rail traffic and safeworking functions from the the Up side of Carrum (signals CAR722 & CAR633) to the Up side of Frankston (signals KAN763 & KAN626). The KSCC RailView will provide train and signal indications from Highett to Kananook. Voice Communication System (VCS) and a DTRS radio consoles were provided.

It is expected that the KSCC will take control of Mordialloc on Friday, 8.10., and between Mordialloc and Carrum on Monday, 25.10.

**15.09.2021 Frankston (SW 640/21, WN 37)**

On Wednesday, 15.9., control of Carrum to Kananook was transferred to the Kananook Signal Control Centre.

The RailView monitors were retained to provide information about train location. The RailView will be modified to remove all controls except for the ability to input a train number.

- 17.09.2021 Warrnambool (SW 165/21, WN 37)**  
 On Friday, 17.9., the existing flashing lights at Wellington St (267.588 km) were altered to operation by axle counters. A healthy state indicator and yellow whistle boards were provided and the remote monitoring equipment was upgraded. A reset key switch for the crossing track was provided in the test switch box. The Up notice board was renewed and now reads "Contact Train Control prior to operating level crossing".  
 Operation of the flashing lights in both directions can be initiated by radio (see Operating Procedure 137). Notice boards lettered 'SIGCON 1' were provided on both the Up and Down sides of the crossing.  
 The existing push buttons to control the flashing lights on the Up and Down sides of the level crossing were updated. The notice boards on both sides of the crossing lettered "Trains must not pass this sign until flashing lights have operated for 25 seconds" were renewed.  
 Diagram 68/21 (Warrnambool – Westvic Siding) replaced 30/17.
- 19.09.2021 South Dynon (TON 434/21, WN 36)**  
 Between Monday, 6.9., and Sunday, 19.9., two crossovers were installed between the standard gauge Loop Road and the Through Road.
- (21.09.2021) Pakenham – Pakenham East (SW 639/21, WN 38)**  
 Diagram 69/21 (Pakenham – Pakenham East) replaced 79/18 to show PKM758, PKM760, & PKM762 as Home signals (see SW 494/19).
- 21.09.2021 Tottenham Yard (TON 485/21 & TON 486/21, WN 39)**  
 On Tuesday, 21.9., Tracks 14 to 20 (2<sup>nd</sup> Classification) within the Common User Area of Tottenham East Yard were booked back into service. Access is only available from the Down end and baulks are provided at the Up end of each road.  
 Track 13 (2<sup>nd</sup> Classification) and Track 8 (1<sup>st</sup> Classification) within the PN Leased Area of Tottenham East Yard/West yard were booked back into service. Access is available to these roads from No 3 Road at the Down end of West Yard and through No 1 Road at the Up end of the East Yard. Derail blocks and clearance point signs have been provided in both roads.
- (28.09.2021) Broadmeadows (SW 661/21, WN 39)**  
 Commencing forthwith, Siding D has been booked out of service due to track condition. Baulks have been provided at Dwarf BMS533.
- 29.09.2021 North Geelong (TON 501/21, WN 40)**  
 On Wednesday, 29.9., Nos 24 & 25 Roads were booked out due to track condition. Nos 23 & 26 Road remain booked out (see TON 181/20).
- 04.10.2021 Ivanhoe (SW 873/21, WN 39)**  
 Between Friday, 1.10., and Monday, 4.10., the flashing lights at Marshall St will be converted to LED.
- 08.10.2021 Mordialloc (SW 676/21, WN 40)**  
 On Friday, 8.10., control was transferred to Kananook Signal Control Centre. The signal box, control panel, and geographic interlocking were decommissioned. A Smartlock VIXL CBI was provided. The consequential signalling alterations formally extended from Thursday, 7.10., to Monday, 18.10.  
 Only minor alterations were made to the signalling:
- Home MOR700 was altered to display Stop, Reduce to Medium Speed, and Medium Speed Warning
  - Home MOR704 was altered to display Stop, Medium Speed Warning, Clear Medium Speed, and Low Speed Caution.
  - Points 614 now auto-normalise.
  - The switch out facility was abolished and the illuminated letter 'A' was removed from Homes MOR704, MOR709, MOR711, and MOR712. The signal box "Closed" sign was removed.
  - All signal post telephones in the Mordialloc area were abolished.
  - All point machines (electro-hydraulic) are now locked by signal maintenance padlocks and cannot be operated by operations staff
- The train stabling compound gates remain worked by hand, and will continue to be opened and closed by drivers as per roster book. The position of the gates is detected and indicated on the Kananook Railview.  
 Amend Diagram 43/21 (Cheltenham – Chelsea).
- 12.10.2021 Echuca (SW 177/21, WN 41)**  
 On Tuesday, 12.10., post commissioning updates to the operation of the local signalling functions occurred. There was no alteration to the operation of the signalling.

End£

## DUNOLLY

Located in Victoria's midlands, just north of Maryborough, Dunolly is an interesting station that, bucking the trend, got more complex in the last part of the 20<sup>th</sup> Century. This was due to a curious historical circumstance that illustrates just how contingent railway history can be.

The line from Maryborough to Dunolly was formally opened on 6 October 1874 with public services commencing on the same day. This line was provided as part of the government policy of serving the towns in the gold mining belt running north from Creswick through Clunes, Maryborough, Dunolly, to Inglewood. The subsequent extension, to St Arnaud, was to serve farming communities, and was opened to Bealiba on 3 September 1878 (for passengers) and completed to St Arnaud on 23 December 1878. Dunolly became a junction on 20 November 1888 when the cross country line to Inglewood was opened.

The first contract was for the construction of ten (gate) cottages between Maryborough and Dunolly. This was gazetted to Morton Brothers on 19 December 1873 for £1176/9/8. The contract for the passenger station at Dunolly was gazetted on 17 April 1874 to S.T. Weeks for £2599/5/1, and the goods shed was gazetted on the same day to Shaw & Haig for £1628/4/1.

### Mostly about Staff sections

Safeworking around Dunolly was by Train Staff & Ticket until the turn of the century.

The first timetable, dated 6 October 1874, did not show any safeworking symbols for the new section between Maryborough & Dunolly. The next timetable, issued on 1 November, however showed that the line was now worked by Staff & Ticket with one section Maryborough – Dunolly. Staff & Ticket working was introduced upon opening to Bealiba, again with a single section.

Between December 1882 and December 1885, Bet Bet and Goldsborough were both been opened as staff stations giving the sections Bet Bet – Dunolly – Goldsborough. Around 1890 the Bet Bet – Dunolly staff was a No 1 Pattern with a Blue ticket box with white lettering and the Dunolly – Goldsborough staff was a No 2 Pattern with a red box with black lettering. The retrenchments of the early 1890s saw the end of Bet Bet and Goldsborough as staff station; Bet Bet closing on 18 April 1893, and Goldsborough following on 18 December

1893. The sections reverted to Maryborough – Dunolly (No 6 Pattern staff, black ticket boxes with red lettering) and Dunolly – Bealiba (No 3 Pattern staff, blue ticket box with white lettering).

On the Inglewood line the overall pattern was similar. The first book WTT, on 1 March 1889, shows the section was Dunolly – Painswick (No 6 Pattern Staff, White box with blue lettering). In the middle of May 1891, Painswick was closed as a staff station and the section became Dunolly – Tarnagulla (No 6 Pattern Staff, White box with blue lettering). At the end of July 1894 instructions were issued that all trains running between Dunolly and Inglewood had to carry the train staff.

On 9 October 1900, (large) Electric Staff replaced Train Staff & Ticket on all sections between Maryborough and St Arnaud. Traffic Inspector Cook was instructed to withdraw the old Staffs and Ticket Boxes per No 7 Down, and then bring the Electric Staff in by No 6 Up between St Arnaud and Dunolly, and by 3.35 pm (Inglewood) train Dunolly – Maryborough. The sections were not changed and remained Maryborough - Dunolly - Bealiba.

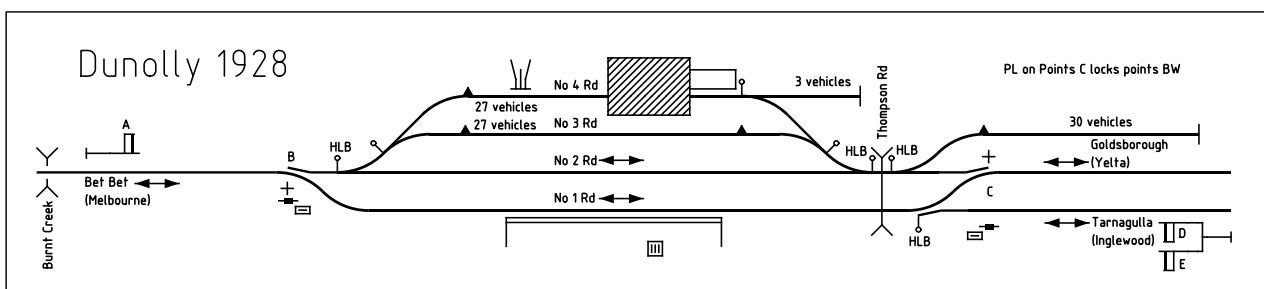
### Plunger locking

On 29 April 1913 the main line points at the Up end of the yard were secured by a plunger lock.

At the Down end, the Inglewood line led straight off the platform loop and the points lay normally for the Mildura line and were secured in that position by a hand locking bar and padlock. The facing points in the Mildura line at the Down end were not equipped with plunger locking until 30 June 1920. Until 12 August 1937 this plunger locked the points bothways, so the Up Home could be cleared from the platform with the road set for either No 1 or No 2 Road. This provision was unusual, and could have been made to allow Up trains a straight run through No 2 Road for the 1 in 50 bank on the Up side of Dunolly.

### Staff working on the Inglewood line

On 7 December 1898 the old pattern Staffs were replaced by Lock Staffs; the Dunolly – Tarnagulla section being provided with a No 1 Pattern staff, and still with a white ticket box with blue lettering. On 10 March 1910, new staffs were provided with "Brass lettering". The ordering of the lettering on these new staffs and the patterns was reversed, with the 'Tarnagulla – Dunolly' staff being a No 2 Pattern Staff. A new No 2 Pattern staff was provided on 13 October 1910 "Brass Letters, New Pattern", to replace



the old one which had been damaged. However, on 28 March 1911 it was noticed that both the Inglewood – Tarnagulla and Tarnagulla – Dunolly sections had No 1 Pattern staffs! A new No 2 Pattern staff was sent for the Tarnagulla – Dunolly section on 10 April 1911. On 7 September 1926 a No 3 Pattern staff was ordered for the Dunolly – Inglewood section, but apparently the closure of Tarnagulla was cancelled and the staff was scrapped. On 24 September 1928 Tarnagulla was finally closed as a staff station and the new section was Dunolly – Inglewood with a No 3 Pattern staff.

By 1 December 1924 the service was a Mixed each way, Monday, Wednesday & Friday, and a “motor mail tricycle” each way on Saturday. Sometime in the two years between October 1929 and November 1932 the service was downgraded to a Car Goods and the Wednesday service was cut. The postal motor continued to run, though. The exigencies of the war saw the Friday service cut in 1940. By December 1942 the Postal Motor had also gone, leaving just one return trip each week, on Monday. Between November 1959 and September 1961 the passenger accommodation was lost and the return journey on Monday became just a Goods train. This was probably as a result of a policy decision to withdraw Mixed Trains and Car Goods – the last Car Goods ran between Ballarat and Maryborough on 19 February 1962. This single regular train soldiered on until around 1974. By June 1974 trains ‘ran only as arranged locally by Senior Train Controller, Ballarat’ and a road service ran Thursdays to Tarnagulla and Llanely for perishable and small goods.

#### **Staff working on the main line**

Wheat farming, and population, in the area served by the Mildura line was expanding in the years prior to the First World War. The Ouyen – Murrayville line, for example, was opened in 1912 and it was extended to Pinnaroo in 1915. This increased the traffic, particularly during the grain season, and especially south of Donald where the heavy grades were located.

The approach taken by the VR at this time was to establish seasonal Electric Staff stations to divide the permanent Staff sections. At the start of the grain season, typically just after New Year on the Mildura line, a qualified safeworker or two would be transferred to each seasonal Staff station. It would remain open as a Staff station until the grain traffic subsided. Depending on the crop, this could be a couple of months, or nearly to July. The seasonal Staff station would then be closed until the next grain season.

Switching instruments were not provided. Instead, a pair of Staff instruments were permanently located at each seasonal Staff station. It appears that when the station was opened, these instruments were cut in by dividing the line wire into two; the seasonal instruments worked with the permanent instruments. It is not known how the gauge of the instruments was managed. One of the short sections was presumably the same gauge as the long section. The other had to be different; presumably the gauge of the permanent instrument was changed to match. Opening and closing these seasonal Staff stations

was not a quick process and required the Block & Signal Inspector and the Electrical Fitter to travel to the three stations involved to swap staffs and perform the necessary alterations.

On the Up side Bet Bet was established as a seasonal Electric Staff station at the beginning of January 1913 dividing the Maryborough B – Dunolly section. On the Down side Goldsborough was similarly established in early January 1916 dividing the Dunolly – Bealiba section. Both were subsequently opened annually.

At the beginning of January 1922, Bealiba was permanently opened as an Electric Staff station, and in 1924 Goldsborough also became a permanent Staff station.

Goldsborough, however, was closed as a permanent Electric Staff station on 30 October 1929, with the section reverting to Dunolly – Bealiba. Two Composite Electric Staffs were provided – one at Dunolly and one at Bealiba to allow Goldsborough to be opened as a block post. On 26 March 1930 a Divided Staff was provided in the Bealiba instrument to allow Goldsborough to open as a Temporary Train Staff and Ticket Station. A competent person was sent to Goldsborough to enable it to be opened as required. On 3 May 1930 Goldsborough was closed as a Staff station and the Divided Staff was secured in the Bealiba instrument and could not be used. Goldsborough was again opened as a seasonal Electric Staff station commencing in 1931. By 1932 it was noted that the Divided Staff had been moved to the Dunolly instrument, but that it could not be used as a ‘grid’ on the instrument prevented the Divided Staff from being withdrawn. At the beginning of December 1933, the Divided Staff was removed and “held in the strongbox at Maryborough”.

In July 1932 the District Superintendent suggested that Bet Bet could be worked by one person during the slack season (notionally May to October) if switching instruments were provided. The cost estimate was £350 for ‘with train’ switching instruments, £400 for ‘without train’. Without train instruments were decided upon and in July 1933 the DS was informed that Bet Bet would go ahead. The switching instruments were brought into service on 21 March 1934; the short sections being Maryborough B – Bet Bet – Dunolly, and the long section Maryborough B – Dunolly.

With Bet Bet approved, the District Superintendent recommended switching instruments at Goldsborough in October 1933. The cost was estimated at £633. The DS suggested that with switching instruments, Goldsborough could be staffed by one signal porter working 7 am to 5 pm throughout the year. The Traffic Branch Staff Officer noted that the current staffing was two signal porters for 8 months of the year (when open as a Staff station) and a caretaker for the other four. The annual saving was expected to be £101, and the project was approved by the Commissioners in February 1934. The non-interlocked switching instruments were provided on 17 July 1934; the long section being Dunolly – Bealiba and the short sections Dunolly – Goldsborough – Bealiba.



A Staff Exchange Box was provided at Dunolly at the beginning of September 1921. This was used in conjunction with other Staff Exchange Boxes between Maryborough and St Arnaud to run one or two through trains after the station staff had ceased duty in the evening. Initially the trains were always specified in written instructions. In February 1923 the use of this box was authorised for the return journey of the 1740 Maryborough to Cope Cope, when run after the last scheduled train, or a later train if scheduled. From February 1925 it could be used for an Up light engine between St Arnaud and Maryborough at night. From November 1929 it could be used for an Up Goods or light engine between St Arnaud and Maryborough run after the passage of No 19 passenger (Tuesday excepted). The Staff at Dunolly could then be used for No 3 Down at Bealiba without going through the instrument at Dunolly. In December 1930 this instruction was varied again with permission being extended for it to be used for an Up Goods or light engine after No 18 Goods on Tuesday. In January 1931, almost complete freedom was granted The Staff Exchange Boxes between Maryborough and St Arnaud could be used as arranged by the Train Controller at Maryborough and they could be subsequently used for a train in the opposite direction without being placed through the staff instrument at each station.

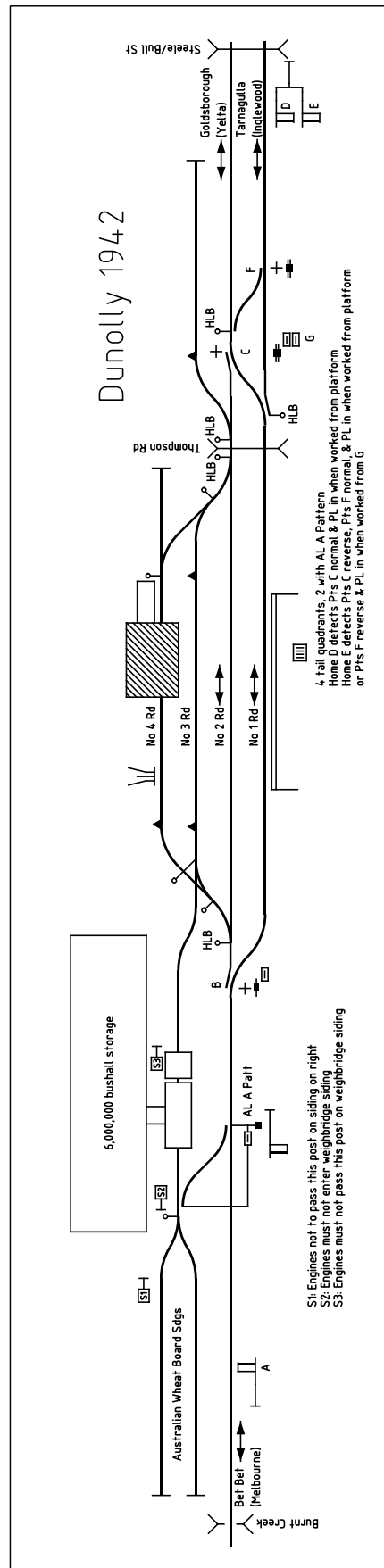
**The wheat sub-terminal**

Victoria began construction of a bulk grain handling system in the late '30s. By the time the Second World War had broken out, the Geelong group – the Mildura line and the lines to the west had been converted to bulk handling and during the early part of the war the remaining 61 Williamstown group country silos were constructed. This caused a storage problem as, unlike bagged grain, bulk wheat could not be simply stacked during a bumper season or disruption to shipping. An 'emergency storage shed' was provided at Murtoa in 1941 (the well known stick shed), and a second at Dunolly in early 1943. The Dunolly shed not only served the Mildura line, but also the Robinvale and Kulwin lines via the line to Inglewood. Subsequently known as 'sub-terminals' these storage sites not only provided bulk storage, but also improved clearances of the country silos as it was much faster to haul wheat to Dunolly than it was to haul it all the way to Geelong.

The emergency storage was provided on the west (Down) side of the line south of the station. On 18 December 1942 a crossover was provided to the new sidings. The crossover faced Up trains and was located outside the plunger locked points. A new Up Departure Home was provided to protect the crossover The main line points were secured by an A pattern Annett lock with duplicate locks on the quadrants that worked the Down Home and the new Up Home.

The sidings were brought into use at the beginning of February 1943. An 825 foot single lead led from the Up end of No 3 Road. In this lead was located a weighbridge and a receiving hopper. After the receiving hopper the crossover from the main line trailed in, and then there

were two dead end sidings each 975 feet clear. The grades fell through these sidings and the working would have been for an incoming wheat train to arrive into No 3 Road, and be pushed through the receiving shed, the trucks running by gravity through the weighbridge and



receiving point and finally into one of the two Up end sidings. From there the empty wagons would be picked up and returned to the country silos.

No mention was made in the Weekly Notice of outloading facilities, but they would have been quickly provided.

The emergency store existed, and was in use, until at least the mid '80s. It has since been demolished.

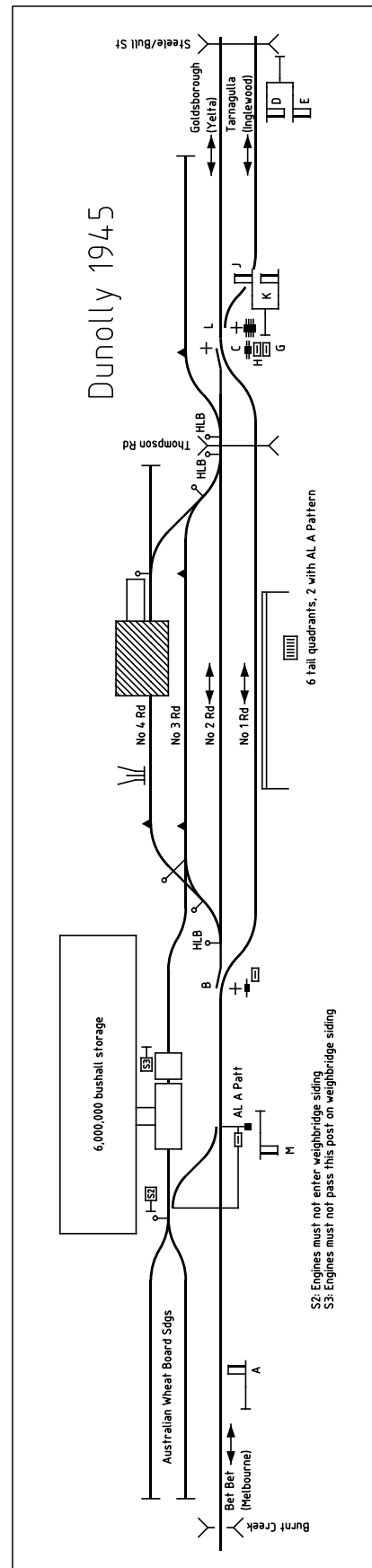
**Inglewood junction**

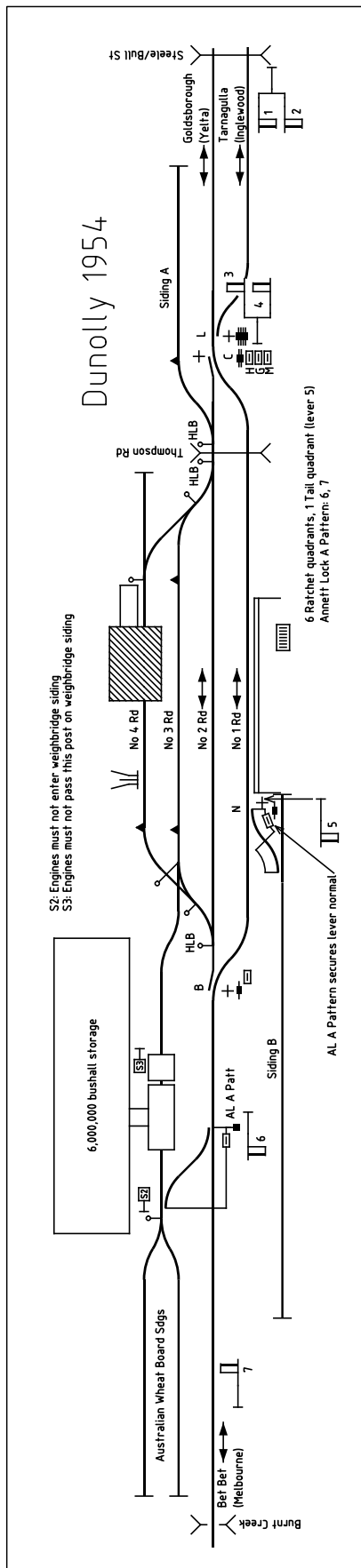
In mid 1940 the Department received a suggestion via the Fuel Conservation Committee that the junction points should be secured by a Staff or Annett lock (the junction points at Bittern and Moriac, both to little used branch lines were secured by Annett locks). The local Block & Signal Inspector considered that a plunger lock would be necessary, and the District Superintendent noted "As the train service has been reduced to one trip to Inglewood and back weekly and as the existing facilities have served for many years, and also as it is anticipated that heavy expenditure would be involved, it is considered that no action be taken". Head office agreed, and shortly afterwards issued a memo to the SM at Dunolly: "When inquiries were in course recently in regard to a suggestion that facing points to the Inglewood line should be secured by Annett Lock or staff, you stated that the present points were unsatisfactory and that they could be left unlocked or even run through unnoticed. Your attention is directed to clause 1, page 194, General Appendix [which required the Officer in Charge to inspect non-interlocked facing points before any movement over them], which must be strictly complied with. These instructions must also be brought to the notice of the Operating Porters." Head office did not consider it necessary to spend money on securing the junction points as safety, or at least blame, was ensured by a rule.

However, part of the works with providing the emergency grain store was the provision of a new direct connection between the Inglewood line and the yard. This allowed bulk grain trains from the Robinvale and Kulwin lines to arrive directly into No 3 Road and the unloading point.

On 22 December 1942 a crossover was provided between the Inglewood and Donald lines at the Down end. The crossover faced Up trains from the Inglewood line, and the facing points in the Inglewood line were plunger locked. As was usual, the facing points in the Donald line were secured by hand locking bars and padlocks.

The junction to the Inglewood line was altered again less than three years later. On 17 October 1945 the direct connection between No 1 Road and the Inglewood line was abolished (the points at the platform end of this connection had been spiked out of use on 20 September 1945) and all trains to and from the branch used the 1942 crossover. The junction points were equipped with a plunger lock and two Departure Home signals were provided. The Departure Homes detected the plunger in and the points set for the correct position.





**Yet more safeworking**

In May 1952 the Chief Civil Engineer proposed to relocate the miniature Electric Staff instruments from the Carwarp – Redcliffs section to the Maryborough B – Dunolly section. The Carwarp – Redcliffs instruments were fitted with balancing magazines, but this facility was rarely used as no difficulty was experienced by the electrical fitter in balancing the staffs during the day shift. Between Maryborough and Dunolly the situation was different – the switching between the long and short sections required constant balancing of the instruments. Accordingly it was proposed to relocate the Carwarp – Redcliffs instruments to the Maryborough B – Dunolly section. On 14 December 1952 the large Electric Staff instruments between Maryborough and Dunolly were replaced by miniature instruments. All six instruments were fitted with balancing magazines, and the switch out instrument at Bet Bet was also replaced.

On 17 January 1954 the same occurred to the long and short sections on the Down side of Dunolly. Again, all instruments were provided with balancing magazines. The large Staff Exchange Box at Dunolly was replaced by a miniature Staff Exchange Box.

Ironically, Goldsbrough did not last long as a staff station. At the beginning of March 1954 it was announced that Goldsbrough would not be switched in until further notice, and the ASM was replaced by a Caretaker from 11 May 1954. At the end of November 1954, the notice about not being switched in was repeated. It had a last brief hurrah in January 1956 when it was switched in daily for one shift for a month. In July 1958 the District Superintendent noted that ‘owing to diesel locos hauling bigger loads’ it had not been necessary to switch Goldsbrough in since 1956, and recommended that it be closed as a Staff station. This was agreed to in October 1958, and on 24 September 1959 Goldsbrough was closed as an Electric Staff station. The electric staff instruments and switching instruments were removed, leaving the permanent section Dunolly – Bealiba.

In December 1947 the SM at Dunolly was authorised to issue Line Clear Reports for the Dunolly – Inglewood section.

**Another siding at Dunolly**

On 24 December 1953 a new long dead end Siding B was provided at the Up end of the platform stretching back towards the creek. The siding was 1700 feet long clear of the points, and had an 80 foot dead end extension at the Down end. A new Up Home Departure signal was provided at the end of the platform to protect the points. The points to the siding were secured in a curious fashion. A plunger lock was provided on the main line points, with an A pattern Annett lock located on the point lever. The main line points were detected normal with the plunger in by the new Up Home. The most obvious reason for this curious arrangement was that this allowed both Up Departure Home signals to be cleared at the one time with only one Annett key.

According to both the WN and the signalling arrangement diagram, the individual signal quadrants on

the platform were replaced at this time by a seven lever ground frame. However, photographs taken in early 1983 show seven quadrants – six Ratchet quadrants and one tail quadrant that worked Home 5.

An 'auxiliary' lever was provided near the junction for the Inglewood line and the Down Departure signal for the Inglewood line could be operated from that lever.

#### Very minor alterations

On 13 July 1972 No 1 Road was extended 300 feet at the Up end. The Down Home was relocated 137 feet in the Up direction. The crossing work in the AWB siding was renewed in June 1973. On 17 December 1976 the

ownership of the AWB sidings was changed to the Grain Elevators Board.

Bet Bet was closed as an Electric Staff station on 30 September 1981. The staff instruments and the switching instruments were removed and the section became Maryborough – Dunolly.

At the end of November 1983 a red flashing light was installed on the canopy of the discharge shed (GEB discharge track). Shunting over the discharge pit was to cease when the light flashed.

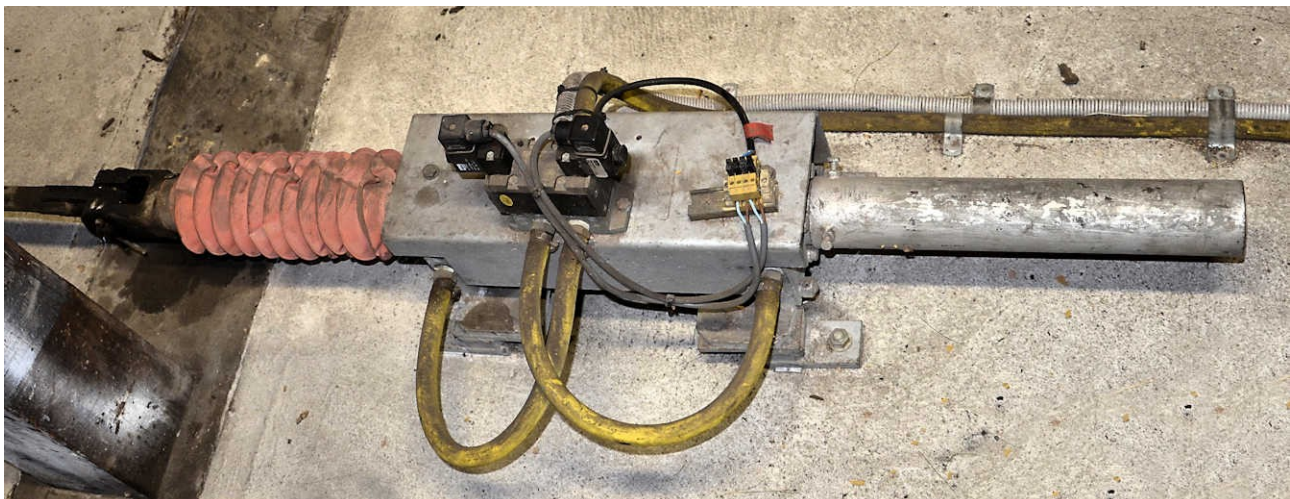
On 6 June 1984 Home 7 was electrically lit.

(To be continued)

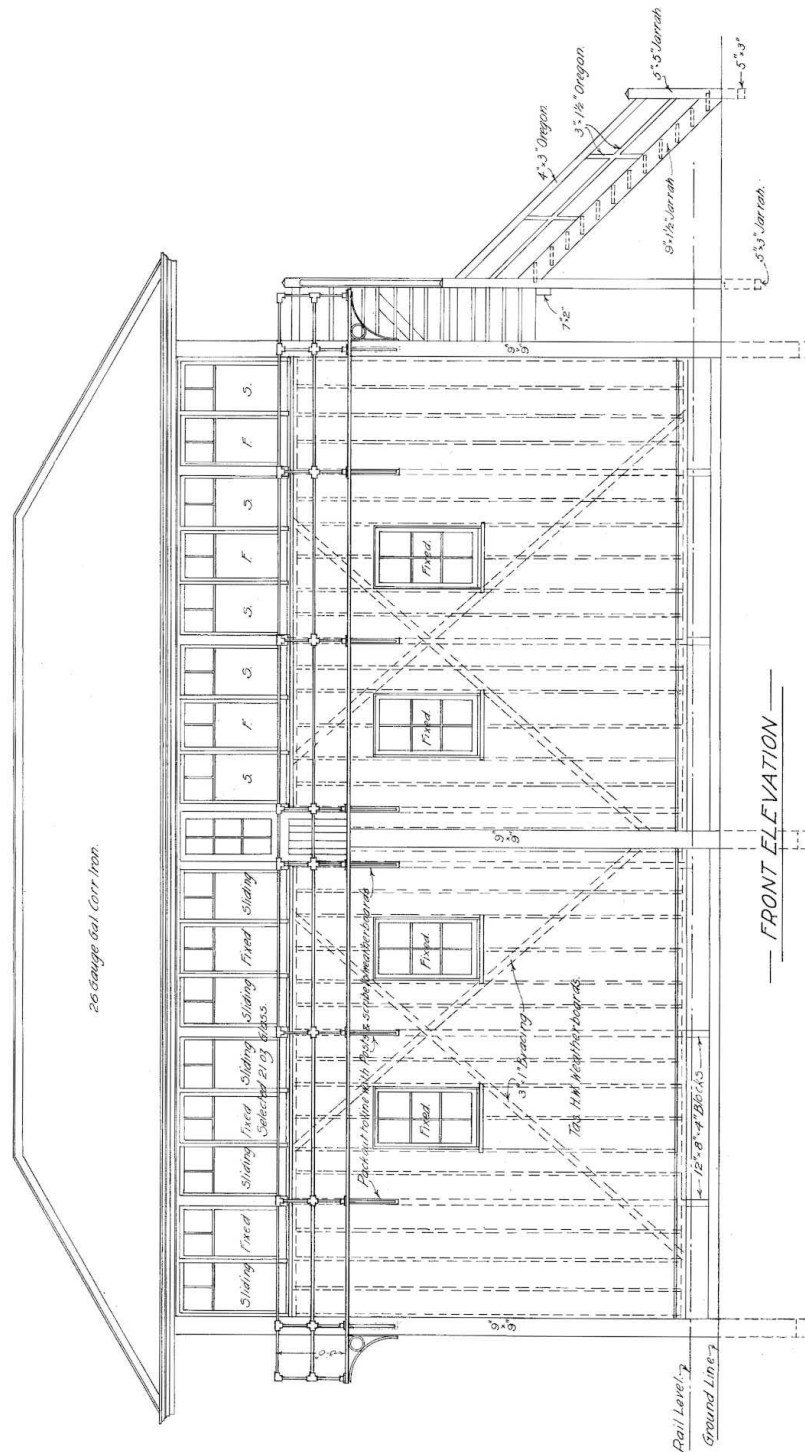
## FRANKSTON SIGNAL BOX



Here are two more photographs taken by Ray Layton at Frankston signal box on 17 September 2011. The upper photo shows the locking troughs for the interlocking frame. In the distance the vertical tails of the cams can be seen. The cam reduce the large travel of the lever as it is moved between the normal and reverse positions to the small travel required by the tappets. The tappets extend from the tails of the of the cams through the locking troughs; the tails of the tappets can be seen extending from the troughs at the lower right. One tappet is reversed, which gives an impression of the travel. The locking troughs contain the locking dogs and bridles that implement the locking. The locking bed is made up of individual troughs – each spanning 10 levers and containing two locking channels; the bed at Frankston is eight troughs wide. The lower photo is of the pneumatic assistance that was provided at Frankston to assist the Signaller in moving the points. The rectangular box contains the cylinder and piston. The air and control wires come in from the top right to the control unit on top of the cylinder and then separate pipes go to each end of the cylinder. The tube at the right and the bellows at the left cover the piston rod to exclude dust.

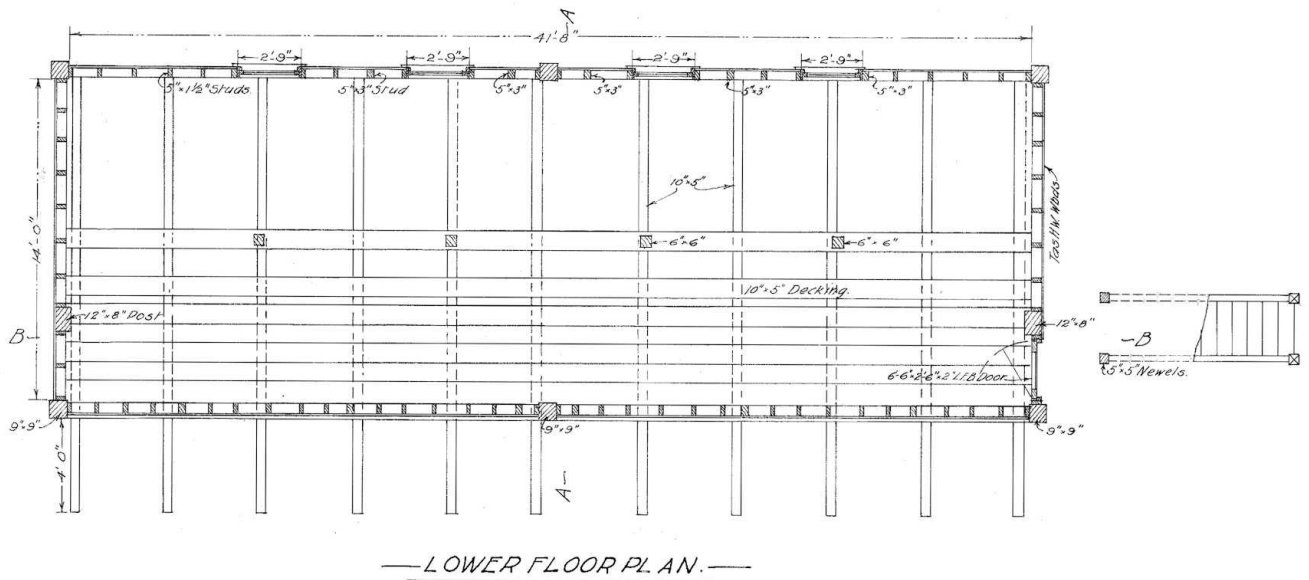
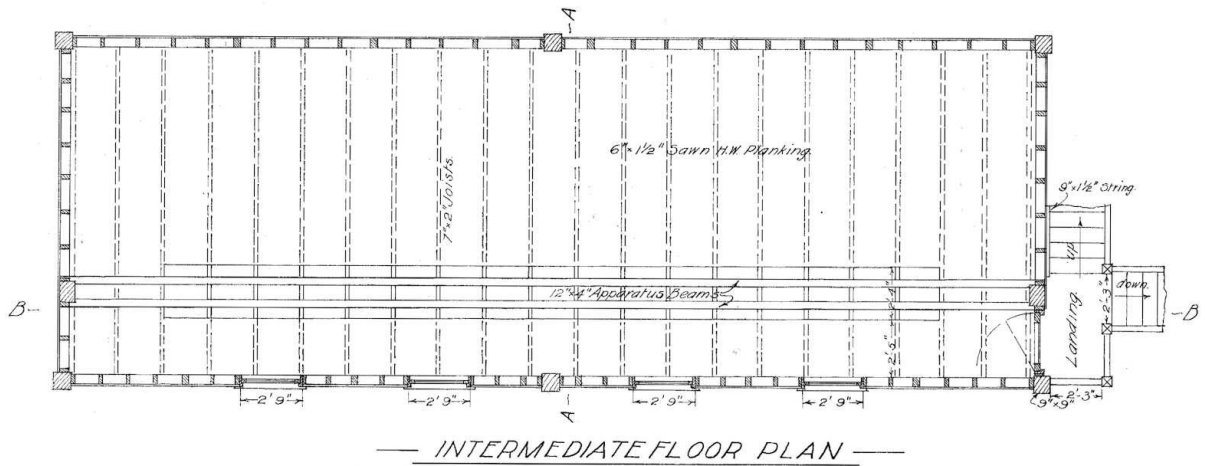
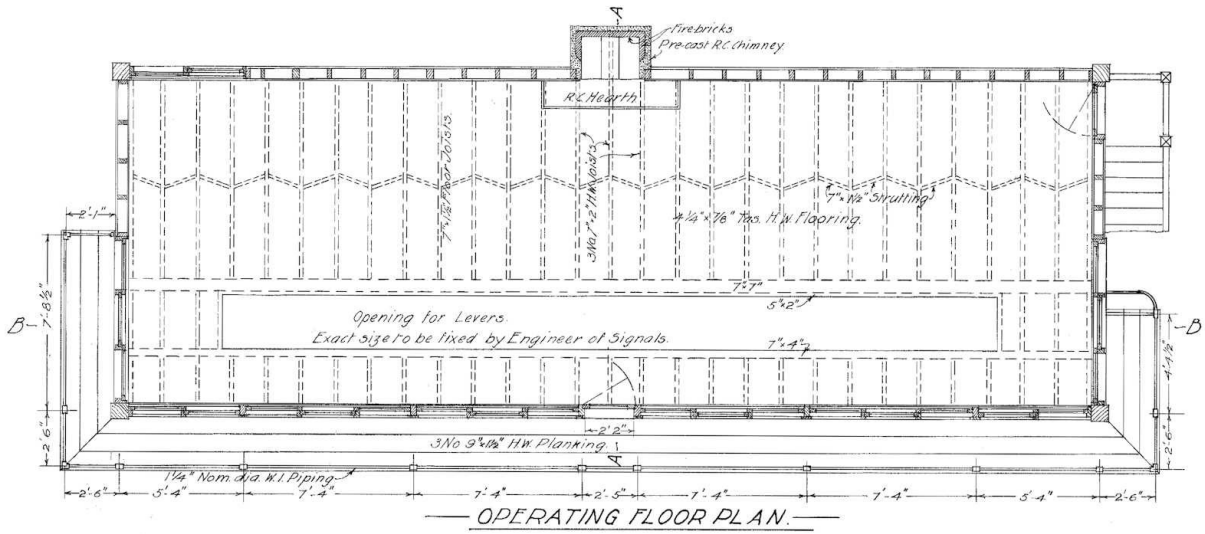


THE 1922 FRANKSTON SIGNAL BOX



These drawings of the Frankston signal box are from Mark Bau's excellent web site <http://www.victorianrailways.net/> and are reproduced (if I have done my calculations correctly) at a 1:80 scale. This box was brought into use in 1922. The large, tall signal box (operating floor 41'8" long by 14'0" wide and 15' above rail level) was provided to control the new layout provided for electrification. Stylistically, Frankston falls into the interwar period. Commencing in 1913 the previous gable roof designs were replaced by a design with large overhanging eaves that were far more suited to the Victorian climate. The earliest type, in 1913, had deep eaves only over the front windows. This quickly developed into a style with deep eaves on all four sides which was in use until around 1916. The style further evolved post WWI with external stairs instead of internal stairs – Frankston is an example of this type. Other standard design features of this style that can be seen in these drawings, include the use of the 'three pane' windows with a large lower pane replacing 4 panes of the older design and the external stage for window cleaning.







Two 'recent' views of Frankston signal box that show very little has changed in its nearly 100 year life. The upper view is of the front and northern sides and was taken on 24 October 2019. The box is looking tired and run-down with what appears to be a sag in the middle with and some replacement, but unpainted weather boards. The staircase has been renewed in metal, and screens have been secured over the operating floor windows. The lower view, taken on 8 May 1999, is of the rear and south wall of the box. At that time the original staircase was still in use. One change, only hinted at in the photo, is the provision of an internal toilet on the operating floor level – as indicated by the soil pipe and the small window at the left hand end of the box. Originally there was a level crossing immediately to the north of the box with interlocked gates; hence the three windows in the north wall, and 2 section window at the north end of the back wall.





## LEVEL CROSSING SIGNS



While Somersault focusses on the railway side of level crossings, it is important to remember that the road side is just as significant, if not more so.

In UK responsibility for protecting road users at level crossings was assigned to the railways. The railways had a legal obligation to completely fence off their lines and gates worked by railway employees were required at all level crossings. The gates themselves were an effective visual warning to road users approaching crossings.

Originally Victoria followed the UK's lead. All level crossings, no matter how minor, were equipped with gates. This was expensive. The capital cost of a gate (including gatehouse) was around £250, and the cost of the gatekeeper was £18/5/0 per annum. Commencing in the mid 1880s, the VR experimented with 'Yankee crossings' – cattle pit crossings. Towards the end of the 1880s provision of cattle pit crossings became the norm on new branch lines such as Wedderburn and Mirboo North, but gates were not removed from existing lines. This took the great financial collapse of the 1890s and a direction from the Minister, Wheeler, to remove gates unless they were required.

The use of open crossings increased the accident rate for road users, particularly post WWI with the more widespread use of motor vehicles. This made the provision of warning signs necessary.

Chris Wurr has sent in some photographs of the old level crossing warning signs. These are painted iron with 'catseyes' to make them more visible at night in headlights.

So little has been written about the road side of level crossings that I am not even sure of the exact meaning of these two signs. Photographs show that, pre WWII at least, both of them were mounted on one post about 100 metres on the approach side of crossings, usually with the triangle at the top.

I believe the red triangle is the equivalent of a modern 'give way' sign – the modern internationally harmonised version has been inverted with the point downwards. The yellow circular disc with black cross is a warning sign for the crossing. It is noticeably similar in design to the US warning sign mounted on the approach to all level crossings which consists of a yellow disc with a black cross and the letter 'R' in the left and right yellow quadrants.



A Country Roads Board photo of the northern approach to the Calder Highway level crossing at Diggers Rest shows the application of the two signs. The signs can be seen to the left of the road just beyond the painted 'Rail X' on the road. In this case the warning sign was mounted above the triangle. The photo also shows that the signs were not just provided at open crossings, but also at gated crossings that were approached at high speed by road traffic. (VPRS 17684/P0003, 38\_00537, reproduced with permission).

If any member knows more about road level crossing warning signs, we would be happy to publish an article (or even more photographs) on the topic.

## STONY CROSSING LINE



The article on Kerang in the last two issues of Somersault has prompted one of our members to ask 'was I aware that the Murrabit – Stony Crossing Staff still existed?' At some point after services were suspended the Staff was withdrawn to the custody of the District Superintendent's office at Bendigo, where it passed from official memory. When the Superintendent retired to Sydney, he took the Staff with him as a memento. Around 1990 it turned up in a garage sale where it was spotted by someone who recognised it as a Staff, but not of a type familiar to him. A phone call resulted in our member hotfooting it down to the sale where the Staff was secured for the princely sum of \$35.

The Murrabit – Stony Crossing staff was a Number 2 pattern staff (Kerang – Murrabit was No 1) and this one almost certainly dates from 1 June 1929 when a new staff was issued as a result of Poonboon being renamed Stony Crossing.