

# SOMERSAULT

MAY 2013  
Vol 36, No 3

SIGNALLING RECORD SOCIETY OF VICTORIA INC



*The standard electric lever lock on Victorian Frames was the M1 lever lock, also known as the 'Lever Lock Type A'. It was introduced around 1917 and was another of the technological imports from US. Compared with the SYX locks previously used, it was compact and flexible. The M1 lever lock consists of three major sub-assemblies: the mechanical lock that secures the lever (left); the electric coils that operate the lock (right); and a set of roller contacts operated by movement of the lever (centre). A drawing of an M1 lever lock is reproduced on the back cover of this issue. The lock is operated by the movement of the lever cam and, hence, moves when the lever is being moved to or from the normal position, and when the lever is being moved past the first reverse notch. Movement of the cam operates the quadrant (4M1) that can be seen at the left hand end of the lock with its tail extending behind the lever catch block. The top curved surface of the quadrant is cut for the various lock notches. The notches are slightly undercut so that the lock (5M1) cannot be jarred or bounced free. The bottom of the curved surface of the quadrant is also shaped and engages with the lock to force it down when the quadrant approaches the lock. This ensures a positive lock and prevents the arm from sticking. The armatures of the lock coils are beneath the coils, and they are connected to the arm (10M1) running the length of the lock. The arm pivots are at the right hand end of the lock and the relative lengths of the two lever arms means that the small movement of the armature at the right hand end becomes a large movement at the left hand (lock) end. The contact roller is operated from the quadrant and has a number of uses. A common use is for a 'slack' lever lock. As the lever is operated, the quadrant operates the roller contacts and, just before the lock engages with the notch, a contact is made to energise the lever lock. This allows economical operation of the lever lock, without requiring a separate switch or button. (Photo Andrew Waugh)*

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Published by the Signalling Record Society Victoria Inc (A0024029F)

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## MINUTES OF MEETING HELD FRIDAY 15 MARCH, 2012, AT THE SURREY HILLS NEIGHBOURHOOD CENTRE, 1 BEDFORD AVENUE, SURREY HILLS

- Present:** - Wilfrid Brook, Brett Cleak, Graeme Cleak, Glenn Cumming, John Dennis, Graeme Dunn, Michael Formaini, Ray Gomerski, Judy Gordon, Bill Johnston, David Jones, Chris King, Keith Lambert, David Langley, Steve Malpass, Andrew McLean, Tom Murray, Trevor Penn, Colin Rutledge, Brian Sherry, Peter Silva and David Stosser.
- Apologies:** - Jon Churchward, Steven Dunne, Chris Gordon, Reg Lloyd, Bruce McCurry, Greg O'Flynn, Laurie Savage, Rod Smith, Stuart Turnbull, Andrew Waugh, Andrew Wheatland and Bob Whitehead.
- The President, Mr. David Langley, took the chair & opened the meeting at 20:33 hours.
- Minutes of the November 2012 Meeting:** - Accepted as read. David Stosser / Steve Malpass. Carried.
- Business Arising:** - Nil.
- Minutes of the February 2013 Meeting:** - Accepted as read. David Stosser / Steve Malpass. Carried.
- Business Arising:** - It was noted that the dual gauge head shunt at North Dynon had been built well before it appeared on a diagram.
- Correspondence:** - Letter from Surrey Hills Neighbourhood Centre with terms of hire for 2013 and advising change of door codes.  
Letter to Surrey Hills Neighbourhood Centre with completed Door Access Code Form.  
Invoice from Surrey Hills Neighbourhood Centre for hire of meeting room for 2013.  
Chris King / Graeme Dunn. Carried.
- Reports:** - Glenn Cumming asked for suggestions for the 2013 signal box tour. Suggestions put forward included the Upfield Line, Epping and Bell.
- General Business:** - David Stosser noted that new station codes had been issued for the Sunbury Line following electrification.  
David Stosser advised that reports had recently been released on proposed new rail lines to Doncaster and Rowville. The proposals were discussed.  
Keith Lambert provided details about various works in the Metropolitan District. A summary of the discussion follows: -
- \* The unit lever control panel at Sunshine will be converted to screen based equipment.
  - \* New connections to the Goods Lines to Tottenham Yard have been provided at Sunshine.
  - \* The power signalling between Greensborough - Eltham - Diamond Creek has been commissioned.
  - \* The power signalling between Diamond Creek - Hurstbridge will be commissioned next weekend including the new stabling sidings at Eltham.
  - \* The commissioning of the re-signalling between Kensington - Flemington Racecourse will run late and a new commissioning date has not been announced.
  - \* The mechanically worked points at Kensington will be converted to motor operation in two weeks time.
- The new arrangements at Hurstbridge were discussed.
- Colin Rutledge provided details about various works in the Country Districts. A summary of the discussion follows: -
- \* Colin reminded the meeting about the demise of electric staff working in Victoria. There are now four sections of electric staff left in Australia, all in New South Wales.
  - \* \$7.7 Million has been allocated for works between Toolamba - Echuca with work to commence in the next financial year.
  - \* Earthworks for the new crossing loop at Warncoort are now under way.
  - \* RRL works and partial commissioning works between Spencer Street - North Melbourne were described.
  - \* Major RRL works at South Kensington will take place across the Queens Birthday long weekend in June 2013.

- \* A new interlocking will be provided at Sunshine over the Easter weekend. Part of the Ballarat Line will be converted to single track and Platform No.3 will be returned to service.
- \* Six weeks of work during December 2013 and January 2014 will focus on the flyover between Spencer Street - North Melbourne. Major track and signal alterations will take place with re-arrangements of the connections. Track works are scheduled for 17 days and signalling works will take 20 days.
- \* RRL junction works will result in track slews for the Geelong Lines at Manor.
- \* Sunshine - Deer Park West will be converted to Up and Down working with the removal of the bi-directional signalling.

Brett Cleak provided details about various projects around the state. A summary of the discussion follows: -

- \* CTC has been commissioned between Berrybank Loop - Tooli Loop - Vite Vite Loop. Tooli Loop is a new crossing loop.
- \* CTC will be commissioned between Vite Vite Loop - Westmere Loop - Tatyoon Loop - Maroona at the end of April 2013. Westmere Loop will be a new crossing loop.
- \* The works for the new yard at McIntyre Loop are progressing slowly with the new arrangements planned for commissioning by the end of June 2013.

Graeme Cleak advised that a new working timetable would be introduced on Sunday 28 April 2013. Movements to and from South Kensington will disappear. Velocity railcars will reverse at Kensington. Loco hauled trains will run around at Essendon.

Meeting closed at 21:59 hours.

The next meeting will be on Friday 17 May, 2013 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 7/13 to WN 15/13 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 alteration.*

- 13.02.2013 **Bendigo** (TON 20/13, WN 8)  
On Wednesday, 13.2., Nos 7, 8, & 9 Train Stabling Sidings were booked into service. TON 297/12 & 6/13 are cancelled.
- 17.02.2013 **Franklin St** (SW 65/13, WN 7)  
On Sunday, 17.2., Automatic 712 and Home 708 were converted to LED.
- 17.02.2013 **Waurm Ponds** (SW 17/13, WN 7)  
On Sunday, 17.2., the level crossing at Anglesea Rd (86.130 km) was abolished (this crossing had previously been closed to road traffic). The boom barriers were removed, and the roadway at the level crossing was removed. Amend Diagram 58/12 (Waurm Ponds - Winchelsea).
- 18.02.2013 **Werribee - Laverton** (SW 68/13, WN 7)  
As from Monday, 18.2., Up Automatic GG816 will be temporarily dressed as a Home signal because of signal sighting issues. If a train comes to a stand at this signal due to it being at Stop, and the Driver can see that there is no train in the section ahead, the Driver is to contact the Signaller Newport. Permission to pass the signal at Stop is by verbal authority.
- (19.02.2013) **Sandringham** (SW 62/13, WN 7)  
Commencing forthwith the signalbox will be switched in as follows:  
M - F 0000-0030 hours, 0510-0540 hours, 0620-0640 hours, 0845-0935 hours, 1610-1655 hours, 2335 - 2359 hours  
Sa ..... 0000-0125 hours, 0510-0555 hours, 0650-0710 hours, 2335-2359 hours  
Su ..... 0000-0125 hours, 0750-0815 hours, 0940-1030 hours, 2330-2359 hours
- 22.02.2013 **Elmore** (TON 25/13, WN 8)  
On Friday, 22.2., the siding was booked back into service. TON 8/13 is cancelled.
- (26.02.2013) **Altona Junction - Laverton** (SW 76/13, WN 8)  
Diagram 133/12 (Altona Junction - Laverton) replaced 25/12 as in service.
- 27.02.2013 **North Bendigo Junction - Elmore** (SW 19/13 & 21/13, WN 8)  
On Wednesday, 27.2., boom barriers were provided at the passive level crossings at Whirrakee Rd (182.383 km) and May Reef Rd (187.161 km). The boom barriers will be operated by axle counters. Healthy state indicators, yellow whistle boards, and remote monitoring were brought into use. Amend Diagram 32/12 (Goornong - Elmore).
- 03.03.2013 **Burnley** (SW 79/13 & 87/13, WN 9)  
On Sunday, 3.3., Home BLY343 was converted to United Tri-Colour LED.
- 04.03.2013 **Bendigo** (TON 34/13, WN 9)  
On Monday, 4.3., Nos 1-3, 5, & 6 Roads Bendigo Goods Yard were booked out of use due to siding conditions. The points have been secured to lie for No 4 Road.
- 04.03.2013 **Long Island Line** (WN 9)  
On Monday, 4.3., the Cresco Siding was baulked 150 metres on the Up side of Bayview Rd. Operations beyond the baulk will require 30 days notice.

- (05.03.2013) **Bendigo** (TON 33/13, WN 9)  
 With the commissioning of Nos 7, 8, & 9 Train Stabling Sidings, the restrictions on the operation of passenger and freight trains in Nos 1 - 6 Roads Bendigo Goods Yard have been removed. TON 288/09 is cancelled.
- (05.03.2013) **Prairie** (SW 22/13, WN 9)  
 Effective forthwith, the siding has been abolished. The point levers, Master Key locks, rodded connections, derails, siding, and intermediate siding board will be removed. Amend Diagram 58/11 (Tandara - Mitiamo).
- 06.03.2013 **Bendigo** (TON 35/13, WN 10)  
 On Wednesday, 6.3., No 3 Road Bendigo Good Yard was booked back into service. The points in the Goods Yard are secured to lie for Nos 3 & 4 Roads. TON 34/13 is cancelled.
- 09.03.2013 **Victoria Park** (SW 89/13, WN 12)  
 On Saturday, 9.3., M3A point machines were provided at both ends of Crossover 2.
- 11.03.2013 **West Tower** (SW 23/13 & 32/13, WN 9 & 10)  
 Between Friday, 8.3., and Monday, 11.3., the Up and Down Engine Tracks were slued. A facing turnout was provided in the Up Engine Track on the Up side of E Gate Access level crossing. This turnout leads to a single compound in the Down Engine Track. A trailing turnout was provided in the Down Engine Track opposite Dwarf MYD188. All these turnouts are secured normal.
- 12.03.2013 **West Tower** (SW 31/13, 73/13, 85/13, & 91/13, WN 9 & 10)  
 Between Friday, 8.3., and Tuesday, 12.3., the Spion Kop portion of the interlocking was tested and commissioned. This covers the Arrival Sidings, Wash Plant, Run-around road, the Down end of the Through Goods Siding, Spion Kop junction, the lead to North Dynon, and the future RRL lines leading to South Kensington. However, not all of these facilities were brought into use.  
 The run-around track (currently the Wash Plant in-track) between the Wash Plant Road and the future V/Line Arrivals Siding No 4 was commissioned. Dwarfs MYD720 (at the Up end of the run-around track) and MYD741 (at the Down end) were commissioned. Dwarf MYD160, controlling Up moves from the Wash Plant Road, was replaced by Dwarf MYD722. Dwarfs MYD720 and MYD722 can display clear low speed. A buffer and red buffer stop light was commissioned at the Down end of the Wash Plant Road. Notice Boards lettered "Stop. Do not proceed without Train Controllers Authority" (for moves from the Wash Plant Road towards the Run Around Track) and "Max Speed 5 km/h towards buffer" (for moves towards the dead end) were provided. Train Security Gates 602 at the Up end of the Wash Plant Road, Run-around Track, and future Arrival Yard Sidings was commissioned.  
 The interim procedure for trains arriving into the Wash Plant (SW 354/12) is cancelled. All trains must arrive via the Run-around track into the dead end, and must not exceed 5 km/h into the dead-end. Points 211 are fitted with a handleless CCW lever set for the Wash Plant. Drivers must check that the points have restored to the straight before departing from the dead-end into the Wash Plant. Trains are not permitted to leave the dead-end towards the Run-around track unless authorised by the Signaller West Tower.  
 The Through Goods Siding and lead to North Dynon will remain under Absolute Occupation. Points 478 and Derail/Crowder 478 will be secured reverse.  
 Points 612, 614, 616, 618, & 622, Crossover 639, and Hayes Derail/Crowder 478D were commissioned. Points 612, 614, 616, and 618 will remain secured normal. Points 478 and Hayes Derail/Crowder 478D were secured reverse.  
 Diagrams 11/13 (West Tower) and 6/13 (South Kensington) replaced 135/12 and 119/12 respectively.
- 14.03.2013 **North Bendigo Junction** (SW 30/13, WN 10)  
 On Thursday, 14.3., the Heywood St level crossing will be relocated 58 metres in the Up direction to 166.560 km. The existing passive crossing at 166.618 km was abolished and all signage was removed. Boom barriers were provided at the new crossing. These will be operated by axle counters. A healthy state indicator, yellow whistle boards, and remote monitoring equipment were provided. Amend Diagram 38/12 (North Bendigo Junction).
- 18.03.2013 **Bendigo** (TON 41/13, WN 11)  
 On Monday, 18.3., No 5 Carriage Shed Road was booked out due to siding condition. The points are secured for Nos 2, 3, and 4 Roads.
- (19.03.2013) **Dunolly** (SW 36/13, WN 11)  
 Operating Procedure 84 (Dunolly) was reissued. SW 1030/03 is cancelled.  
 Issue of Through Train Orders to the Secondary Corridor (Korong Vale line). When permission is granted by the Manager Network Signalling, through train orders may issued through Dunolly between the primary and secondary corridors without a Signaller being in attendance. These orders may be used for: an Up train from Korong Vale to Maryborough followed by a Down train from Maryborough to Korong Vale; a Down train from Maryborough to Korong Vale; or two Down trains from Maryborough to Korong Vale (but only if the first Down train has been reported complete at Arnold Block Point). The Train Controller must instruct the Signaller prior to ceasing duty to set the junction points for the Korong Vale line, clear the relevant signals, and endorse the Train Register. A Through Train Order must not be issued to trains that are required to shunt at Dunolly.

Issue of Train Orders for trains to/from the Secondary Corridor to cross. When permission is granted by the Manager Network Signalling, trains may cross at Dunolly when proceeding to and from the Korong Vale line without a Signaller being in attendance. The Train Controller must instruct the Signaller prior to ceasing duty to set the junction points for the Korong Vale line, clear the relevant signals, and endorse the Train Register.

Signaller in attendance. A signaller must be in attendance at Dunolly if trains are to operated to or from the secondary corridor (except in the above two situations), a train is to shunt Dunolly, and for the arrival and departure of trains required to work in Nos 3, 4, or 5 Roads. In the last case, the Signaller is not required to be in attendance while the train is actually working in Nos 3, 4, or 5 Roads, unless a train is to work through Dunolly. After a train that will work Nos 3, 4, or 5 Roads has arrived, the Signaller must ensure that Points A, E, F and G are secured normal, roll-out protection is in place, and that the Annett keys are secured in the panel.

Standard Gauge trains. Standard gauge trains will not operate between Maryborough and Dunolly without prior approval.

(19.03.2013) **Wallan** (TON 44/13, WN 11)

The signalbox hours have been altered (the actual hours are not given).

20.03.2013 **Traralgon - Bairnsdale** (TON 45/13, WN 12)

Commencing Wednesday, 20.3., trains services between Traralgon (Liddiard Rd 159.310 km) and Bairnsdale were suspended due to problems with the operation of level crossing equipment. Track machines, road/rail vehicles, and test trains/locomotives are permitted to run.

25.03.2013 **Eltham** (SW 83/13, WN 10)

Between Friday, 22.3., and Monday, 25.3., Stabling Sidings Nos 3 - 7 were commissioned. Each siding is 173 metres in length.

Dwarfs ELT120, ELT122, ELT124, ELT126, & ELT128 were provided. Points 022, 024, 026, 028, & 030 will be provided. Hayes Derail and Crowder 020, 022, 024, 026, & 028 were provided. Train Stabling Gates 031 were provided. All points and derails within the Stabling Sidings will be operated by electro-hydraulic point machines.

Diagram 21/13 (Watsonia - Eltham) replaced 75/12.

25.03.2013 **Diamond Creek - Hurstbridge** (SW 84/13, SWP 6/13 & 7/13, WN 10 & 11)

Between Friday, 22.3., and Monday, 25.3., the Train Staff and Ticket system between Diamond Creek and Hurstbridge was replaced by the ATC system. The WestCAD panel at Diamond Creek was abolished and control of Diamond Creek was transferred to Epping. Main line movements at Hurstbridge are controlled from Epping, but a Signaller will attend Hurstbridge from the first to the last train to carry out yard movements.

Diamond Creek. No 2 Track is now a bi-directional track, and Up Departure Home DCK103 was provided. Homes DCK104, DCK104P, DCK105, and DCK106 were converted to three position signals. Up Repeating S1056 was converted to an Automatic signal. Automatics S1075 and S1096 were provided.

Wattle Glen. Down Controlled Automatic WTT100 was provided. Automatic S1142 was provided. The Down Two Position Automatic signal was abolished.

Hurstbridge. Homes HBE100, HBE101, HBE102, HBE103, and Dwarf HBE104 were provided. Points 002 were equipped with a dual control point machine. Hayes Derail and Crowders 023, 033, 043, 053, and 063 were provided and are all worked by electro-hydraulic point machines. Points 034, 044, and 054 continue to be hand operated by WSA levers, but are electrically detected. Train Stabling Gates HBE091 and HBE097 are manually operated by the Signaller, but will be electrically detected.

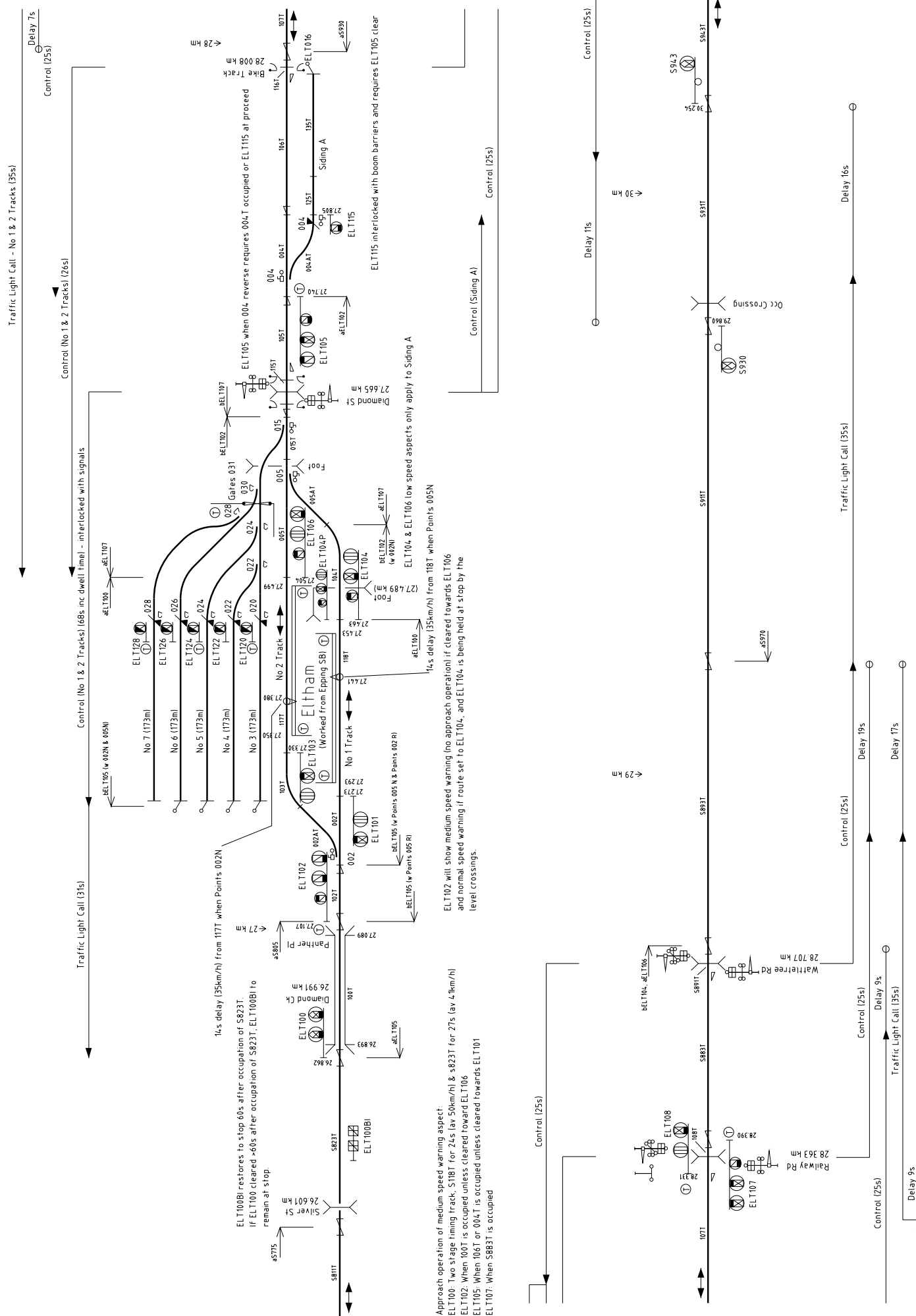
Diagram 23/13 (Diamond Creek - Hurstbridge) replaced 73/12.

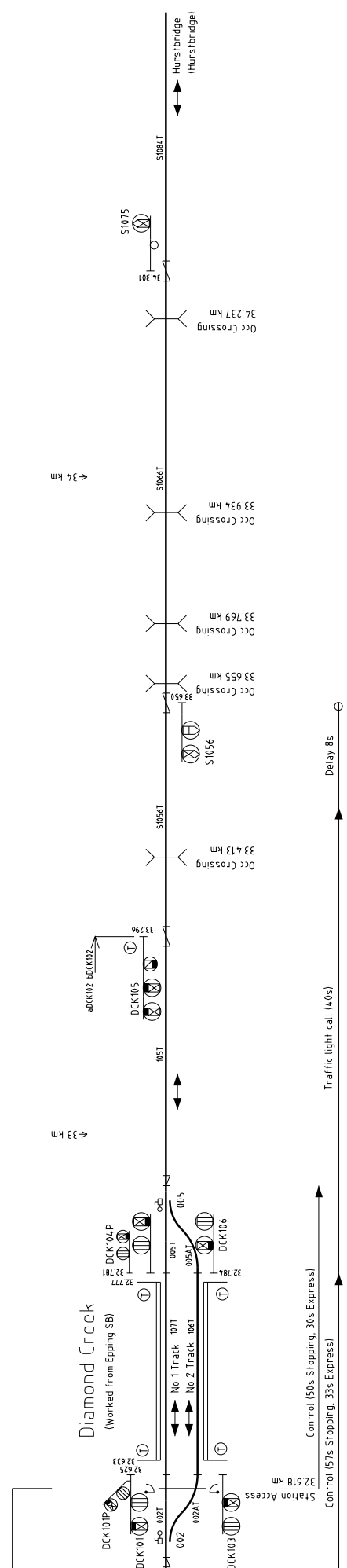
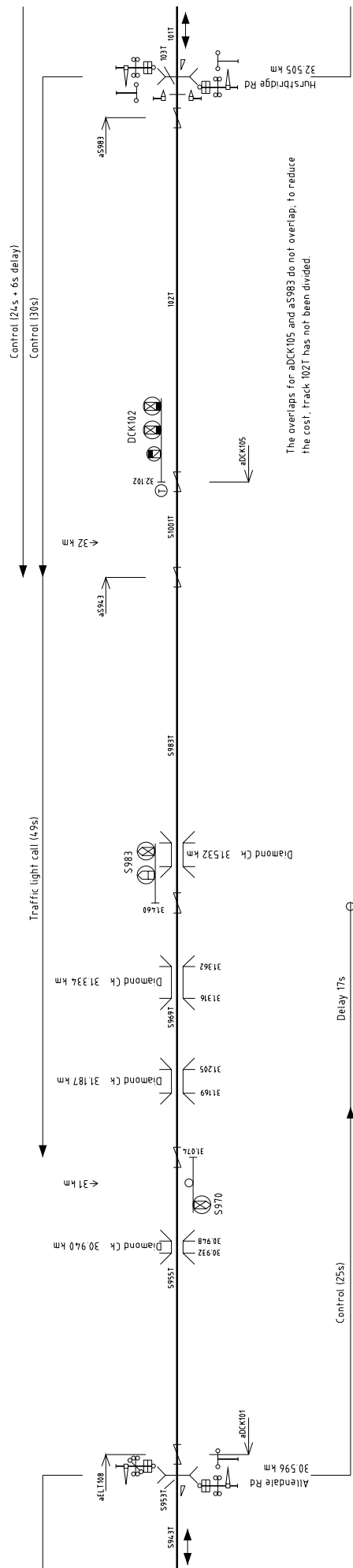
Clifton Hill Group Operating Procedures 7 (Diamond Creek - Failure of Signals), 8 (Hurstbridge - Driver in charge of signalling), and 10 (Hurstbridge - Failure of Down Home signal) are cancelled. Clifton Hill Group Operating Procedure 4 (Greensborough to Hurstbridge - Failure of Signals) was reissued. Form 2382 (Authority to issue ATC Caution Orders) will not apply to the Greensborough - Eltham - Diamond Creek - Hurstbridge sections.

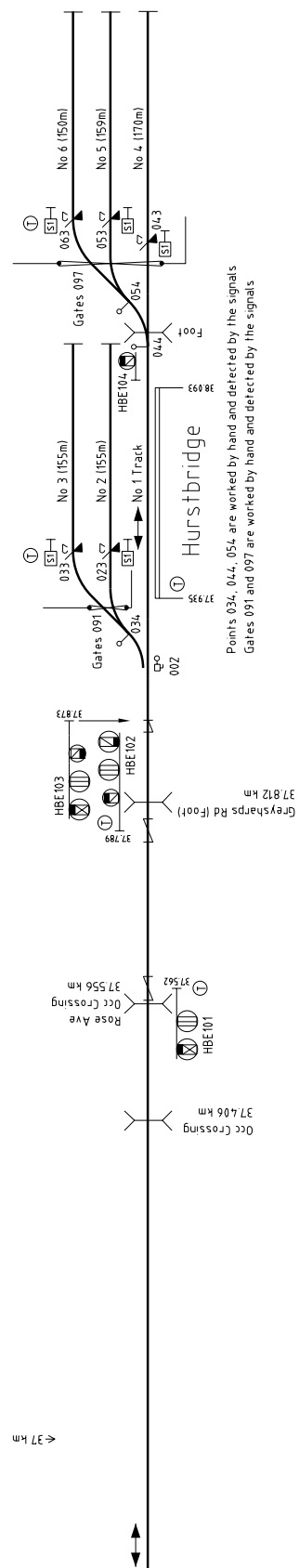
New Clifton Hill Group Operating Procedure 5 (Hurstbridge - Shunting and Docking Trains) was issued. The train stabling sidings at Hurstbridge are not fully signalled for remote operation, consequently a Signaller is on duty to 1) operate the hand points, 2) open and close the train stabling gates, and 3) give verbal permission (in person) to Drivers to dock trains, all under the direction of the Signaller Epping. When a shunting or docking move is to be made, the Signaller Epping will instruct the Signaller Hurstbridge as to the required move. The Signaller Hurstbridge is to operate the hand points and ensure that the train stabling gate is secured open, and then inform the Signaller Epping. The Signaller Epping is to confirm that the points are set correctly using the Westcad display. If the train is to be shunted (moved into the sidings), the Signaller Epping will then call the route into the siding from HBE102 or HBE104. If the train is to be docked (moved from the sidings), the Signaller Epping will call the route from the siding and then instruct the Signaller Hurstbridge to authorise the Driver to dock the train. If a docking movement is to be cancelled, the Signaller Epping must ensure that the Signaller Hurstbridge and the Driver understand the situation before cancelling the route.

(26.03.2013) **North Bendigo Junction** (SW 38/13, WN 12)

Diagram 20/13 (North Bendigo Junction) replaced 50/12 due to the alteration at Heywood St.

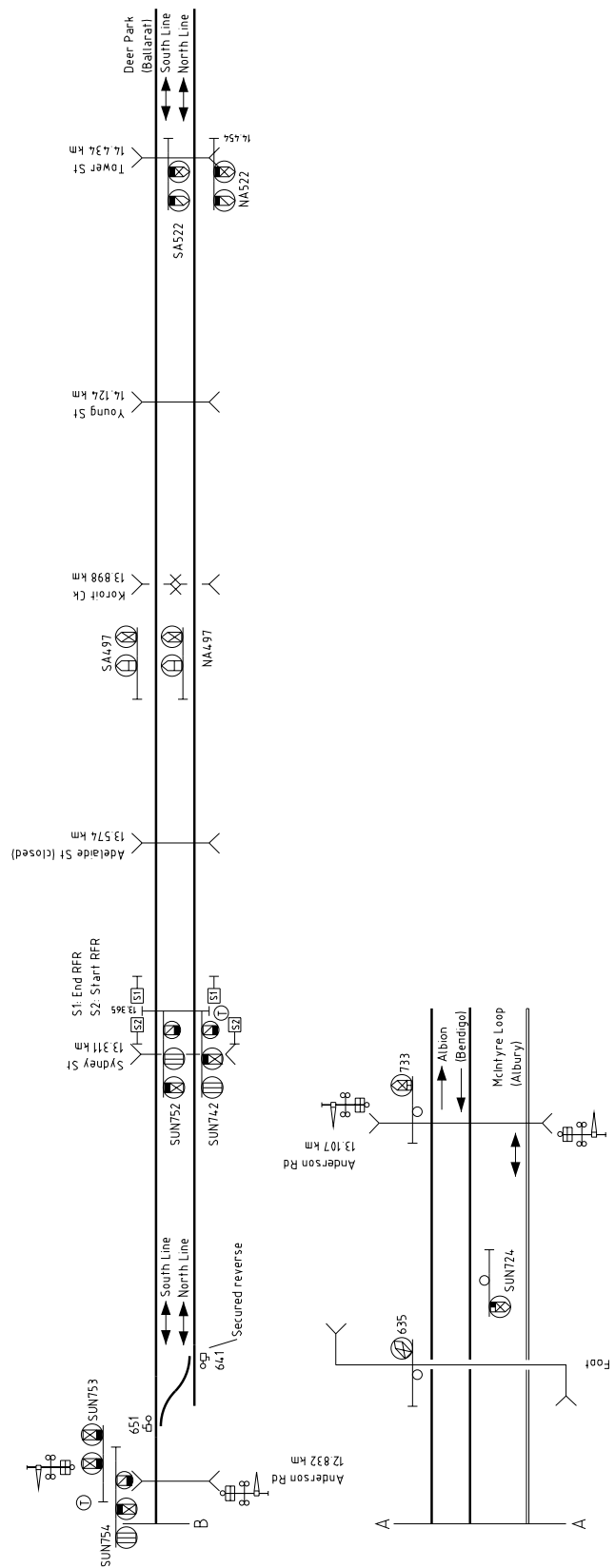
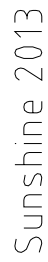








- (26.03.2013) **Traralgon** (SW 41/13, WN 12)  
Commencing forthwith, trains or locomotives are permitted to stable in No 2 Road (due to the suspension of services beyond Traralgon). Rollout protection must be provided whenever trains or locomotives are stabled in No 2 Road.
- 01.04.2013 **Sunshine** (SW 108/13, WN 13)  
On Monday, 1.4., the route indicator on Down Home SUN735 was removed. Normal speed indications will only apply to the Bendigo line, and Medium speed indications to the Ballarat line. Arrows were painted on the respective targets.
- 02.04.2013 **Kensington** (SW 106/13 & 110/13, WN 13)  
On Tuesday, 2.4., Points 11 and 12 were renewed with tangential turnouts and are now motor worked by M23A point machines. Points 9U were converted to motor operation and fitted with an M23A point machine. However, the other end of the crossover, Points 9D, remains mechanically operated. Separate point indications were provided for Points 9U and 9D. Dwarf 10 was replaced by a light dwarf signal (this was the last upper quadrant mechanical dwarf signal in use).
- 02.04.2013 **Newmarket** (SW 106/13 & 110/13, WN 13)  
On Tuesday, 2.4., Points 45 and 47 were renewed with tangential turnouts. Crossover 43 on the Race-course line was removed. Dwarfs 44 & 46 were abolished. Levers 43, 44, & 46 on the Newmarket panel were sleeved normal.  
Diagrams 25/13 (Kensington - Essendon) and 27/13 (Flemington Racecourse Line) replaced 83/07 and 117/12 respectively.
- 03.04.2013 **Sunshine** (SW 42/13, 44/13, 100/13, & 104/13, SWP 9/13, WN 12)  
Between Thursday, 28.3., and Tuesday, 2.4., the following alterations took place (note: the Anderson Rd alterations and the restoration of No 3 Track was not commissioned until the following day, Wednesday, 3.4):  
  - \* The relay interlocking and unilever panel was replaced by a Westcad route setting panel and Westlock CBI.
  - \* No 3 Track was booked back into service for non-electrified moves. SW 308/12 is cancelled.
  - \* The new connections between the Independent Through Tracks and the Main Suburban Lines at the Up end were commissioned. Points 405, 415, & 455 and Crossover 434 were commissioned. The bi-directional Independent Through Track was slued towards the Up Main line and connected to Crossover 617 (which was restored to use). Crossover 628 was consequently secured normal. Down Uncontrolled Home M395 was converted back to an Automatic. Down Home SUN717 was restored to service. Down Home SUN515 was commissioned. Down Home SUN741 (10.910 km), Up Home SUN534 (11.600 km) and Up Home SUN506 (11.165 km) were provided. Up Uncontrolled Home SUN628, Up Home SUN504, and Down Home SUN707 were abolished.
  - \* To aid construction of the Anderson Rd overpass on the Ballarat line, the portion of the North Line through Anderson Rd was removed.  
Crossover 642 was secured normal. Points 651 (13.191 km) and 641 (13.257 km) were provided to form the junction between the South and North Lines. Points 641 were secured reverse.  
At Anderson Rd, the north side boom barrier was moved closer to the line, the pedestrian wickets on the Up side of the crossing were moved closer to the line, and the pedestrian crossing on the Down side of the crossing was closed.  
Down Home Departure SUN743 (North Line) was abolished. Down Home Departure SUN753 (South Line) was relocated from the signal bridge to a ground mast and will now apply to both the North and South Lines. Up Homes SUN742 (North Line) and SUN752 (South Line) were relocated 465 metres in the Down direction. Up Automatics SUN740 (North Line) and SUN750 (South Line) were abolished together with the TPWS at the signals. New Up Automatics SA522 and NA522 were provided at 14.454 km. TPWS was provided at SUN742, SUN752, SUN754, NA522 and SA522. The 'End TPWS' sign will be relocated to be adjacent to Home SUN754. The 'Start RFR' and 'End RFR' boards were relocated to be opposite Homes SUN752 and SUN742. . The Adelaide St pedestrian crossing was temporarily closed due to sighting problems.  
Diagrams 145/12 (West Footscray - Tottenham), 3/13 (Sunshine), & 14/13 (Ardeer - Rockbank) replaced 37/10, 143/12, & 66/10 (respectively).  
SW 209/12, 308/12, 421/12 & 422/12 were cancelled. As from Tuesday, 2.4., Metro Trains Northern Group Operating Procedure 9 (Sunshine - Albion, Failure of Signals) was reissued.
- 05.04.2013 **Southern Cross** (SW 43/13, WN 12)  
Between Thursday, 28.3., and Friday, 5.4., the Wash Track at the Carriage Maintenance Depot will be slued closer to the building to allow space for the new RRL 1-8 tracks. The Wash Track was reduced in length to 5 car lengths (approximately 135 metres).
- 06.04.2013 **Mitcham** (SW 111/13, WN 14)  
On Saturday, 6.4., the overhead wiring over Siding A was abolished as part of the grade separation project.
- 09.04.2013 **Deer Park West** (TON 57/13, WN 15)  
On Tuesday, 9.4., the V/Line portion of Boral Siding was booked back into service. Points 9 were restored to service. TON 196/11 is cancelled.



- 14.04.2013 **Bendigo** (SW 53/13, WN 15)  
 At 0500 hours on Sunday, 14.4., control of the Bendigo RFR and Bendigo Yard will be transferred to Control. Train Orders for passenger trains will be received by V/Line Operations station staff and delivered to drivers. Train Orders for freight trains will be received directly by the train crews. All Master Keys at Bendigo have been transferred to Maryborough and Echuca. When a train is required to shunt at a siding between Bendigo and Swan Hill or Bendigo and Echuca, arrangements must be made for a Network Services employee to be in attendance at the siding with a Master Key.  
 The signalling equipment at Bendigo will be retained as an emergency operating workstation.
- 14.04.2013 **Highbett** (SW 117/13, WN 15)  
 On Sunday, 14.4., traffic light co-ordination was provided at Highbett Rd.
- 15.04.2013 **Raywood** (SW 48/13, WN 14)  
 On Monday, 15.4., boom barriers were provided at the passive crossing at Rumbolds Rd (189.449 km). A level crossing predictor is provided. RFR predictor boards were provided. Trains travelling at more than 50 km/h at the predictor board may increase speed before the level crossing. Remote monitoring equipment is provided. Amend Diagram 52/11 (Eaglehawk - Raywood).
- 16.04.2013 **Raywood** (SW 49/13, WN 14)  
 On Tuesday, 16.4., boom barriers were provided at the passive crossing at McQualters Rd (189.948 km). A level crossing predictor is provided. RFR predictor boards were provided. Trains travelling at more than 50 km/h at the predictor board may increase speed before the level crossing. Remote monitoring equipment is provided. Amend Diagram 52/11 (Eaglehawk - Raywood).
- 20.04.2013 **South Kensington** (SW 118/13, WN 15)  
 On Saturday, 20.4., Points 657, 658, 668, and 669 were secured normal to facilitate removal of the overhead wiring above them.
- 21.04.2013 **West Tower** (SW 55/13, WN 15)  
 Between Tuesday, 16.4., and Sunday, 21.4., the lead between the Through Goods Siding and North Dynon Yard was recommissioned. The first trains from North Dynon via the Through Goods Road will be 9461 on 20.4., and 9462 on 21.4.  
 Home MYD731 and Dwarf MYD760 was commissioned. Home MYD731 can only display Stop and Low Speed Caution. Derails & Crowders 620D & 631 were commissioned. Points 620U, 854, & 855 were commissioned, but secured reverse. Points 653 and Crossovers 852 & 853 were commissioned, but secured normal. These alterations are shown on Diagrams 11/13 (West Tower Melbourne Yard) and 6/13 (South Kensington).
- 23.04.2013 **Epsom** (SW 51/13, WN 14)  
 On Tuesday, 23.4., boom barriers were provided at the passive crossing at Ironstone Rd (170.856 km) and will be operated by axle counters. Healthy state indicators and yellow predictor boards are provided. Remote monitoring equipment is provided. Amend Diagram 32/12 (Goornong - Elmore).
- 23.04.2013 **Bagshot** (SW 50/13, WN 14)  
 On Tuesday, 23.4., boom barriers were provided at the passive crossing at Reillys Rd (180.773 km) and will be operated by axle counters. Healthy state indicators and yellow predictor boards are provided. Remote monitoring equipment is provided. Amend Diagram 32/12 (Goornong - Elmore).

## BLOODSTOCK & LIVESTOCK

### A SHORT HISTORY OF THE FLEMINGTON RACECOURSE LINE

With the impending resignalling of the Flemington Racecourse Line, it is a suitable moment to consider its history.

The early history of the branch is very obscure. The paucity of information is partially due to the age of the branch, partially due to its early history as a private line, and partially due to the lack of regular train services. It is interesting to note that even into the twentieth century, no mention was made of the line in the working time tables.

The obscurity extends even to the 'official' names of the locations on the branch during the 19th century. Recourse has had to be made to the traffic lists in the Annual Report. These lists are not altogether reliable, but they suggest that VR originally named the terminus 'Racecourse,' and it remained so upto and including the report for the year ending 31 December 1876. From the report for the year ending 31 December 1877, the terminus was listed as 'Racecourse (Melbourne)'. This matched the other Victorian racecourse platforms which were listed as 'Racecourse (Ballarat)', 'Racecourse (Geelong)' and so on. However, it is not clear if the station was actually renamed, or whether this merely a notional name used to distinguish the various racecourse platforms in the traffic list. The name was unchanged in the following year, but in the report for the year ending 31 December 1881 it became 'Melbourne Racecourse'. This change was matched by the other racecourse platforms which became 'Ballarat Racecourse' (etc). The name then remained unchanged until the report for the year ending 30 June 1887 when the name became 'Flemington Racecourse'. I would suspect this reflects the renaming of the racecourse itself to distinguish it from the other metropolitan racecourses at Williamstown and Caulfield. A problem for this neat chronology is that the signalbox at the terminus was named 'Flemington Racecourse' from opening on 31 October 1885. The name has remained 'Flemington Racecourse' since then, albeit with occasional variations in hyphenation. As for the Showgrounds, the early notices listed in the Argus suggest that it was called the 'National Agricultural Society's Show Ground Siding'. However, the report for the year ending 30 June 1886 lists the location as the 'Agricultural Show Ground'. From the report for the year ending 30 June 1889 this was shortened even further to 'Show Ground'. During the twentieth century the situation gets a bit confused. The Passenger Fares Book consistently refers to the 'Royal Agricultural Society's Show Ground' (or 'Showground' from at least 1957). The Directory of Stations uses the name 'Flemington Showground' from at least the 1957 edition. For the purposes of clarity in this article, I always refer to the racecourse itself as 'Flemington Racecourse' (even though this may be anachronistic prior to circa 1887), but the station as 'Racecourse' until 1880, 'Melbourne Racecourse' from 1881 to 1887, and 'Flemington Racecourse' thereafter. The show grounds platform will be referred to as 'Show Grounds' during the 19th century.

#### Flemington Racecourse

The extensive river flats and adjacent steep ridge at Flemington Racecourse could almost have been designed for racing. It is not surprising, then, that Flemington Racecourse was first laid out in 1840 and became an important racing track. It was reported that between 30,000 to 40,000 people saw the 'Australian Championship Sweepstakes' at Flemington in 1859. Transport of such crowds to the course would have been difficult. The Victorian Railways first served the racecourse by running trains to Footscray in

March 1859. Subsequently, the department provided a set of platforms somewhere near the Maribyrnong River bridge, however, the reporter for the Argus covering the Spring Race Meeting in 1860 noted that the "special trains of the Victorian Railways department found but little favour, the distance from the platform to the Grand Stand being to great to be walked with comfort". According to the reporter horse drawn carriages took most of the punters to the course.

Although it would have been simple to construct a short branch to the course from the VR, the railway serving the Flemington Racecourse originated in a private company, the Melbourne and Essendon Railway Company. This company was formed in 1858 to build the railway line from Essendon Junction, near North Melbourne, to Essendon. The company gained its Act in February 1859 and construction of the line commenced in July 1859. It opened for general passenger traffic on 1 November 1860.

The first public notice of a branch line to Flemington Racecourse was a comment on 31 August 1860 at the Company's second AGM. The Chairman of the company stated that "Your directors further beg to inform you that they have received intimation of the early intention to form a branch line from your New Market Station on to the contemplated new grand stand at the Melbourne race-course, the ground of which has been already carefully surveyed, and, when completed, will bring a considerable revenue to your company." At this stage it appears that the company was not proposing to construct the branch itself, probably because they had no spare money. Shareholders defaulting on their calls meant that the company had struggled to raise sufficient money just to complete the main line. However, it appears that the Essendon Company constructed the branch itself, with the funds being loaned to it by the directors of the company.

Little information is available about the construction of the line. Harrigan, in 'Victorian Railways to '62' states that construction commenced shortly after completion of the main line. The Argus, on 24 December 1860, noted that the Essendon Company "have a branch in course of construction to the Racecourse which will be completed by the beginning of April, and which will be a great convenience to the public. Its terminus is immediately behind the Grand Stand, on a line with the new lawns... The cost of constructing this line will be small while the proceeds bid fair to be very considerable."

On 19 February 1861 the Company placed an advertisement in the Argus that stated "The roads being considered at present impassable for the conveyance of carts to the Racecourse, the directors of this railway are desirous to accommodate the public in every way, and are, therefore, making arrangements to have trucks ready at Spencer-street Station to CONVEY GOODS by the Essendon Railway direct to the GRAND STAND THIS DAY and to-morrow." A similar advertisement was placed on 25 February 1861 for the Jockey Club Races that specifically mentions conveying trucks by the branch line on 26 and 27 February. These two notices appear to mark the commencement of traffic on the line.

Passenger traffic commenced on 28 February 1861 for the three day Jockey Club Races. The first train was scheduled to leave Spencer-street at 11 am, and then every 15 minutes. Fares were 1/6 First Class, and 1/0 Second. The advertisement concluded "Visitors to the races... will save themselves from the annoyance of dust and a long walk, and have the satisfaction of being set down at the Grand

Stand and the Hill on the Racecourse". To publicise the new line the company sponsored the 'Railway Plate' race on the second day of the race meeting, worth 50 sovereigns.

The new branch commenced at the Down end of the Newmarket platform. It sharply curved to take up a westward course. The line crossed Ascot Vale Road and Epsom Road on the level. Hand gates were almost certainly provided from the opening at both crossings. Beyond Epsom Road the line commenced to fall and it curved to the left and then the right around the hill before reaching the platform at Flemington Racecourse.

The branch line appears to have been opened with no fanfare what-so-ever. There was no celebration, and the *Argus* did not even refer to the opening or describe the new line. The probable reason for this was that the line had been built, and was operating, without the necessary legal authority. The process for a private company to build a railway line in Victoria was modelled on that used in the UK, and a private Act of Parliament was required. The formal process of obtaining this Act was started by the Essendon company just seven days after the opening of their main line, when it advertised its intention to seek powers in the next parliamentary sitting to construct a "branch railway with all proper and suitable stations, bridges, approaches, works, and conveniences connected therewith, commencing at or near the Newmarket Station, at a point on the said railway two miles and forty six chains, or thereabouts, from the Spencer-street Terminus, thence proceeding in a westerly direction through Sections or Portions Number Five and Number Three, and Number Twenty eight and Twenty Nine, and terminating in the Racecourse Reserve, in Section or Portion Twenty Eight, (such extension being in length one mile and three eighths of a mile, or thereabouts) [...]" The necessary Bill was not introduced into the Legislative Assembly, however, until 20 February 1861 - just eight days before the branch carried passenger traffic. By 13 March 1861 a Select Committee had been formed to consider the Bill, and at its one and only sitting, the chairman of the company admitted that the branch was "nearly complete", a train had run over it, and it had been passed conditionally by the government engineer. The condition was the sanction of the legislature to the construction of the line! The bill gained the approval of the lower house on 27 April 1861, the upper house on 5 June 1861, and gained Royal assent on 3 July 1861. The Act retrospectively validated construction of the line. No-one in Parliament, nor in *The Argus*, mentioned the embarrassing fact that the line had already been constructed and had carried passengers! Reading between the lines of Select Committee's report, it appears that the line was funded by the directors of the Essendon Railway Company, not by the company itself, and a significant feature of the Act was to authorise the company to borrow up to half the value of its paid up capital. Part of the money raised in this way appears to have been used to extinguish the loans to the directors.

During the rest of 1861 it appears that the line was used for passengers to the three day Victorian Turf Club races starting on 21 March, the Royal Victorian Calvary Races on 25 May, the three day Victorian Jockey Club starting on 17 October, and the three day Victorian Turf Club races starting on 7 November (during which the first Melbourne Cup was run).

Another source of income was trialled on Wednesday 28 August 1861 when the first delivery of sheep was made by railway to the Newmarket saleyards. The flock of sheep from the Western district was sent up from Geelong, and handed over to the Essendon company at Essendon junction. The report in the *Argus* concluded "By the arrangements entered into between the authorities of the Govern-

ment line and the Essendon Railway Company, live stock brought up will be conveyed to the cattle yards without change of trucks and at a very modest charge." No details are provided in the article on what facilities were provided by the private company to handle livestock traffic. It is possible that they were unloaded at Newmarket station, perhaps even on the passenger platform, but a siding, or an unloading platform, could have been provided. It would appear that this traffic did not, however, develop.

At the Essendon Railway AGM held on 31 August 1861 it was noted that the branch railway had cost £14,362. This appears to have been financed by the sale of bonds worth £27,000, and the directors believed that the race traffic on the branch would cover the interest on the bonds. It was further hoped that traffic on the main line would cover its costs, and the undeveloped sheep and cattle traffic was looked to provide the dividends to the shareholders.

However, the directors closed the line on 1 July 1864 due to poor financial returns. The last race meeting to which the company ran trains was probably the Great Metropolitan and Trotting Races held on 16 April 1864. While there was considerable pressure from local residents for the government to purchase and re-open the line, this did not immediately bear fruit. When it did, in 1867, it appears the main arguments for the government purchasing the line were the Newmarket Saleyards and the traffic to the Flemington Racecourse. On 12 June 1867 a deputation from the Melbourne City Council waited on the government to press for either re-opening the line, or building a new line to the Cattle Yards. It appears that the Council were inspired by their plans to greatly enlarge the Saleyards. On 2 July, it was the turn of a deputation of the Victorian Racing Club and MLAs to wait upon the government to urge the purchase of the line. At this meeting the Treasurer essentially agreed to the purchase if the price was right, and the agent of the company offered a price of £25,000. By mid July the line had been inspected by Higinbotham who estimated repairs to cost £16,000, and the question was passed to a sub-committee of the house. Parliament agreed to purchase the line for a price not exceeding £22,500 on 3 August 1867. The sale was concluded on 26 August 1867, subject to Parliament voting the necessary money.

Repair work was immediately started on the line between Essendon Junction - Newmarket - Flemington Racecourse, in order to reopen it for the coming spring racing. An added incentive was the possibility of increased crowds at the races due the presence of Royalty in the person of the Duke of Edinburgh. On 7 October 1867 the *Argus* described the scope of the works. About half the line between Essendon Junction and Newmarket was 'widened' - probably duplicated - and a crossing loop was provided at Newmarket itself. The girders and deck of the Racecourse Rd bridge were replaced. At the Racecourse itself, the line was extended by 230 feet into the hill, and the earth used to widen the formation to carry three tracks for a quarter of a mile from the platform. Two 125 foot platforms were erected at the racecourse to enable trains to be despatched from the course every five minutes without any fear of accidents. All of the sleepers were replaced, as was the ballast, and the last half mile of track. Repair work between Newmarket and Essendon was planned to occur when the Racecourse line had been put in order.

The branch line was reopened for the three day Spring Racing Meeting commencing on 31 October 1867. Interestingly, at this date the Essendon company had not actually been paid for the railway, nor was the line legally vested in the Board of Lands and Works - an interesting echo of the opening of the line before the authorising Act had been passed. An Act of Parliament to vest the lines was not in-

troduced into Parliament until 8 September 1868. Passage through both houses of Parliament was swift and it received assent on 29 September. The company received the money for the line on 19 November 1868, and the branch was formally vested in the Board of Lands and Works on that day. The remainder of the main line between Newmarket and Essendon was not reopened until 9 January 1871.

### **Newmarket Livestock Sidings**

The Newmarket Saleyards predate the railway. Land for the Saleyards was granted to the Melbourne City Council in August 1856. By 1859 the Saleyards were in operation, but the official opening was not until 1861. The Saleyards were on a roughly trapezoidal block of land south of Racecourse Rd, about 500 metres south of the railway line. The yards adjacent to the Racecourse line were not used to sell stock. Instead, they were used to draft stock unloaded from the trucks before they were walked south along Newmarket Rd to the Saleyards.

It is not clear when the livestock yards were erected on the branch. As already noted, the Essendon Company received at least one shipment of sheep in August 1861, but it is not known what facilities were provided to unload the sheep. Given that this did not appear to be a continuing traffic, it is quite possible that the sheep were unloaded at the passenger platform at Newmarket and walked to the Saleyards. Prior to the takeover by the VR, it appears that the livestock was unloaded at platforms behind North Melbourne station and were walked from there through Kensington.

In late 1870 the Engineer in Chief purchased land for a livestock station and the line was regraded to be level. On 22 September 1871 a contract was gazetted to Robert McCall for the construction of a sheep and cattle station on the Racecourse branch. The contract amount was relatively low at only £1825/5/0 - and so this may not reflect the all of the livestock facilities. It is known that the Victorian Railways commenced to unload sheep at Newmarket as from 1 September 1872. However, no notification has so far been found for opening for cattle traffic. It is most likely to be around this period, however.

On the day after the sheep yards were opened, on 2 September 1872, a sheep train was in a collision at Newmarket. The 6.40 pm Down Essendon ran into the rear of a rake of sheep trucks that were standing on the main line before being shunted onto the Racecourse line. It appears that the tail light on the last sheep truck was not alight, or, at least was not visible.

Around 1871, some or all of the Racecourse line was duplicated. A contract was gazetted on 3 November 1871 for sleepers for "extending the duplication on the racecourse line". This suggests that some of the branch was already double track, but whether the whole branch was duplicated at this time is not known.

The Traffic Branch recommended alterations to the livestock yards in January 1880 that would cost an estimated £7000. Instructions were, however, only issued "as to crossover road and raising fencing" for £210. The line was slewed in July 1883 to allow the American engines to pass the cattle platforms, however the Traffic Branch then complained that there was too much space between the trucks and the platform. In August 1884 plans were prepared to alter the crossings at the Newmarket Cattle Yards to avoid facing points. This was approved by the Commissioners and work was in hand in September. But in December 1885 the Traffic Branch requested that points leading to the livestock siding be put in at the Up end. The Engineer of Existing Lines had no objection to the provision of these points, provided they

were taken out before each race meeting - this implies that these were facing points in the Down main line.

In July 1883 the local residents requested that Newmarket be opened for light goods, but this was initially knocked back as there was no funds. The Flemington and Kensington Boro continued to press for the facility. The firewood siding was opened on 15 December 1883. This was a dead end siding leading off the Up end of the livestock siding.

### **Agricultural Show Ground Platform and Siding**

In the early 1880s, the National Agricultural Society of Victoria had a showgrounds site in St Kilda Rd, however they did not have security of tenure. In 1882 they accepted a new 30 acre site near Flemington Racecourse on the north side of the railway line and commenced to build a new show ground. The first show at the new site opened on 7 November 1883.

In December 1882 the Railway Commissioners directed that an inspection be made of the proposed site for a siding at the Agricultural Society's ground. In March 1883 the Society asked the Department to expedite the construction of the siding at their new grounds. The Engineer for Existing Lines responded that he had no definite instructions and asked whether the Minister wished plans and estimates to be prepared. Clearly the answer was 'yes', as a sketch plan and estimate had been prepared by late April 1883. Instructions were issued for the construction of a platform "at once" at the beginning of June 1883. At this time the Victorian Racing Club handed over the land required for the siding. The necessary points and crossings were delivered in mid July 1883. A crane, presumably on the siding, was reported as being ready for use on 1 November 1883. Semaphores were provided on 3 November 1883.

The first train to the show grounds platform appears to have run on 17 October 1883 when a special conveyed an party consisting of the Minister of Agriculture and members of the National Agricultural Society travelled to the new show grounds to inspect the work. The first 'Grand Spring Show' at the new site opened on Wednesday, 7 November 1883. Trains ran to the showgrounds on the Wednesday and the Friday but not on the Thursday, apparently due a clash with a race meeting at Flemington Racecourse. The following year the Show was held from 27 August until 30 August, on dates which did not clash with racing, and the train service was substantially more involved.

It is not clear what facilities were provided at the show grounds upon opening. Clearly a passenger platform was provided, and this was almost certainly situated on the north side of the line at roughly the current location. The provision of a crane suggests a goods siding.

As already mentioned, it appears that the platform was initially named the 'Agricultural Show Ground' until 1885/6 when it was shortened to 'Show Ground'.

### **Enlarging Flemington Racecourse station**

In 1885 the terminus at Flemington Racecourse was greatly expanded and rebuilt into a form that was essentially unchanged in the early 1980s, and is still recognisable today.

The terminus was in line to be interlocked as early as late 1882, as McKenzie and Holland forwarded sketches of the proposed interlocking of 'Racecourse' in March 1883. Nothing further appeared to happen until September 1884 when the Traffic Branch suggested extending the third road to the 'Show yard platform' - this appears to be the origin of the current Loop Siding. In November 1884 the Traffic Branch suggested that the levers of the semaphores at 'Racecourse' platform be relocated to the bridge from which the SM di-

rected operations. This was approved by the Commissioners and probably brought into use before the Champion Meeting on 1 December 1884.

Behind the scenes, discussions were occurring to finalise a major rebuild of the station. In December 1884, the VRC requested that the works be commenced after the Autumn race meeting on 7 March 1885. In April 1885 the Engineer for Existing Lines formally requested permission to carry out works for £5000. This was agreed to by the Commissioners and earthworks commenced shortly after - the VR asked the VRC if they required any filling. Sheppard Moore & Co were awarded a contract to construct a platform wall in July 1885 - this is almost certainly the northern platform. It was completed in early September 1895. On the 21 July 1885 the lines were broken to allow for construction of a new subway to provide access from the new platform. The Commissioners approved the plans for interlocking the yard on 18 September 1895 for an estimated cost of £1348. On the same day, the Traffic Branch requested that two booking offices be provided on the new platform, with a third at the subway. In addition four small boxes, one for each platform, were to be provided for the men in charge. Finally, they requested a footbridge for staff between the two platforms and it was agreed to provide this adjacent to the signal box. Instructions were issued for the four 'signal boxes' in late September, and they were reported as complete on 23 November 1885. The contract for erection of the ironwork for the footbridge was let to P Bevan in October, and the woodwork was supplied by the VR and completed by 23 November 1885.

The Signal Engineer requested that a daily pilot engine be scheduled from 24 September from his workshops (at Spencer Street) at 7.45 am to convey men and materials to the Racecourse. This special train was cancelled on and after 20 October.

The first train to the rebuilt station appears to have run on 22 October 1885 when the Governor, accompanied by a Captain Traill, travelled to the racecourse by special train. At the racecourse they were shown the "new railway arrangements and other improvements made for the Melbourne Cup".

'Flemington Racecourse' signalbox, with a 59 lever frame (with 4 spaces), was brought into service on 31 October 1885, just in time for the Spring racing meetings. Behind the scenes it does not appear that everything was going well. The Signal Engineer took the unusual step of protesting to the Secretary on 6 November that he declined to have anything to do with the working of the traffic unless he had full charge of trains working into and out of the yard. On the same day, the Engineer for Existing Lines instructed the Signal Engineer on the arrangements as to the working of the traffic on Saturday, 7 November, and Monday, 9 November. On the same day, the Traffic Branch requested that the line be ready on 9 November, 'same on race days'.

The layout brought into use on 31 October appears to have been little different to that which existed in the early 1980s. The yard had five tracks, flanked by two long platforms. The southern platform, nearest the racecourse, was probably used for first class passengers from 1885, and the northern platform for second class passengers. Complete first and second class trains were run to the racecourse. Central crossovers allowed two trains to stand at each platform at once. The station was approached by three tracks extending from the show ground. The central track was the sole Up line, and it was flanked on each side by a Down line. Second class trains were turned on to the 'Loop Line'

at Show Grounds. It would appear that at this time the practice of using hand signalmen to control the trains along the branch was instituted.

Minor alterations to the racecourse yard continued to be made after 1885. A new disc, applying from No 6 Rd to A Rd, was provided on 26 October 1886 and an additional signal lever was brought into use. On 2 November 1888 the frame was extended by two levers to be 61 levers long (or a new frame fitted). Additional signals were provided, and as there remained one spare lever, this probably meant that four signals were provided. On 1 November 1889 this last space became a working lever when an additional signal was provided. No changes were then made to the frame until the new century.

As already mentioned, it is likely that the name 'Flemington Racecourse' was adopted for the station around 1886/7.

### Dalgety & Co Siding

In December 1884, Dalgety & Co inquired about the goods charges if they were to erect a store on a main line near Melbourne - possibly at Newmarket or Braybrook Junction (Sunshine). By June 1885, the company had decided on a site at Newmarket for their proposed new wool and grain store. This complex was situated inside the Racecourse line curve beyond the Newmarket platform. Construction of the store appears to have taken some time, and it was not until 18 February 1887 that the Coy informed the VR that it proposed to receive goods (including wool) at its new Hide and Skin store at Newmarket. A siding agreement was signed by the company in March 1887, but the siding at this time appears to have only been half finished as over £1413 were still to be expended on the siding. The final accounting for the siding was undertaken in December 1887, and this probably indicates its completion as this would normally occur shortly after the siding was completed.

The siding trailed into the Down line near the end of the Wood Siding. It consisted of a platform road and a loop siding with an intermediate crossover.

### Show Ground cabin

It is almost certain that the Down Loop line between the Show Ground platform and the racecourse was provided in 1885 as all the signalling at Flemington Racecourse was provided at this time. It would appear that the connection to the Loop Line at the Show Grounds was initially worked by hand. The junction was interlocked on 2 November 1888 when a signalbox named 'Show Ground Cabin' was provided. The box contained a 13 lever (6 spaces) No 6 Pattern frame. New connections required the frame to be altered on 28 August 1890, and this required two additional working levers.

Initially, it does not appear that the cabin was used in connection with Show Ground traffic, but this changed on 18 August 1891 when it was noted that the 'apparatus was worked in conjunction with show traffic'.

### Conclusion

As flagged at the start of this history, the early period is opaque. In the next part of the article, however, the story will be taken up from 1897 and more details will be provided.

(To be continued)

## BARWON PARK LOOP

Brett Cleak



(Above) Home departure signals BWP32 and BWP30 at Barwon Park Loop (above). The loop is provided with 1 in 15 tangential turnouts, allowing 65 km/h departures from No. 2 Road. Also evident is the provision of approach lighting. All new signals on the Gheringhap to Marooona resignalling are to be approach lit. The signals will be lit before an approaching train can sight the signal, which is generally at a distance of between 4 km and 10 km depending on the position of suitable track circuits. Lastly it can be seen that the signals are not equipped with ladders, rather a footing and brackets are provided to enable the use of a portable ladder.



(Left) Home arrival signal BWP26 at Barwon Park Loop. Unlike previous CTC loops in Victoria the aspects available on the home arrival signals are in line with South Australian practice. When the train controller sets a main route the signal will display normal speed aspects for moves into No. 1 Road, and medium speed aspects for moves into No. 2 Road. When the train controller sets a shunt route the signal will only display a low speed aspect, even if all tracks in the route are clear. This is different to normal Victorian practice where low speed push buttons are used. Arrangements for simultaneous arrivals are also different, when a main route is set one home arrival signal no simultaneous arrival is possible from the opposing end of the loop, however when a shunt route is set simultaneous arrivals are possible at each end.





*Emergency operation keyswitches for signals BWP10 and BWP12 at Barwon Park Loop, located in a small lockable box adjacent to the relevant signals. Five minutes after the failure of the telemetry between the interlocking and train control the interlocking will enter telemetry failure mode. During telemetry failure mode the keyswitches are enabled, and the home departure signals may be cleared and cancelled from the keyswitches. The home arrival signals will automatically operate during telemetry failure mode, the first train to arrive at the loop will be signalled into No. 2 Road, and a second train arriving will be automatically signalled into No. 1 Road. Similar arrangements are provided on the CTC loops between Pyrenees Loop and Leeor Loop, as well as the remaining CTC loops on the North East SG at McIntyre Loop, Tullamarine Loop, Somerton Loop and Wallan Loop. A similar style of arrangement is also provided at the so called "Passing Lanes" at Donnybrook, Kilmore East and Tallarook.*

## LETTERS TO THE EDITOR

Bob Taaffe found a NSWRR tablet section card that read:

Section Tanyinna – Bethungra – brought into use 8 March 1942. No 6 pattern V nib with F4 [serial number of instrument] at Tanyinna and F6, later F5 at Bethungra. Tablets 1 and 50 brass and 2 to 49 duralium.

What was really interesting was a note stuck on the back of the card –

"Duplication Cootamundra – Juneec

When the final section of the duplication is brought into use one of the recovered tablets from the single line section is to be handed over to the Commissioner for Railways for presentation to Mr Gavin Duffy, Victoria. The matter to be submitted to me with a view to determining the inscription to be placed on the tablet. – [Initialled] WFB 6/12/45."

A pencil annotation stated – Tablet No 1.

WFB was the then S&T engineer - Walter Barton. I wonder what happened to the tablet and what inscription was chosen?

## REVIEW

### NEW SOUTH WALES TRACK AND SIGNAL DIAGRAMS, VERSION 3

Many members are likely to be familiar with the CD of NSW track and signal diagrams published by the ARHS NSW. The third version of this useful resource has recently been published. This version is a very substantial improvement on the previous editions.

Previous editions have collected together all known track and signal diagrams published by the NSWGR and its successors. These diagrams are the NSW equivalent of the Victorian signalling diagrams. Most of the diagrams have the Circular attached (the equivalent of the Victorian A Circular) giving the date the diagram was introduced together with the details of the signalling and safeworking.

Version 3 substantially improves the content.

The existing diagrams have been rescanned at a high

resolution. In the previous editions the fine detail of some of the diagrams has been difficult to read. This is not the case with the new edition - the track and signal diagrams look superb.

The contents have been brought nearly up to date - it seems that it is complete to the end of 2011.

Finally, an entirely new collection of diagrams have been added. These are the equivalent of the Victorian locking sketches - working sketches (the diagrams), locking tables, and locking diagrams. These are extraordinarily interesting. The quality of the scans is not as good as the track and signal diagrams themselves, but perfectly adequate.

In consequence, the collection now contains some 11,160 diagrams, many of which are multi-page.

The collection of diagrams comes with a FileMaker Pro database that can be searched for diagrams of interest.

Installing the collection on a computer is not particularly difficult, although the instructions could be improved. It is important to note that the 'T&SV3 Files' directory must be copied from the DVD to the root directory of the C Drive - copying it to any other location on the hard drive will mean that the FileMaker Pro access will not work, nor can FileMaker Pro access images from the DVD itself. The collection requires around 4.4 gigabytes free on the hard drive.

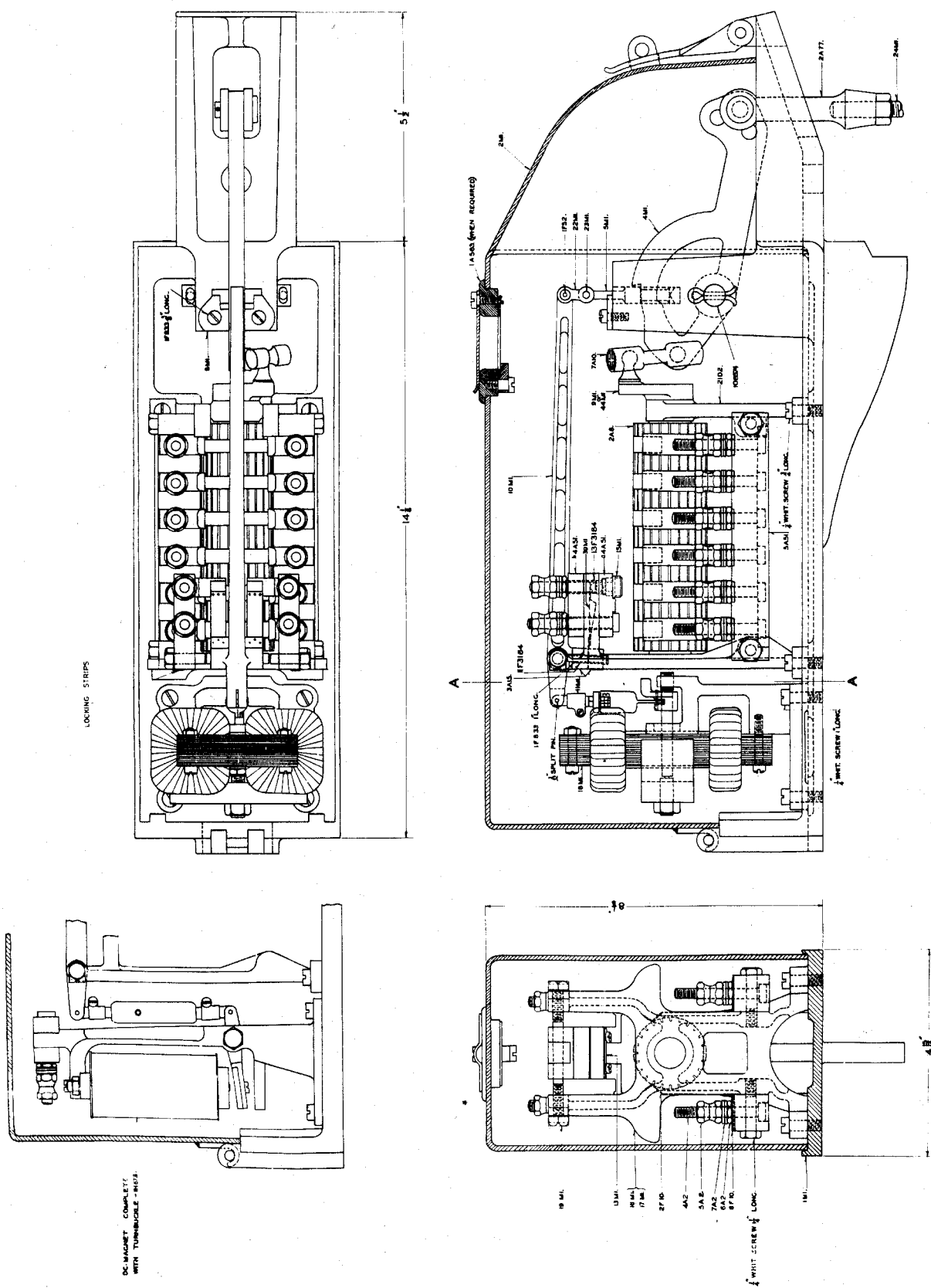
The instructions suggest that the FileMaker Pro access program (T&SV3.exe) should be copied to the desktop. The copied program would not work on my computer, but it worked fine if it was run from the installed directory.

When a diagram is selected, it is displayed in a window within the FileMaker Pro program. To zoom in (or out) the diagram, move the mouse to the bottom of the diagram which will popup the Acrobat toolbar. The '+' and '-' buttons can be used to zoom in or out. Alternatively, with the mouse in the diagram, type 'Ctrl+' to zoom in and 'Ctrl-' to zoom out.

Installing the diagrams requires Windows PC (Windows XP and Windows 7 are known to work), a DVD drive, and 4.4 Gigabytes free on the hard disc. To display the software requires Acrobat Reader v10 or later. A Mac version is expected later in the year.

This DVD can be heartily recommended to the members of the SRS.

Available from the ARHS Bookshop, RRP \$79 (plus postage and handling).



SECTION A-A