

# SOMERSAULT

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SIGNALLING RECORD SOCIETY OF VICTORIA INC



*The Down Home at Yarrawonga protects two sets of plunger locked points at the Up end of the station yard. When the mechanical home was replaced with a light signal, the conventional mechanical facing point locks was retained on the two points facing for arriving trains and the light signal was worked by a wire operated circuit controller placed after the detectors for the points. The signal mast appears to be of the standard type designed at the time of the South Yarra - Caulfield resignalling, and this example is clearly constructed to hold two signal heads. The triangular 'P' sign gives the identity of the signal. Signals (and points) at plunger locked stations are normally identified by letters, starting with 'A' at the Melbourne end, but these were not normally placed on the posts themselves. At some point it was decided to label the post, and the post was 'renumbered' from 'A' to 'P' as it was felt that putting an 'A' plate on the signal might be misinterpreted by drivers. Photo: Steve Malpass*

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## MINUTES OF MEETING HELD FRIDAY 15 JULY, 2011, AT THE SURREY HILLS NEIGHBOURHOOD CENTRE, 1 BEDFORD AVENUE, SURREY HILLS

- Present:** – Wilfrid Brook, Graeme Cleak, Glenn Cumming, Mike Drew, Graeme Dunn, Steven Dunne, Vance Findlay, Michael Formaini, Ray Gomerski, Chris Gordon, Judy Gordon, Bill Johnston, Chris King, Keith Lambert, David Langley, Steve Malpass, Tom Murray, Roderick Smith, David Stosser, Andrew Wheatland and Bob Whitehead.
- Apologies:** – Bruce McCurry, Greg O'Flynn, Colin Rutledge, Laurie Savage, Peter Silva, and Stuart Turnbull.  
The President, Mr. David Langley, took the chair & opened the meeting @ 20:06 hours.
- Minutes of the May 2011 Meeting:** – Accepted as published. Graeme Dunn / Bill Johnston. Carried.
- Business Arising:** – Glenn Cumming corrected the item about Newport South. There will there be a connection from the new stabling sidings at Newport to the Werribee Line. The recent works at Champion Road Newport South involved constructing a bridge over the oil pipelines for the new connection.
- Correspondence:** – Invoice from Victrack for the rent of the rooms at Seymour.  
Payment for the rent of the rooms at Seymour sent to Victrack.  
Invoice from East Highlands Printing for the printing of "Somersault".  
Invoice from SRSUK for the 2010 issues of the UK "Signalling Record".  
Invoice from Local Community Insurance Services for the renewal of the public liability insurance.  
Payment for the public liability insurance was sent to Local Community Insurance Services.  
Payment for the rent of the meeting room was sent to Surrey Hills Neighbourhood Centre.  
Letter to Michael Menzies of the Geelong & South Western Rail Heritage Society responding to the invitation to participate in the planned celebrations of the 150th Anniversary of the opening of the Geelong & Ballarat Railway during April 2012.  
Letter to the Melbourne Model Railway Society thanking them for hosting our visit to their clubrooms on Friday 18 February 2011.  
Letter to Tony Howker thanking him for presenting the Syllabus Item at the May 2011 Meeting.  
Annual Return for 2010 was sent to Consumer Affairs Victoria.  
Melbourne Model Railway Society thanking them for hosting our visit to their clubrooms on Friday 18 February 2011.  
Steve Malpass / Andrew Wheatland. Carried.
- Reports:** – Glenn Cumming reported on planning for a signal box tour on the Frankston Line on Saturday 17 September 2011.  
Bill Johnston reported on progress on the restoration of the Market Street signal bridge. Additional assistance is required.
- General Business:** – The Secretary advised the meeting that the SRSV had purchased a data projector.  
Keith Lambert provided details about various works in the Metropolitan District. A summary of the discussion follows: –
- \* Track and signal alterations at Westall are to be commissioned later this year.
  - \* The commissioning of the major works between Keon Park – Epping – (south of) South Morang is scheduled for November 2011 and will be done as a single job.
  - \* The next stage of the project at Newport will be commissioned in August 2011.
  - \* Alterations and a track slew at Manor Loop will be carried out this weekend.
  - \* Works between Albion – Broadmeadows will be commissioned in August 2011.
- Keith Lambert tabled the timber box used to transfer the Pilot Staff between Creswick and North Creswick. This led to a discussion on the arrangements between Creswick – North Creswick as de-

scribed in the article in the recent issue of "Somersault".

The recent works at Sunbury were discussed. The Sunbury station building has been gutted internally. Chris Gordon advised that the resignalling works for the Hurstbridge Line have been put out to tender. Elders Loop was commissioned on Tuesday 12 July 2011.

Chris Gordon provided details about various works. A summary of the discussion follows: -

- \* Donnybrook Loop is to be commissioned next month.
- \* Manor Loop is to be relocated to allow for the construction of the Werribee West junction for the Regional Rail Link.
- \* Newport - Laverton Loop SG Line is being resignalled with commissioning expected before the end of 2011.

Chris King asked about time allowances for driver reaction to green signals. It was suggested that in Victoria it was an operational matter, not a signal design matter.

This led to a discussion about arrangements at Drome and Rock. The loop roads at Drome and Rock were track circuited but no indication was provided on the control panels.

Rod Smith asked what signalling headways are being provided on Regional Rail Link. The answer is not known at this time and is till to be determined.

Regional Rail Link works between Tottenham and Sunshine were discussed.

Tom Murray discussed a recent derailment at the Portland cable tram.

Bob Whitehead noted that rice traffic from Deniliquin is being roaded to Tocumwal for loading during the Bendigo Line shut down.

Bob Whitehead advised that large containers from Deniliquin will be railed via the Toolamba - Echuca Line.

Syllabus Item: - The President introduced member Andrew Wheatland to present the Syllabus Item.

Andrew presented a selection of approximately 100 digital images from his recent tour of Poland and the United Kingdom. A feature of the presentation were the views of live steam in Poland on regular services, including services where people like Andrew pay to operate the steam locomotives while in traffic. Also included were recent scenes of operations on the Puffing Billy Railway where Andrew is the Signals Manager. The presentation was thoroughly enjoyed by those present.

At the completion of the Syllabus Item, The President thanked Andrew for the entertainment & this was followed by acclamation from those present.

Meeting closed at 22:03 hours.

The next meeting will be on Friday 16 September, 2011 at the Surrey Hills Neighbourhood Centre, Bedford Avenue, Surrey Hill, commencing at 20:00 hours (8.00pm).

## SIGNALLING ALTERATIONS

*Details of the following alterations have come to hand.*

(25.06.2010) **Benalla - Oaklands**

When a train has not operated on the line for more than 48 hours the following instructions are to be observed:

- \* If a competent employee is to travel with the train. The driver is to be prepared to stop short of any protected level crossing if the protection equipment is not operating and the competent employee is to operate the protection equipment by means of the test switch.
- \* If a competent employee is to travel by road. The employee is to operate the test switch and inform the train crew that they are clear to proceed over the crossing
- \* If a train is delayed en route and exceeds the 48 hour limit, the train crew are to be prepared to stop short of any protected level crossing if the protection equipment is not operating. The crew is to operate the protection equipment by means of the test switch

If a rail movement has not passed over the line for more than two weeks, the ARTC Operations Manager North South Corridor will provide additional instructions.

12.12.2010 **Seymour Loop**

On Monday, 19.12., the 1220 metre intermediate siding leading from the East Line at Seymour Loop was made available for use. Points 115 at 101.700 km were brought into service.

The main line points are equipped with a point motor and operate in conjunction with a Hayes Derail and Crowder in the siding. The points and derail are operated locally from a V5PSW keyswitch released by the train controller.

Two V5PSW keyswitches are provided to operate the points, one to accept the release, and the second to operate the points. When the release from the train controller is available the yellow indication light on the release keyswitch will flash. The key can then be turned to the right to accept the release, and the key must be held in that position until the light becomes steady. The indicators on the points keyswitch will be lit when the release has been accepted. There are three indicators: a green points normal indication, a yellow points reverse indication, and a white points free indication. To operate the points the keyswitch must be held over until the appropriate indication light illuminates (which may take up to 20 seconds).

When a train is entering the siding, the train must be stopped on the main line between 3 and 100 metres

from the toe of the points.

A separate panel is provided for when the motorised points or the release fails. Should a failure occur, a V5PSW key must be inserted in the lock and turned. This will illuminate an alarm on the train controllers panel. The yellow release light will begin to flash, and after a 4 to 9 minute delay, the release will be effective. The button can then be depressed and the Emergency Operations Lock (EOL) will be free to be removed.

16.12.2010 **Dimboola**

From Thursday, 16.12., Dimboola will be permanently controlled remotely from ARTC Train Control at Mile End. The CTC sections will become Pimpinio Loop - Dimboola Station - Dimboola Loop. The illuminated letter 'A's will be removed from Homes 362/6 and 362/26.

22.12.2010 **Murtoa**

From Wednesday, 22.12., Murtoa will be permanently controlled remotely from ARTC Train Control at Mile End. The CTC sections will become Lubeck Loop - Murtoa Station - Murtoa Loop. The illuminated letter 'A's will be removed from Homes 298/6 and 298/26. The 5P keyswitches for the operation of Signals 298/8 and 298/14 for the operation of the Wimmera Hwy level crossing were abolished.

24.01.2011 **Manor Loop - Gheringhap**

On Monday, 24.1., the pedestrian crossing at Furner Ave (72.660 km) will be relocated to 72.695 km to allow construction of a pedestrian underpass.

10.02.2011 **Alumatta Loop**

On Thursday, 10.2., Alumatta Loop will be booked out of use and will not be available for crossing trains. Points 3 and 7 will be secured normal. Prior to signalling a train from Glenrowan Loop or Chiltern Loop, the Train Controller must operate the Down or Up Departure Home signals (respectively) at Alumatta Loop.

14.02.2011 **Glenrowan Loop**

On Monday, 14.2., Glenrowan Loop will be booked out of use and will not be available for crossing trains. Points 3 and 7 will be secured normal. Prior to signalling a train from Benalla Loop or Chiltern Loop, the Train Controller must operate the Down or Up Departure Home signals (respectively) at both Glenrowan and Alumatta Loops.

02.03.2011 **Benalla**

On Wednesday, 2.3., Down Home Arrivals BNL4 and BNL24 will be relocated 30 metres in the Up direction and on the same side of the line as formerly. Amend Diagram 50/10 (Benalla - Glenrowan).

03.03.2011 **Wangaratta**

On Thursday, 3.3., a permanent speed restriction was introduced to ensure minimum warning times at Sisely Ave for Up stopping trains. The boards are lettered "Stopping Trains Max Speed to Sisely Ave 40 km/h" and are erected at the Up ends of both platforms. Amend Diagram 56/10 (Alumatta - Bowser).

17.03.2011 **Donnybrook Loop**

On Thursday, 17.3., the Up end switch locked siding was booked out of service and will no longer be available for the stabling of track machines.

(07.04.2010) **Maroona - Portland**

When a train has not operated on the line for more than 48 hours the same instruction as for the Benalla - Yarrawonga line are to be in force.

08.04.2011 **Portland**

As of Friday, 8.4., instructions were issued for the operation of Portland.

The Port of Portland Harbour Sidings are part of the Port of Portland Sidings. The Arrival and Departure Roads of the Port of Portland Sidings are bi-directional running roads and the Signaller must ensure that the points are set for a train to arrive or depart from Portland. Before clearing a signal for a train to arrive in the Depot sidings, the Signaller must advise the Driver by radio of the intended destination of the movement. If the movement is along the main line at the Depot, the Signaller must ensure that the points are secured for the movement and the E pattern Fortress Key is secured in the panel. If a light engine or local pilot is to arrive direct into the Depot Sidings, it must be brought to a stand at the points before they are reversed.

Before a movement enters the Port Sidings beyond Post 13, the Signaller must advise the employee in charge of shunting. The shunter must ensure that the points are set for the intended movement and the road is clear. The shunter must then advise the Signaller of the location the movement is to be made to. After permission has been given to a movement to enter the Port Sidings, the track on which the train will arrive must not be fouled in any way. Should a shunter not be on duty, the Signaller is responsible for ensuring the points are set and the track is clear.

Before a movement departs from the Port Sidings towards Post 14, the driver must obtain the permission of the shunter, or the Signaller (if the shunter is not on duty).

Prior to any locomotive proceeding past No 2 Quay Road, the shunter must obtain permission from the employee in charge of the Port of Portland area. Locomotives must not exceed 15 km/h when passing over the grain discharge pit. The level crossing protection equipment at Cliff Street and Quay Road is

operated manually by the shunter.

#### Unattended Operation

A Signaller must be in attendance at Portland 30 minutes before a train arrives unless the following procedures are in force. If a train is to arrive at Portland while it is unattended, the Signaller must clear Signals 1, 5, 11, and 13 and inform the Train Controller of the road the train is to arrive into. The Train Controller must inform the Driver, who must ensure that the road is set accordingly when arriving. After the train has arrived into the Harbour Sidings, the locomotives can be detached and stabled locally as required. The Driver must ensure the train has arrived complete and fulfill the Train Order.

#### Kalari Siding

This siding is located between the Henty Hwy overpass and Points 2 (Depot Sidings Y Junction) within the protection of Homes 1, 4, and 12. The points at each end of the siding are secured by A pattern Annett locks and are rodded to Hayes Derails and Crowdors. The Annett key is secured in a electric crosslock adjacent to Points 2. The siding is fenced with manually operated gates at each end of the siding. There is 219 metres standing room inside the gates, and 249 metres between derails. Home 5 and Dwarf 3 are located between the points at each end of the siding.

Before shunting the siding, the Train Controller must obtain the permission of Kalari and inform the shunter accordingly. The shunter is to obtain the Annett key, operate the points, and start the flashing light warning system. Kalari employees must not encroach on the siding while the lights are operating. If it is necessary to load or unload a vehicle while the lights are flashing, the permission of the shunter must be obtained.

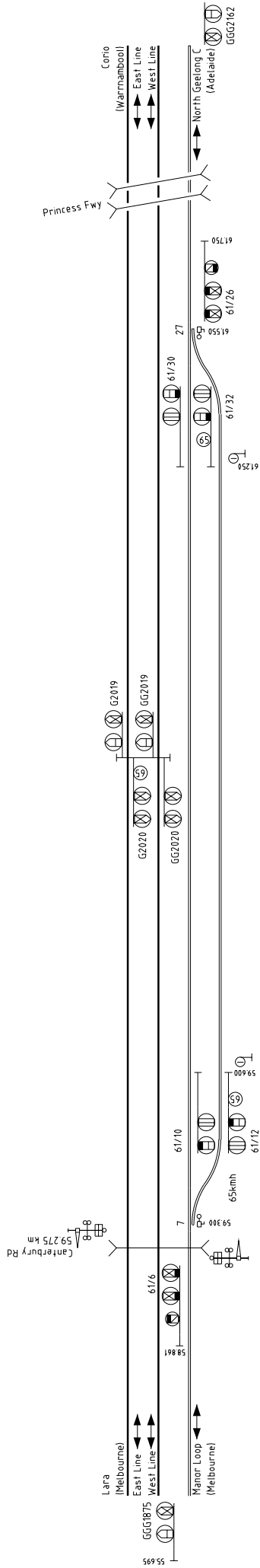
#### 17.04.2011 **Passing Signals at Stop**

From 0100 hours, Sunday, 17.4., Rule 1, Section 3, TA20 (the ARTC Rulebook applicable to the DIRN Victorian Network east of Dimboola) relative to passing signals at Stop has been altered to be identical to the 1994 Victorian Rulebook. TA618/02 (issued 19/4/02) is cancelled.

*The following alterations were published in WN 23/11 to WN 31/11 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.*

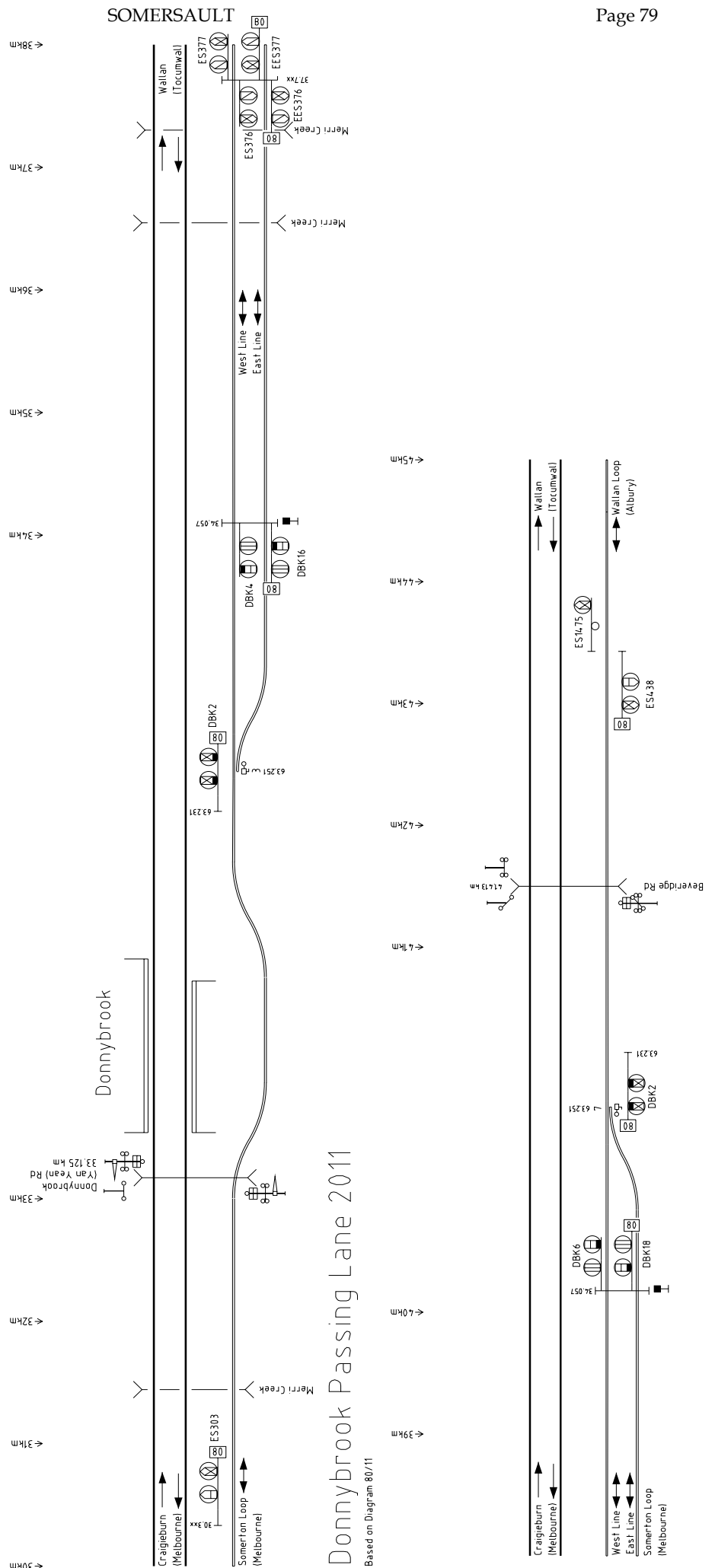
- 23.05.2011 **Ballarat East** (TON 151/11, WN 27)  
On Thursday, 23.5., the Turntable Road at Ballarat East was booked out of service as part of the stabling project.
- 07.06.2011 **Benalla**  
Speed restrictions (80 km/h) have been provided at each signal located on the right hand side of the line at Benalla. This is necessary to satisfy an interim condition of ARTC's application to vary their accreditation associated with the implementation of the new signalling system.
- (14.06.2011) **Metrol** (SW 219/11, WN 23)  
When a signal fails to clear for a route that crosses the border between two panels the train must be signalled towards another route. If no other route is available, further direction will be given by the Manager Safeworking and Signalling.
- 18.06.2011 **Manor Loop** (SN 4088/11, SW 231/11, WN 24)  
Commencing on Saturday., 18.6., and lasting until the work was completed, Up end Points 7 were relocated 50 metres in the Up direction to 36.602 km. Homes 38/6 were relocated to a temporary position on the right hand side of the line at 36.594 km.  
Diagram 84/11 (Werribee Racecourse - Little River) replaced 30/11.
- 19.06.2011 **Jolimont - Parliament** (SW 224/11, WN 24)  
On Sunday, 19.7., Home 199 on the lead to the City Circle Loop was converted to a TC2 LED head.
- 19.06.2011 **Broadmeadows** (SW 220/11, WN 24)  
On Sunday, 19.7., Dwarf BMS432 in Siding C was relocated 12 metres in the Down direction. Track circuit 532T was altered accordingly. Data and circuit changes were made to reflect these alterations, and also the abolition of the Almurta Ave pedestrian crossing.
- 22.06.2011 **Woodvale BP - Dingee** (SW 77/11 & 78/11, WN 24)  
On Wednesday, 22.6., boom barriers were commissioned at Bridgewater Rd (185.129 km) and Sebastian Rd (186.136 km) which were previously passive crossings. The boom barriers are operated by a level crossing predictor. Trains travelling at more than 50 km/h at the indicator boards may accelerate before entering the level crossing. Remote monitoring equipment was provided.
- 25.06.2011 **Dandenong - Narre Warren** (SW 226/11, WN 25)  
On Saturday, 25.6., Automatics D1152, D1181, D1204, and D1284 were converted to TC2 type LED heads.
- 26.06.2011 **Southern Cross** (SW 227/11, WN 25)  
On Sunday, 26.6., Crossover 025 was brought into service.
- 26.06.2011 **Albion Junction** (SW 234/11, WN 25)  
On Sunday, 26.6., Points 95 were renewed as a set of tangential points on concrete bearers and are now operated by an M23A dual control point machine. Amend Diagram 9/10 (Albion - St Albans).
- (28.06.2011) **Dandenong - Hallam** (SW 131/11, WN 25)  
Diagram 131/10 (Dandenong - Hallam) replaced 121/06 as in service.

- 27.06.2011 **Donnybrook Loop**  
On Monday, 17.6., Donnybrook Loop was booked out of use to allow final construction of the passing lane. Before signalling a train towards Donnybrook Loop, the Train Controller must clear the appropriate Departure Home at Donnybrook Loop.
- 28.06.2011 **Flemington Racecourse** (SW 238/11, WN 25)  
On Tuesday, 28.6., the following alterations took place. Ground Disc Post 73 (Disc 3) was converted to a LED 2 position Dwarf. Dwarf Post 68 (lever 40) was also converted to a LED 2 position Dwarf. Buffer lights were provided on the baulks at the end of Tracks 1, 2, 3, and 4.  
Diagram 35/11 (Flemington Racecourse Line) replaced 51/07.
- 29.06.2011 **Beaufort - Ararat** (SW 79/11, WN 25)  
On Wednesday, 29.6., boom barriers were commissioned at Langi Ghiran Picnic Ground Rd (198.341 km) which was previously a passive crossing. The boom barriers are operated by a level crossing predictor. Remote monitoring equipment will be provided.  
Diagram 76/11 (Wendouree - Beaufort) replaced 40/11. From the diagram it appears that there are now only three passive level crossings remaining between Ballarat and Ararat.
- 01.07.2011 **Maryborough** (TON 150/11, WN 27)  
On Friday, 1.7., No 2 Road was booked back into service. TON 138/11 was cancelled.
- 04.07.2011 **Ballarat** (TON 153/11, WN 27)  
On Monday, 4.7., Nos 8, 9, and 10 Roads were reduced in length due to track damage caused by semi-trailers operating in the container area. The lengths of the roads are now: No 8 - 351 metres, No 9 - 309 metres, and No 10 - 395 metres. Baulks have been fitted and the crossover from No 7 to No 8 Road has been secured normal. Amend Diagram 78/10 (Ballarat).
- 04.07.2011 **Underbool** (TON 152/11, WN 27)  
On Monday, 4.7., the siding was booked out of service due to Grain Corp Silo construction activity.
- 09.07.2011 **Elders Loop** (SN 4237/11)  
From Saturday, 9.7., work will be undertaken to commission the new Elders Crossing Loop.  
At the commencement of the work the signals at Elders Grade Crossing were abolished - Down Automatic GGG1961, Down Home 61/30, Up Home 61/10, and Up Automatic GGG2150. The following signals were commissioned but fixed at stop: Up Home Arrival 61/26, Up Departure (Main) 61/10, Up Departure (Loop) 61/12, Down Departure (Main) 61/30, Down Departure (Loop) 61/32, and Down Home Arrival 61/6.  
During the commissioning, Train Authority Working will be introduced between Manor Loop - Elders Crossing Loop - Thompson's Rd (North Geelong C). 'Start Train Authority Working' signs will be provided on Homes 38/30 and 38/32 at Manor and Home 72/24 at Thompsons Rd. 'End Train Authority Working' signs will be provided on Home 38/26 at Manor and Home 72/6 at Thompsons Rd. Signallers will be located at Manor Loop, Elders Loop, and Thompsons Rd and will work under the direction of the Operations Controller at Elders Loop. Train Authorities will be issued by the Signaller at the exit of the section to the Signaller at the entrance of the section where the train will enter. The Signaller at the entrance to the section will confirm that the section is clear by consulting the TRB and the Train Authority Book, and then ('in liaison with the Operations Controller') contact the Signaller at the exit. The Signaller at the exit will then confirm that the section is clear by consulting the TRB and Train Authority Book, and then prepare and dictate the Train Authority to the Signaller at the entrance. The Signaller receiving the Train Authority must repeat it back to the Signaller. The Driver does not need to verify the Train Authority, but must sign the butt of the form.
- 11.07.2011 **Sydenham** (SW 257/11, WN 28)  
On 11.7., Post SDM715 was relocated 9 metres in the Up direction to allow for the future provision of Points 625U. Diagram 33/11 (Keilor Plains - Sydenham) replaced 47/07.
- (12.07.2011) **Werribee Racecourse - Little River** (SW 264/11, WN 27)  
Diagram 86/11 (Werribee Racecourse - Little River) replaced 84/11 due to a standard gauge track slue and signal relocation at Manor Loop.
- 12.07.2011 **Elders Crossing Loop** (SN 4238/11, SW 85/11, WN 27)  
On Tuesday, 12.7., Elders Crossing Loop was commissioned. The 1800 metre loop is located at 61 km on the Up side of the Princes Freeway overbridge. The CTC sections will be Manor Loop - Elders Crossing Loop - Thompson's Road (North Geelong).  
Diagrams 32/11 (Lara) and 34/11 (Corio - North Shore) replaced 16/11 and 4/11 respectively.
- 13.07.2011 **Ballarat (Bunge Siding)** (TON 173/11, WN 29)  
On Wednesday, 13.7., Bunge Siding was booked out of use as the siding is not in use. The hand points were spiked for the West Line.
- 14.07.2011 **Ballarat** (SW 84/11 & 87/11, WN 27 & 28)  
On Thursday, 14.7., the Doveton Street siding was abolished. Dwarfs 10 and 12 (applying to and from the West Line), and Dwarfs A and B (applying to moves along the siding across Doveton St) were abolished. The pushbutton controls for Dwarfs A and B were also abolished. Baulks were provided on the siding on the Down side of Doveton St. The VDU display at Ballarat was updated to reflect these changes. Operat-



## Elders Crossing Loop 2011

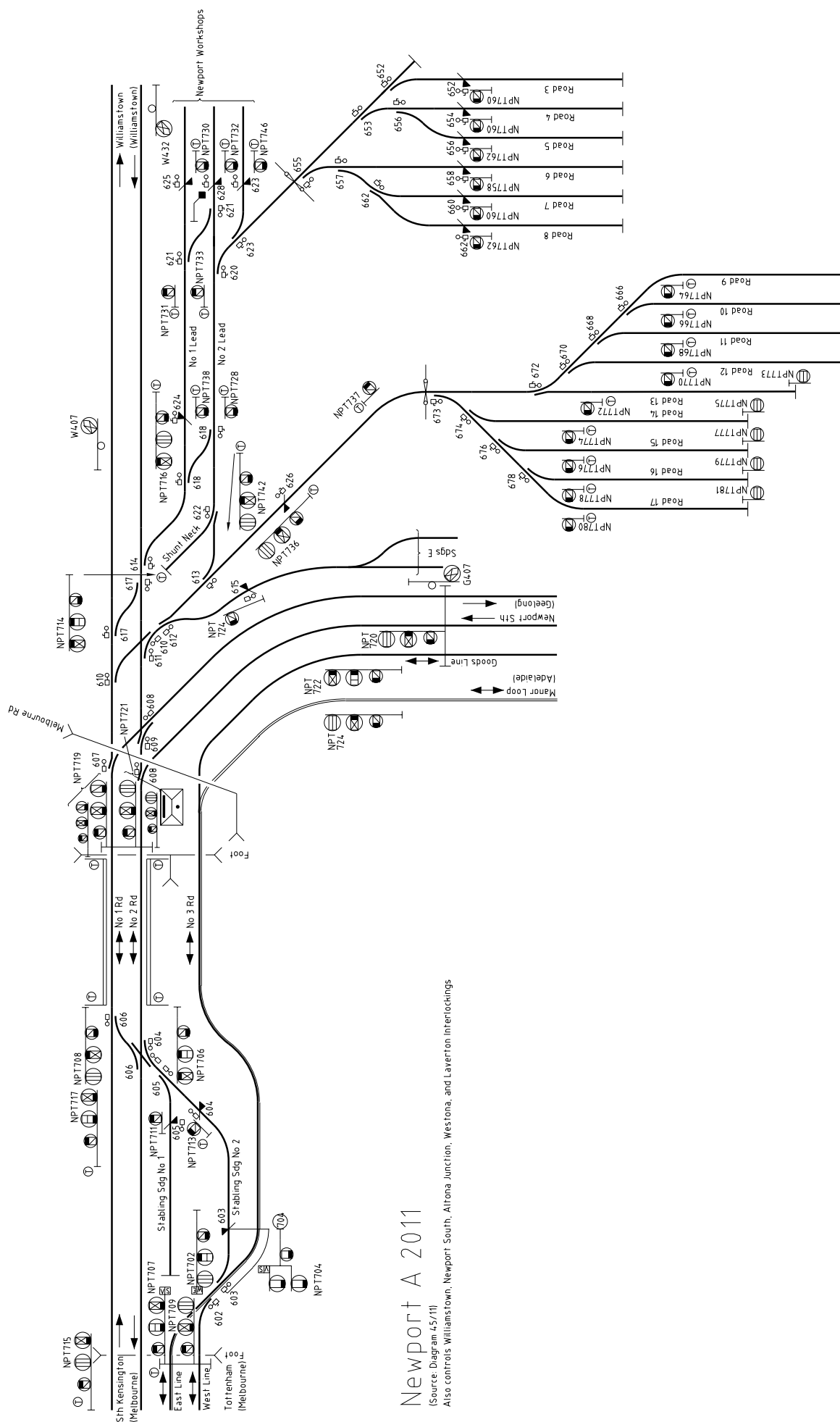
Based on Signalling Diagram /11



ing Procedures 72 (Doveton St Sidings) and 74 (Ballarat - Wendouree Defective Signals) were re-issued. Amend Diagram 80/10 (North Ballarat Junction).

- 15.07.2011 **Bendigo** (SW 86/11, WN 28)  
On Friday, 15.7., No 5 Dock Siding was realigned and shortened to 139 metres. Buffers were provided, and the adjacent platform was removed. No 5 Dock Siding is now available to stable trains. Amend Diagram 22/06 (Bendigo).
- 16.07.2011 **Donnybrook**  
Between Saturday, 16.7., and Sunday, 17.7., the Up end points at 33.580 km will be replaced by a Vossloh Cogifer 80 km/h turnout at the same location. The Down end points at 34.705 km will be removed.
- 16.07.2011 **Manor Loop** (SN 4262/11 & SN 4263/11, WN 27)  
From Saturday, 16.7., to Sunday, 17.7., the points and signals at the Down end of the loop were disarranged to allow the points to be relocated. Points 27 will be taken out of service and the point machine removed. Up Home Arrival 38/26 and Down Home Departures 38/30 and 38/32 will be fixed at stop. On completion of the work Points 27 were relocated 50 metres in the Up direction to 38.437 km and the track was slued approaching the points. Down Departure Homes 38/30 and 38/32 were relocated 53 metres in the Up direction from 38.406 km to 38.353 km. Up Arrival Home 38/26 was temporarily relocated to the slued line.
- 18.07.2011 **Tottenham - Sunshine** (SW 267/11, WN 28)  
On Monday, 18.7., the Up and Down lines have been slued to the north (Up) side of the original alignment between 9.910 km and 10.695 km. Down Automatic M375 was relocated to the new alignment, and Up Automatic M376 was provided with LED heads.
- 18.07.2011 **Sunbury** (SW 263/11, WN 27)  
Between Saturday, 2.7., and Monday, 18.7., (sic) Sidings A and B were abolished and Points 27U were secured normal. Down Home SBY32 was relocated 35 metres in the Up direction, and Down Home SBY34 was relocated 15 metres in the Up direction. Diagram 92/11 (Watergardens to Clarkefield) replaced 118/08.
- (19.07.2011) **2011 Book of Rules** (WN 28)  
Consultation drafts have been issued of the 2011 Book of Rules. The comment period will close on Friday, 29.7., and a final consultation/risk assessment will be conducted in August.
- 20.07.2011 **Ballarat** (TON 172/11, WN 29)  
On Wednesday, 20.7., the West Line was booked back into use and the point clip was removed from Points 9. TON 161/11 is cancelled.
- 24.07.2011 **Dandenong - Hallam** (SW 279/11, WN 29)  
On Sunday, 24.7., Automatic D1033 was converted to a TC2 LED signals.
- (26.07.2011) **Eaglehawk - Inglewood** (SW 91/11, WN 29)  
Signalling Diagram 66/11 (Bridgewater) replaced 94/06 (Eaglehawk - Bridgewater) as in service.
- (26.07.2011) **Eaglehawk - Piangil** (SW 91/11, WN 29)  
Signalling Diagrams 52/11 (Eaglehawk - Raywood), 58/11 (Tandarra - Mitiamo), 54/11 (Pyramid - Kerang), 60/11 (Lake Boga), 56/11 (Swan Hill), and 62/11 (Woorinen - Piangil) were issued.
- (26.07.2011) **Bendigo - Echuca** (SW 92/11, WN 29)  
Signalling Diagrams 72/11 (Bendigo), 74/11 (North Bendigo Junction), 90/11 (Goornong - Elmore), and 96/11 (Rochester - Echuca) replaced 22/06 (Bendigo), 98/09 (North Bendigo - Elmore), and 16/10 (Rochester - Echuca) as in service.
- (26.07.2011) **Stratford - Bairnsdale** (SW 90/11, WN 29)  
Signalling Diagrams 98/11 (Stratford) and 100/11 (Bairnsdale) replaced 128/07 and 16/09 respectively as in service.
- 31.07.2011 **Book of Rules (Metro)** (SW 229/11, WN 25)  
On Sunday, 31.7., in preparation for the issue of the 2011 Book of Rules, Sections 34 (Operating Procedures) and 35 (Underground Loop Operating Instructions) have been removed from the 1994 Book of Rules. These have now been converted into site specific instructions (Inner, Clifton Hill, Burnley, Caulfield, and Northern) and will be available on the Metro Intranet.
- 31.07.2011 **Ruthven - Keon Park** (SW 291/11, WN 30)  
On Sunday, 31.7., Automatics T487 and T501 at Ruthven and Home KPK103 were converted to LEDs.
- 31.07.2011 **Dandenong - Hallam** (SW 286/11, WN 29)  
On Sunday, 31.7., Automatics D1097 and D1098 were converted to TC2 LED signals.
- (02.08.2011) **Signalling of Trains** (SW 275/11, WN 30)  
The instructions applying to the signalling of trains in SW 49/10 (WN 12) at Glenhuntly, Mordialloc, Springvale, Brighton Beach, Kensington, Newport, Upfield, Essendon, St Albans, and the Metrol Western Panel have been cancelled.
- (02.08.2011) **Donnybrook Passing Lane** (SW 94/11, WN 30)  
The Donnybrook Passing Lane was commissioned. Signalling Diagram 80/11 (Donnybrook - Wallan) replaced 24/10.





Newport A 2011

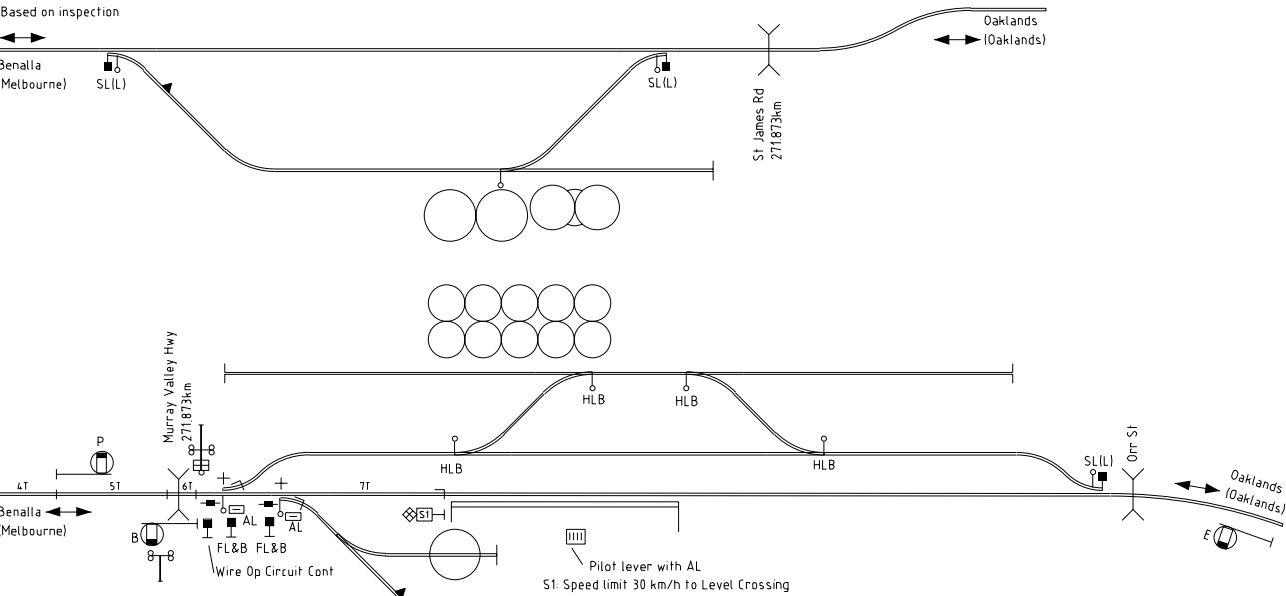
(Source: Diagram 45/11)

Also controls Williamstown, Newport South, Altona Junction, Westona, and Laverton Interlockings

BENALLA - YARRAWONGA - OAKLANDS 2011

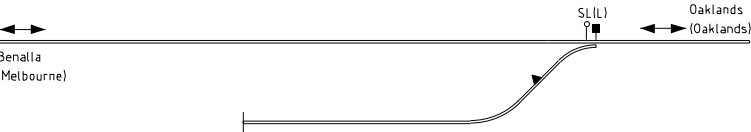
Brian Coleman

St James (228 km)



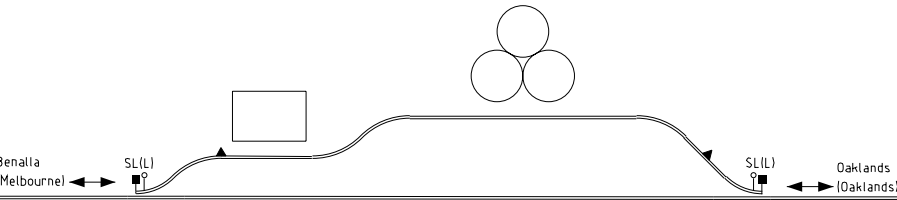
Yarrawonga (260 km)

Based on inspection & SA RF595F



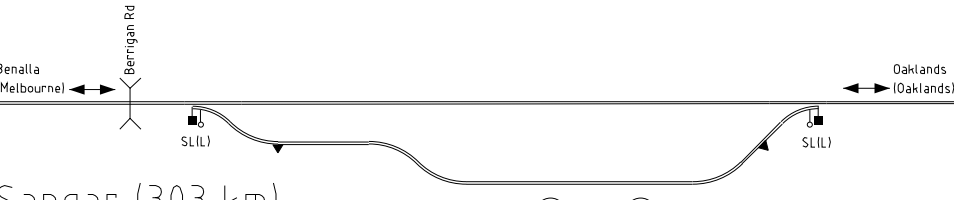
Sloane (272 km)

Based on inspection & SA S1855/84



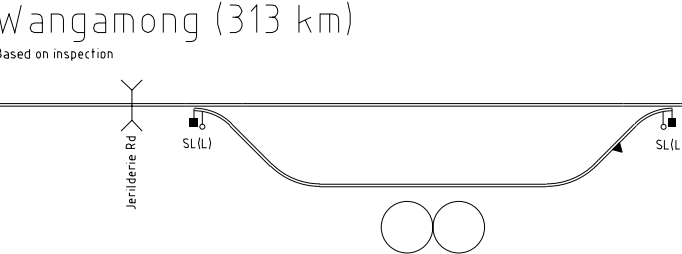
Warragoon (282 km)

Based on inspection & SA RA3V6



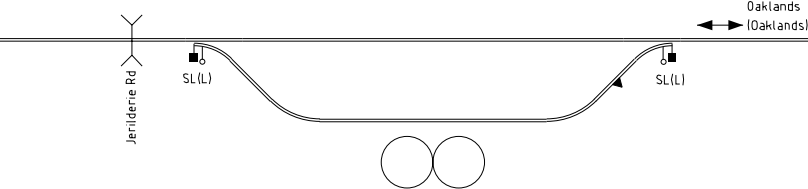
Sangar (303 km)

Based on inspection & SA RA3V15



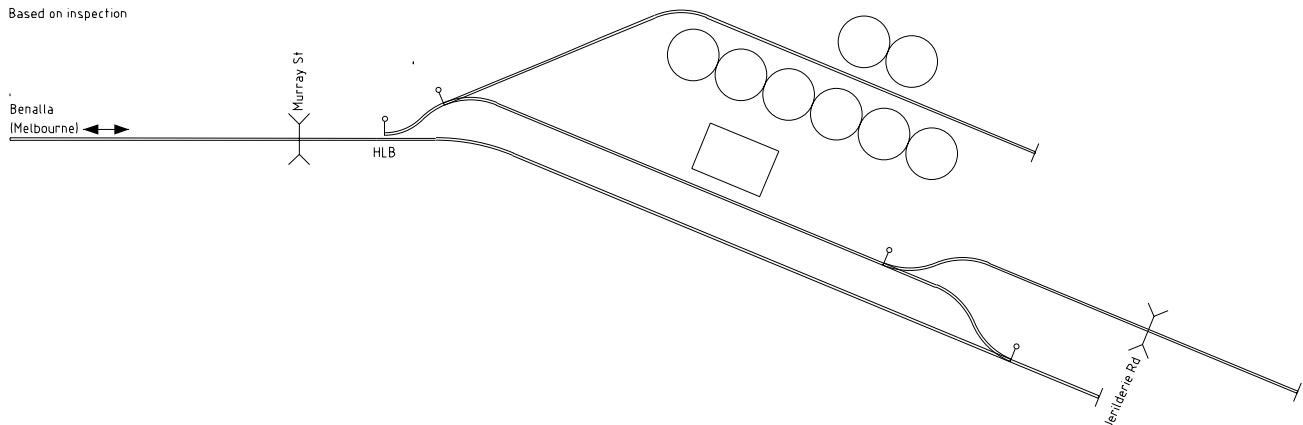
Wangamong (313 km)

Based on inspection



## Oaklands (321 km)

Based on inspection



## SIGNALLING ALTERATIONS

(Continued from page 81)

- (09.08.2011) **Ballarat** (SW 97/11, WN 31)  
 Operating Procedure 74 (Ballarat - Wendouree Defective Signals) was re-issued. Clauses b and c were updated to bring the procedures to be followed if point detection is lost in line with those used at other locations where the signalling is controlled from a remote location. SW 87/11 is cancelled.
- 09.08.2011 **Creswick** (SW 95/11, WN 31)  
 On Tuesday, 9.8., boom barriers were commissioned at Williams Rd (176.032 km) on the Down side of Creswick which were previously equipped with flashing lights. The boom barriers are operated by a level crossing predictor and trains travelling at more than 50 km/h at the predictor boards can accelerate before reaching the crossing. Remote monitoring equipment will be provided.
- 15.08.2011 **Newport** (SW 299/11, WN 31)  
 Between Friday, 12.8., and Monday, 15.8., the final signalling at the entrance to the workshops and stabling sidings was commissioned, including the connections between No 1 Lead and the Williamstown line. Stabling Sidings No 9 to 17 were commissioned but will not be brought into service until all civil and overhead works are completed.
- The following alterations took place:
- \* Down Controlled Automatic NPT715 was converted to a Home
  - \* Down Home NPT719 and co-acting signal NPT719P were converted to LED.
  - \* Down Home NPT721 was converted to LED and a co-acting signal NPT721P was provided.
  - \* Facing Crossover 617 was provided in the Williamstown line.
  - \* Points 614 were provided in the Down Williamstown line.
  - \* New Up Home NPT714 was provided at 10.840 km on the Williamstown line. Movements from NPT714 towards No 1 Road via Crossover 617 will be by low speed signal only.
  - \* New Down Automatic W407 was provided at 10.956 km on the Williamstown line (306 metres in advance of NPT719).
  - \* Up Automatic W416 was converted to a Home and renumbered NPT716.
  - \* Up Automatic W426 was relocated 65 metres in the Down direction and renumbered W432.
  - \* Derail 612D in No 2 Lead was abolished and Points 622 were provided to the new Shunting Neck.
  - \* New Up Home NPT742 was provided in No 2 Lead.
  - \* Crossovers 618 and 621 were provided between Nos 1 and 2 Leads.
  - \* Derail and Crowder 624 was provided in advance of Dwarf NPT738.
  - \* New Up Dwarfs NPT728 & NPT 738 and Down Dwarfs NPT731 (with train stop) & NPT733 (with train stop) were provided in No 1 and 2 Leads.
  - \* The driver operated keyswitch and noticeboard for the gates over No 1 Workshops Lead was relocated 25 in the Down direction to allow for a six car train to stand clear of NPT738.
  - \* New Up Dwarf NPT730 will be provided for moves from Newport Workshops.
  - \* Derail and Crowder 625 was provided in advance of Dwarf NPT730
  - \* Up Dwarf NPT734 (from Newport Workshops) will be renumbered NPT732.
  - \* Points 618, 622, 624, 625, 626, and 628 self normalise 10 seconds after a train movement clears the track circuit.
  - \* Stabling Sidings 9 to 17 were provided. Up Home NPT736 was provided. Down Dwarf NPT737 (with train stop) was provided at the entry to the sidings. Up Dwarfs NPT764, NPT766, NPT768, NPT770, NPT772, NPT774, NPT776, NPT778 and NPT780 were provided. Down Dwarfs NPT773, NPT775, NPT777, NPT779, and NPT781 were provided at the Down end of the sidings and fixed at stop. Points 666, 668, 670, 672, 674, 676, and 678 were provided. Derail and Crowder 626 was provided. All Dwarfs are fitted

Continued on Page 90

## VICTORIAN RAILWAY TABLETS

Several original Victorian Railways tablets and tablet hoops were lent to me recently and photographs were taken and the vernier calliper was dug out from its box to measure up.

Victoria used Tyers No 5 Pattern tablet instruments, and the final three sections in use were on the Brooklyn Loop Line: Newport A - Thomas' Mill - Brooklyn A - Sunshine. These were replaced by large electric staff instruments in the late fifties: Newport A - Thomas' Mill on 4 April 1957, Thomas' Mill - Brooklyn A on 18 December 1959, and Brooklyn A - Sunshine on 31 March 1960. The three tablets and the hoops inspected came from the Thomas' Mill - Brooklyn A and Brooklyn A - Sunshine sections.

### Tablets

Tyers No 5 Pattern tablets were the same size as No 7 Pattern tablets (as used in New Zealand). The tablets were circular and just under 4 inches in diameter and  $\frac{5}{16}$ " thick. The newest tablet was 4", the other two were  $3\frac{15}{16}$ " in diameter. This difference could represent wear, but this sort of wear is unlikely in a metal tablet. As this dimension is not critical, the smaller diameter probably represents clearance to reduce jamming in the machine. For comparison, Heine states that New Zealand tablets were  $3\frac{29}{32}$  inch in diameter, between  $\frac{9}{32}$  and  $\frac{11}{32}$  inch thick, and the fibre version weighed 55 grams.

The sample tablets represent two types of material. Two are of 'fibre' which appears to be some form of early plastic and was used for Tablets in Victoria, New Zealand, and the UK. This plastic could clearly be machined. The third table is of metal - probably duraluminium which is also used to make staffs. Gavan Duffy, in his writings, notes that early tablets were also made of brass.

The gauge (or configuration) of a tablet is represented in two ways - by the hole in the centre and the notch in the rim.

It is believed that the hole in the centre of the tablet was

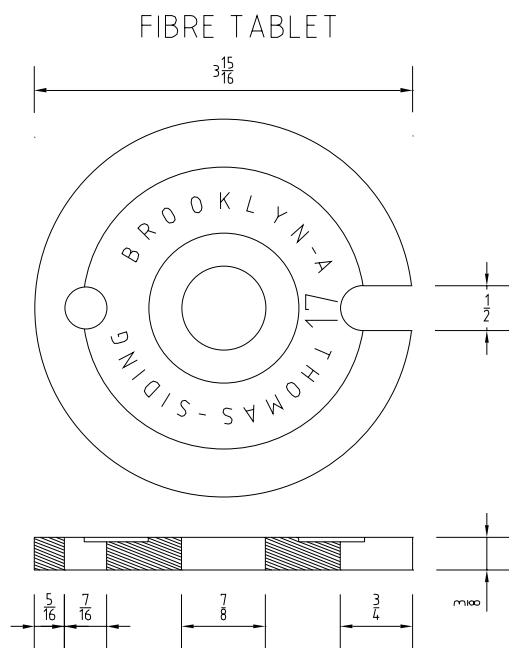
only intended for use by people - it was not detected by the instruments or the locks. Stirling states that four standard tablet gauges were in use in the UK - circle, square, triangle, and diamond. New Zealand also used these shapes until 1933. One benefit claimed by Stirling of this hole was that the shape could be felt by fingers in poor lighting to confirm the section! With the sample Victorian tablets, the Thomas Mill - Brooklyn A section was round and the Brooklyn A - Sunshine section was square. It is quite likely that Victoria only used these two gauges. Certainly there was never a location that required three tablet gauges, and the first special lock register assigns one of two patterns (labelled 'No 1 Pattern' and 'No 2 Pattern') to each tablet lock.

The notch in the rim was used to check the gauge in the instrument and to ensure that the tablet was inserted in the correct instrument. The notch for a circle tablet was a deep slot  $\frac{1}{2}$ " wide with a semi-circular end, while the notch for a square gauge was a broad flat notch. The same notches are shown in both Stirling (ud) for the UK and xxx. for New Zealand.

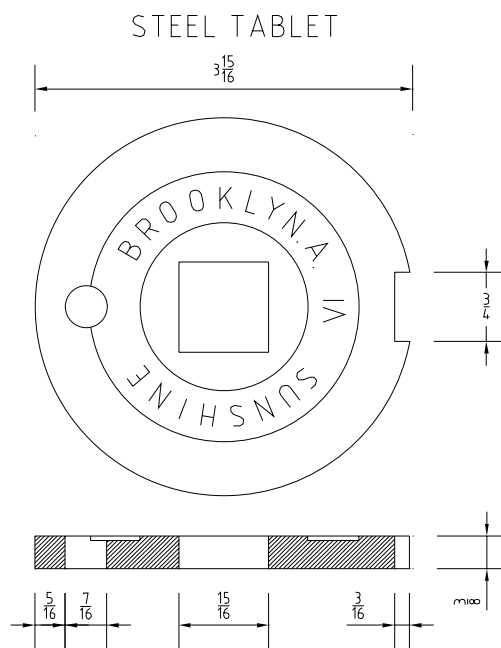
In addition to the gauge hole and the notch, there was a second circular hole through a tablet directly opposite the gauge notch. This hole might have been provided as an aid to prevent the tablet turning in a lock, or when machining the tablet.

The section names were punched into the top of the tablet in an arc, and the serial number of the tablet was punched on the front next to the gauge notch. The lettering

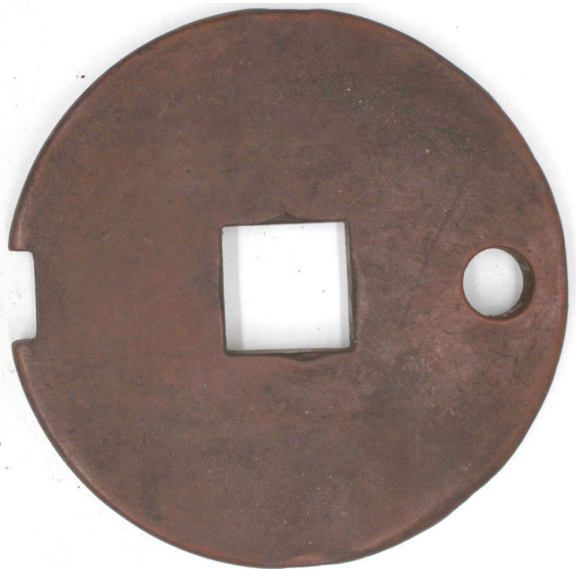
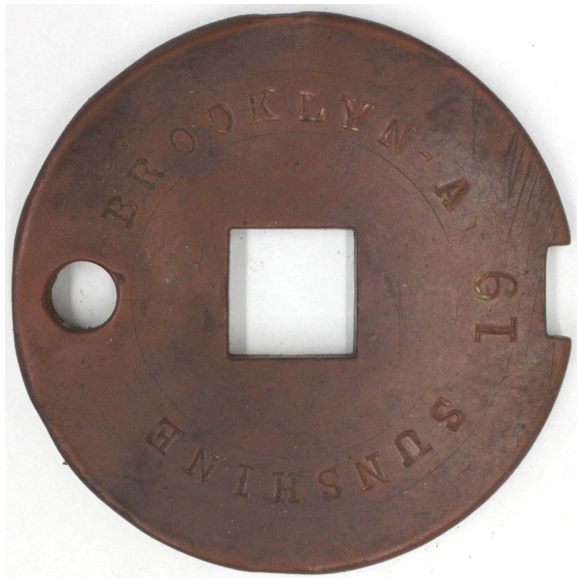
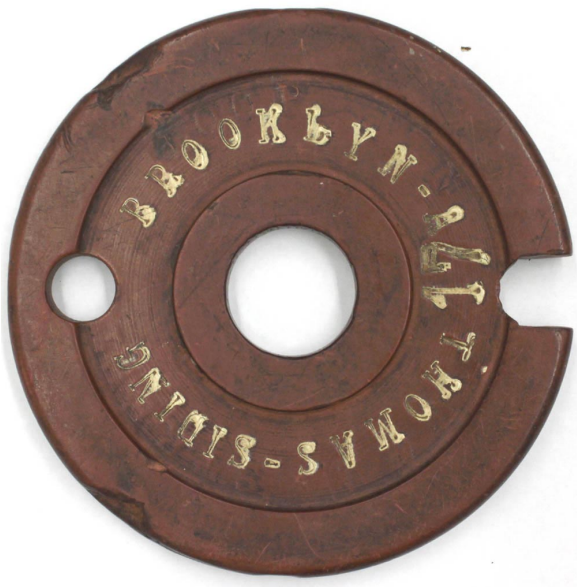
*Below: Drawings of the two gauges of tablet, one showing a fibre and the second showing a steel tablets, half scale. Opposite page: Front and rear views of the three tablets. The top pair of images is the front and rear of a round Thomas Siding - Brooklyn A made from fibre. The circular depression in which the lettering sits is the result of turning away previous lettering. The middle pair is of a square Brooklyn A - Sunshine fibre tablet, and the bottom is of a metal Brooklyn A - Sunshine tablet.*



Letters for section names  
3/16" tall & tablet number  
3/8" tall

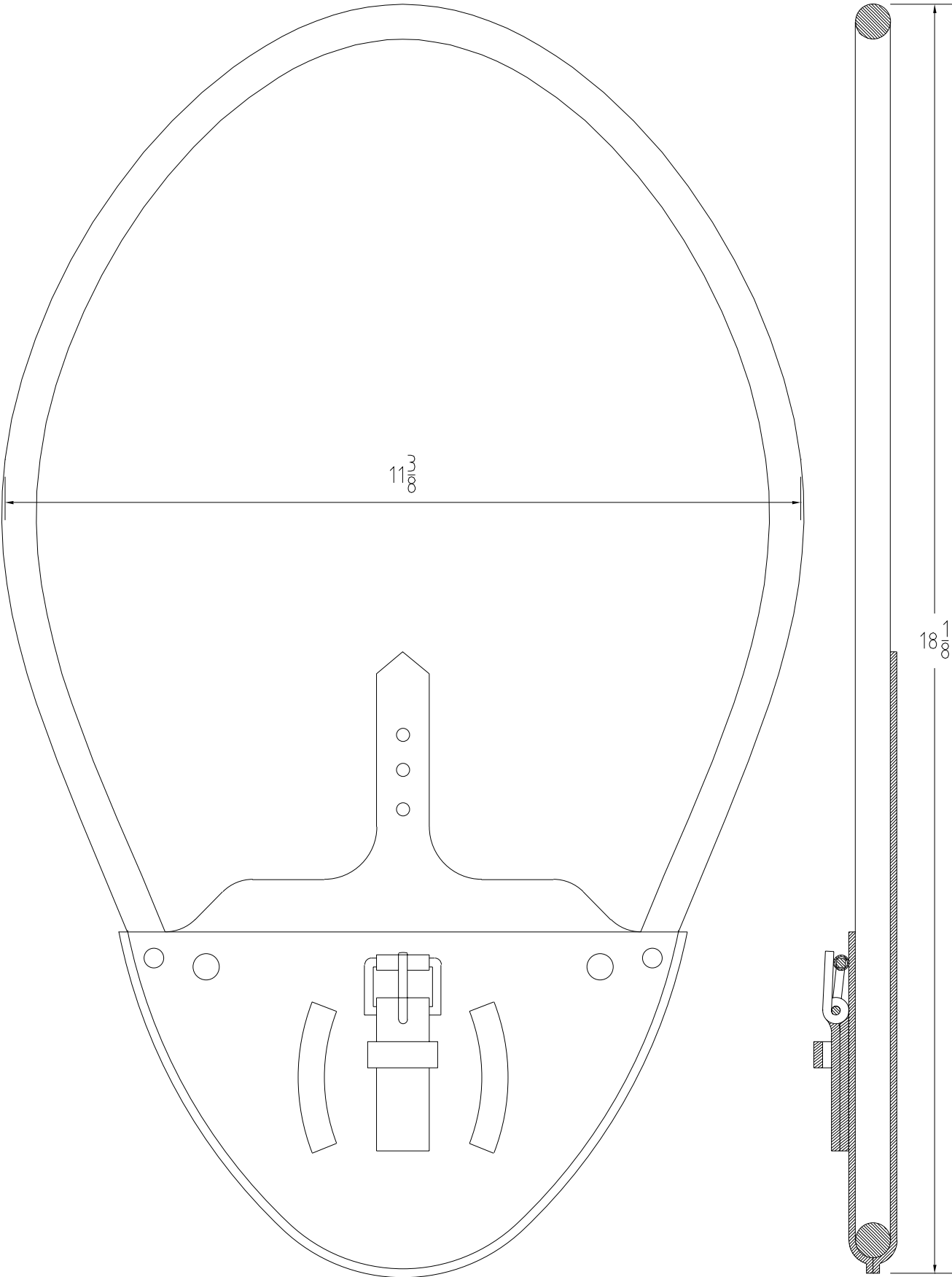


Letters for section name &  
tablet number all 1/4" tall





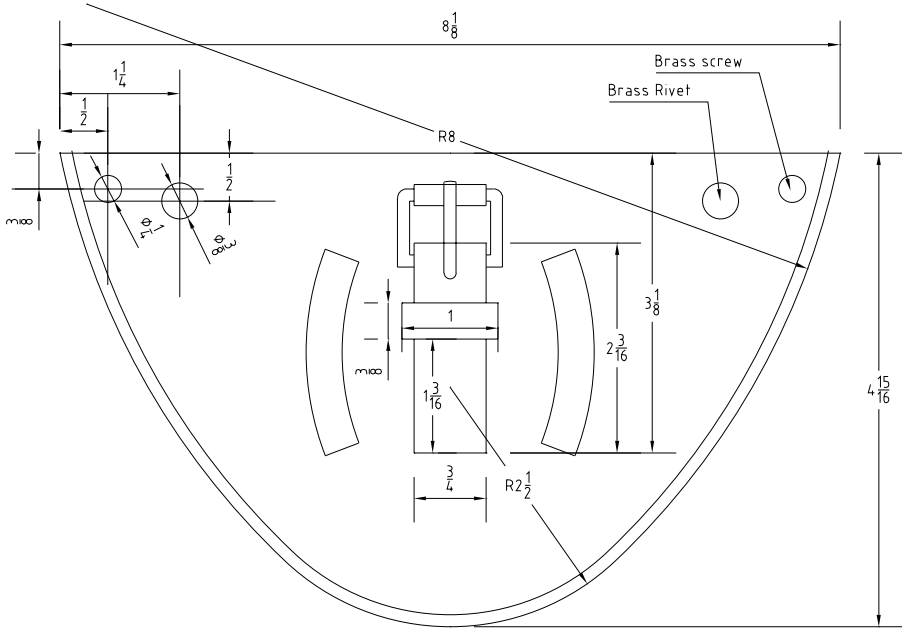






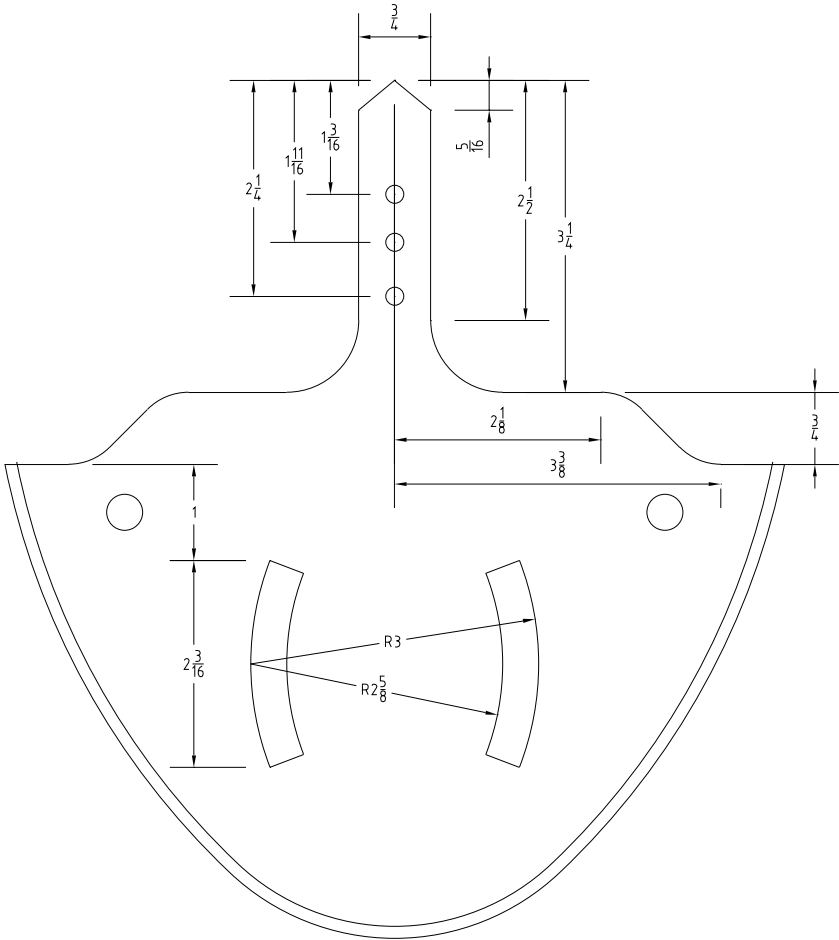
Details of the tablet pouch. (Above) The pouch with the metal Sunshine - Brooklyn A tablet inside. Note how the semi-circular openings are of a different radius to the lettering on the tablet. The flap is closed and buckled. (Below) A drawing of the front of the

pouch, 50% scale. (Opposite above) The rear of the pouch with the flap closed and buckled to the front. (Opposite below) A drawing of the rear of the pouch showing the flap and strap.



Tablet pouch (front)  
 All dimensions in inches





Tablet pouch (back)

All dimensions in inches

is not consistent in size between tablets. On the older fibre tablet, the lettering is crudely picked out with white paint (the need for which is apparent when the lettering on the other fibre tablet is considered). On one tablet, the number is also punched on the rear of the tablet. On the steel tablet the serial number - 6 - is punched in roman numerals ('VI'), not as a number. The use of roman numerals for tablet 6 was almost certainly to clearly distinguish tablets '6' and '9'. This approach is also used with electric staffs, and the other tablets for the section would have been identified using arabic numerals.

On one of the fibre tablets and the metal tablet circular depressions have been turned out of the face of the tablet. This was not part of the design of the tablet, instead it indicates where previous section names have been erased. Indeed close examination of the fibre Tomas Mill Siding - Brooklyn A tablet reveals a very faint impression of the text 'Rae Street' and 'Loop Junction' indicating that this tablet was once used on the North Fitzroy 'A' - Northcote Loop Junction tablet section.

### Tablet Hoops

Two tablet hoops were also examined and measured. The hoops were the work of a leatherworker - perhaps a harness maker? - and were extremely difficult to measure up as they were not simple shapes. Consequently, the leading dimensions given below and in the drawings are sometimes nominal. Of course, none of the dimensions are critical and small variations during manufacture would not have been a concern.

The hoop itself is a single piece of 1/2 inch cane bent in an elliptical shape. The hoop was 18 1/8" long overall (including pouch) and 11 3/8" wide. Both hoops show remnants of being painted with aluminium coloured paint - presumably for visibility at night. Although it is difficult to be sure (as the hoop could not be disassembled), it appears that the open end of the loop inside the pouch was joined by a piece of wood or cane to act as a spacer.

The hoop was kept bent by the leather pouch used to hold the tablet. This pouch consisted of two pieces of roughly triangular leather stitched together on two sides with a single stitch. The overall width of the pouch as assembled was 10 1/8" (as the leather had to curve around the cane on both

sides, the actual cut width was probably more like 10 1/2"). The hoop was secured into the pouch by a two small brass screws, one on each side, near the top of the pouch. Adjacent to each screw was a brass rivet that holds the two pieces of leather together and provides additional protection against the hoop slipping out of the pouch.

The two lower sides of the pouch was a compound curve that almost defied measuring. It appears that the upper portion of side was a curve of radius 8", which changed to a curve of 2 1/2" over the bottom of the pouch. The curves are distorted, possibly due to inaccuracies in marking and cutting, and probably due to stretching from pressure of the hoop.

The top of the back piece of leather was extended to form a flap and strap used to hold the tablet in the pouch. The flap was 3/4" deep and a 3/4 inch strap was provided. There were three holes in the strap - why it is not clear as tablets do not vary in thickness or size - and it is clear that only the third hole was actually used. The matching 3/4" strap and buckle was attached to the middle of the front piece of leather.

Circular openings were cut in both the front and rear leathers to allow train crews to read the section names on a tablet without removing it from the hoop. It appears that the openings were not concentric with the lettering on a tablet. Instead, the openings appear to be part of a circle about twice the diameter of circle of lettering. The advantage of this is that the position of the tablet in the pouch is not critical - minor movement of the tablet will still allow most of the lettering to be read through the openings. The following dimensions of the opening are approximate. The outer side of the opening appears to be of 3" diameter struck from the centre of the opposite outside opening. The opening is about 5/8" wide.

### References & Acknowledgements

Stirling (not dated), Electric Token Block Instruments, D Stirling, SRS Signalling Paper No 11.

Heine 2000, Semaphore to CTC: Signalling and Train Working in New Zealand, 1863-1993, Richard W Heine, New Zealand Railway and Locomotive Society Inc, 2000

I would like to thank the members of the Signalbox web site for comments on tablets in general.

## SIGNALLING ALTERATIONS

(Continued from page 90)

with LED heads and show purple for stop. All point machines are dual control. Gates 663 were not commissioned.

Diagrams 45/11 (Newport), 49/11 (North Williamstown - Williamstown), 47/11 (Newport - Altona Junction) and 39/11 (Newport Workshops North Yard) replaced 93/06, 93/06, 69/06, and 89/10 respectively.

15.08.2011

**Kilmore East**

(SW 96/11, WN 31)

On Monday, 15.8., the block switch was removed from the block shelf. In future the block instruments will be switched out using closing lever 10.