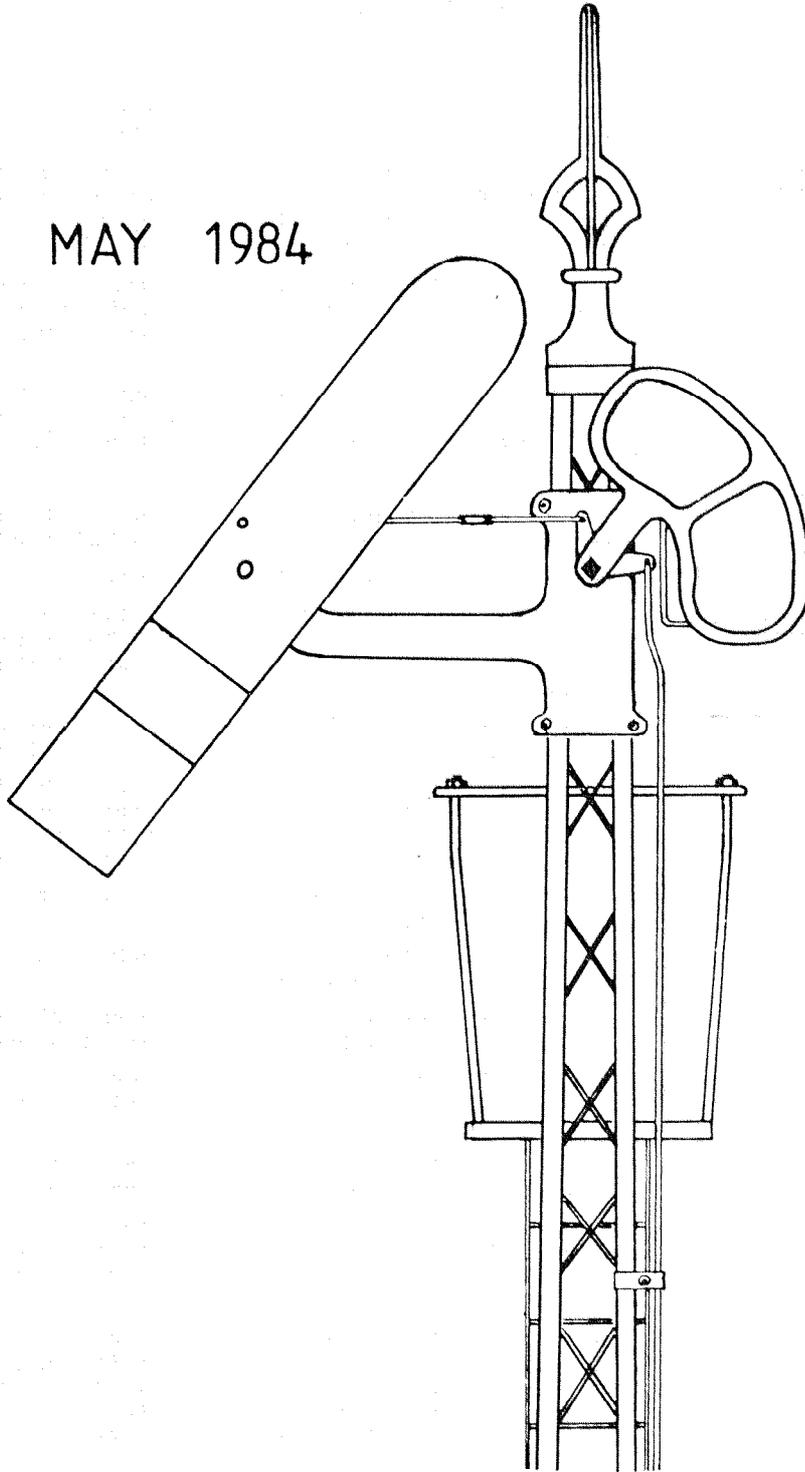


SOMERSAULT

MAY 1984



SRSV

MINUTES OF MARCH 1984 MEETING

HELD AT: A.R.H.S. Library Room, Windsor Railway Station

MEETING COMMENCED: 2007 hours.

PRESENT: J. McLean, J. Brough, B. Wooding, A. Wheatland, C. Guy, C. Rutledge, T. Deveney, J. McCallum, D. Langley, S. McLean, W. Pates, A. Jungwirth, A. Kociuba, W. Brook, R. Kent, R. Jefferies, J. Sinnatt, W. Doubleday, P. Stoncham.

A welcome was extended to Tom Deveney, this time as a new member.

MINUTES: of both November meeting (previously deferred) and January meeting confirmed (Rutledge/Wooding).

BUSINESS ARISING:

1. Need for more detail to be shown in correspondence section of minutes (Langley). This will prevent one piece of correspondence being treated twice, not being recognized as the same letter.
2. Letter from Railway Signal & Telegraph Museum Inc. S.A. was now dealt with. They want to receive our newsletter, whether as a subscriber, gift or exchange not known.

Suggest we write to them, seeking clarification, sending one copy of Somersault, and asking them if they have a magazine. (Langley/Brough).

CORRESPONDENCE:

1. As in 2. above.
2. From Robert Wallace of Kensington - selling video cassette "Steam Railways of South Maitland Area".
3. Three pamphlets from B.T.E. tabled.

GENERAL BUSINESS:

1. J. Brough questioned the availability of GWR papers produced by SRS England. When Bob Taafe receives them in Australia he will notify us of their production.
2. Diagrams available (Rutledge); proof copies of new country timetables available (S. McLean).
3. Nhill-Serviceton becomes CTC soon, with staff and ticket on the long section Salisbury Loop-Kaniva for 4 days to prevent crosses at Nhill and Diapur while the work is done. Next CTC stage due Easter.
4. Dimboola-Nhill CTC still having problems. Pilot working in use.
5. D. Langley seeks date of Horsham-Dimboola CTC (in use, but not yet notified).
6. Parwan repeater has a metric number 427 but other signals at Parwan Loop have imperial numbers.
7. To suit ANR, the CTC section Lecor-Wolseley will have automatic signals normally clear in both directions.
8. Query by D. Langley - Is Dimboola switched in daily for engine movements? Answer - no.
9. Query by J. Sinnatt - who keys in Train Descriptor numbers for up trains off Sandringham line? General opinion is that it is done by the man in Metrol himself.
10. The interlocked gates at Beach Street, Frankston, have been abolished. Alan Jungwirth suggested, and there was general agreement, that the down home arrival signal at Frankston is the first case of a 3-position signal worked by a wire-operated circuit controller.
11. The new station building and "box inside the box" at South Geelong are near completion; Bungaree has a departure colour-light home signal protecting flashing lights. (Doubleday)

MEETING CLOSED: 2110 hours.

ENTERTAINMENT: Stephen McLean showed a selection of slides "Kowloon to Killarney" taken on his recent trip to Europe, starting at Hong Kong and travelling via China, Mongolia, and half of the Trans-Siberian railway. Other unusual places visited included Sardinia and Corsica.

SIGNALLING ALTERATIONS

- ✓ 2/11/1983 HAMILTON-BRANXHOIME. The electric staff system between these stations was abolished and staff & ticket working instituted. (On 5/6/1911 the electric staff system replaced staff & ticket between Coleraine Jcn and Branxholme.)
- 3/11/1983 MELBOURNE YARD, WEST TOWER. New signalling diagram No 29/83 was issued and diagram No 25/73 cancelled.
- 3/11/1983 MELBOURNE YARD, SOUTH & STORAGE AREAS. New signalling diagram No 28/83 was issued and diagram No 9/74 cancelled.
- 7/11/1983 SOUTH DYNON. New signalling diagram No 27/83 was issued and diagram No 18/83 cancelled.
- ✓ 1/12/1983 DUNKELD. No 2 road has been extended.
- ✓ 5/12/1983 MAROONA. The plunger locked points (M) at the up end were relocated 140 metres further out and the catch points in No 3 road were replaced by a scotch block. Plunger locked points (B) protected by down home signal "A" were abolished. The normal lie of rodded points (H) and (J) at the down end of the yard were altered to lead from the Hamilton line to No 2 road. A quadrant lever for the operation of the up home arrival signal from the Hamilton line was provided at points (J).
- 20/12/1983 BROADMEADOWS-SOMERTON. Pedestrian boom barriers were provided at new pedestrian walkways opposite Smeaton Avenue (18.4 Km) and Almurta Avenue (19.7 Km). The operation of the barriers is automatic for up and down broad and standard gauge trains.
- 11/12/1983 DIMBOOLA. New signalling diagram No 32/83 was issued and diagram No 16/83 cancelled.
- ✓ 19/12/1983 APPLETON DOCK LINE. The flashing lights on Footscray Road were replaced by co-ordinated traffic lights but the flashing lights were retained on the side roads. A dwarf signal was installed on either side of the roadway and the appropriate signal will clear after the traffic lights have cycled to the railway phase. The signals will automatically cancel after the passage of the train.
- ✓ 21/12/1983 BAIRNSDALE. The annett lock securing the points at the down end of the yard was removed and replaced by a hand locking bar. The annett locks were also removed from the quadrant lever of the Up Home Arrival signal.
- WN 2/1984 FLINDERS STREET. No 1 road in the Camberwell sidings, which was previously booked out of use, is now available for use.
- ✓ WN 2/1984 WARRACKNABEAL. A staff exchange box has been provided.
- ✓ WN 4/1984 YARRAWONGA. A staff ticket exchange box has been provided.
- WN 5/1984 SPENCER STREET No 1 BOX. In order to facilitate the release of light engines from the Passenger Yard, authority is hereby granted for Drivers of light engines signalled via the East Country Line, after stopping for 10 seconds at automatic signal No 421, to pass that signal at the Stop position whilst the track section ahead is occupied by other light engines which are detained at No 521 Home signal at Franklin Street. These instructions only apply during daylight hours and only when light engines are following other light engines. Drivers are to exercise extreme caution and stop short of the preceding light engines.
- ✓ 17/1/1984 CRANBOURNE. The staff lock on the points leading to Sperry New Holland Siding was converted to an "A" pattern Annett Lock and the scotch block replaced by a derail. A staff/annett key exchanger was provided at the points. The staff must be inserted in the exchanger and the key removed when a train is required to shunt.
- ✓ 20/1/1984 NORTHERN UNDERGROUND LOOP. Signal No 587 controlling movements at pilotman's key was provided on signal No 500. Removal of the pilotman's key will secure signals Nos 576, 580 and 586 at Stop

The other switch will restore DG248 to the Stop position to prevent unnecessary operation of the booms at Toorak Road in the event of an up train being held at Tooronga.

- ✓ 26/1/1984 SOUTH DYNON. No 208 Dwarf signal was relocated to the opposite side of the line and dwarf signal No 212 was moved five metres in the up direction.
- ✓ 29/1/1984 NORTH MELBOURNE UNDERGROUND JUNCTION. Signalling diagrams Nos 30/83 (City Circle & Northern Loop), 2/84 (Flinders Street-North Melb.), & 3/84 (North Melbourne-Macaulay) were issued and diagrams 32/81, 14/83 & 33/83 (respectively) were cancelled. The signalling in connection with the Northern Underground Loop was tested and commissioned. Automatic signals Nos 508 and 550 were converted to controlled automatics and worked from Metrol. Automatic signals Nos 510, 537, 551 and 552 were converted to home signals, and along with home signals Nos 513 and 515 are controlled from Metrol. A box was provided on signal post 510 and contains a Pilot Key which, when removed, prevents signals 510 and 552 from clearing for moves towards the Underground Loop.
- WN 7/1984 FLASHING LIGHTS AT LEVEL CROSSINGS. Where necessary, an Approach Section Indicator will be erected to indicate to train crews the point at which the track circuit for a Flashing Light Signal commences. The indicator consists of a diamond shaped board, painted white with a black diagonal cross thereon.
- During shunting operations, the person in charge of the movement must avoid as far as practicable, occupying the track section between the indicator and the level crossing. If occupied, the section must be cleared as quickly as possible.
- ✓ 1/2/1984 BALLARAT EAST. The down home signal on Post No 6 at Ballarat East applying along the engine road toward Ballarat was converted to a disc signal.
- ✓ 4/2/1984 PARWAN LOOP. Signalling diagram No 4/84 (Melton & Parwan Loop) was issued and diagrams No 31/82 (Melton & Parwan) was cancelled. The mechanically interlocked crossing station at Parwan was abolished and the crossing facilities transferred to Parwan Loop which is on the upside of existing Parwan. The passenger platform at Parwan will be retained. The points and signals at Parwan Loop are worked from a control panel in a new signal box at Parwan Loop.
- ✓ 11/2/83 ? HORSHAM-DIMBOOLA. The staff & ticket system was replaced by the Centralised Traffic Control system and single line three position automatic signalling. Pimpinio Loop is remotely controlled from the CTC panel in Head Office at Spencer Street. CTC is now in operation between Murtoa-Murtoa Loop-Horsham-Pimpinio Loop-Dimboola. Murtoa and Dimboola are still locally controlled from the mechanical boxes and jointly with the CTC panel work a departure signal into the CTC section from their station.
- ✓ 8/2/1984 YARRAGON-MARYVALE. Signalling diagram No 9/82 was issued and diagram No 17/66 was cancelled. The double wire operated points at Moe were converted to motor operation, points No 3 being abolished. Levers Nos 1 and 2 were renumbered C and 1 respectively, and levers Nos 2, 3 and 16 were added. The signals on posts 1 and 2 previously controlled by lever No 1 will be controlled by lever C. Levers Nos 1 and 3 will become pilot levers. A new disc signal, lever 16, will be provided (new post 9) governing movements from Siding "A" to No 2 road towards post 10 or to No 3 road.
- 14/2/1984 YARRAVILLE. The down approach bell at Yarraville was extended to operate from signal W235 at Footscray.
- ✓ 16/2/1984 DIMBOOLA-NHILL. The electric staff for the sections Dimboola-Salisbury Loop-Nhill was abolished and replaced by staff and ticket working. Salisbury Loop now becoming a permanent staff station.
- 22/2/1984 KILMANY-SALE. Flashing light signals were brought into use at Heyfield Road level crossing (197.454 Km) and Fulham Road level crossing (200.144 Km). The operation of both sets of lights is automatic for up and down movements.
- 26/2/1984 RINGWOOD-CROYDON. The single line was slued to a new alignment from the upside of Dublin Road level crossing to a point between Nos 26 and 35 home signals at Croydon. The signals apply to movements on the realigned main line.

- ✓ 27/2/1984 DARTMOOR. Dartmoor was disestablished as a staff and ticket station but the fixed signals and plunger locking will remain in use until further notice. Dartmoor may be opened as a temporary staff and ticket station as required. The new section will be Heywood-Mount Gambier.
- ✓ 3/3/1984 DIMBOOLA-NHILL. Signalling diagram No 10/84 (Dimboola-Nhill) was issued and diagrams Nos 42/83 (Dimboola) & portion of diagram 4/70 (Gerang Gerung-Kaniva) was abolished. At 0800 hours the control of train movements was taken over by the Centralised Traffic Control system between Dimboola and Nhill, Dimboola and Salisbury Loops being worked from the CTC panel in Melbourne. The up home signal at Nhill, No 24, is worked from Nhill and controlled by the CTC panel.
- Flashing light signals were brought into use at Glenlee Road level crossing (378.431 Km - upside of Gerang Gerung) and Woorack Road level crossing (390.414 Km - down side of Salisbury Loop). The operation of both sets of lights is automatic and at Gerang Gerung a 5P key operated switch is provided to control signal 378/24 during shunting operations.
- ✓ 10/3/1984 ASPENDALE-FRANKSTON. New signalling diagram No 44/83 was issued and diagram No 24/78 was cancelled. At Frankston, the interlocked gates and pedestrian wickets were removed and replaced by boom barriers. The operation of the booms is automatic for movements to or from Nos 1, 2 or 3 roads but via lever No 77 for all shunting moves over the crossing. The down home signals, post 4, was replaced by a new three position down home (light) signal 23 metres further out. Speed proving train stops are provided in Nos 1, 2 and 3 roads and will be time delayed from when the train passes the signal bridge on the down side of Beach Street level crossing. The water crane siding and associated disc signals were abolished.
- ✓ 11/3/1984 FRANKLIN STREET. Signal posts Nos 560 & 714 were moved 10 metres in the down direction.
- 15/3/1984 FLINDERS STREET. Audible warning devices have been installed at the following locations:
- a) at exit of the Northern Loop tunnel,
 - b) at exit of the Clifton Hill & City Circle tunnel,
 - c) off the end of platforms 12 and 13 at the East end.
- The devices at the exits of the tunnels are activated by trains leaving the tunnel sections but the warning at the end of platform 12 & 13 is activated by trains in both directions.
- 20/3/1984 FRANKLIN STREET-NORTH MELBOURNE. Overhead power was restored to the up and down East Suburban lines and these lines are again available for electric trains. Overhead power was also restored to the up and down Special lines at Franklin Street.
- ✓ 20/3/1984 NHILL-DIAPUR-KANIVA-SERVICETON. The electric staff system was taken out of use and replaced by staff & ticket using the same sections. Diapur became a permanent staff station instead of a switching ES station.
- ✓ 21/3/1984 MURTOA. Signalling diagram No 7/83 was issued and diagram No 5/83 was cancelled. No 1 road (Back Platform Road) and associated signals was abolished, the other roads were renumbered. Signal posts Nos 5, 9, 11, 14, 15 were removed together with the left hand doll on post 2. The signals on the left hand doll on posts Nos 17 and 18 became discs. Levers Nos 7, 8, 9, 12, 13, 14, 15, 17, 18, 23, 24, 25, 38, 39, 40, 43, 46, 63, 64, 65, 66, 69, 70 and 71 were sleeved normal.
- ✓ 16/3/1984 BALLARAT EAST. A post telephone on Post 3 was provided and is connected to the signal-box.
- ✓ 22/3/1984 CROYDON. The crossover from No 2 road to the down line (No 12) was abolished. The down home signal on post 5 was fixed at Stop position, and the disc signal abolished. Levers Nos 12, 14, 23 and 31 were sleeved normal, and levers Nos 11 and 14 will be worked as Pilot Levers.
- ✓ 24/3/1984 FLINDERS STREET-NORTH MELBOURNE. New signalling diagram No 12/84 was issued and diagram No 2/84 was cancelled. The passenger lines (broad gauge) between Franklin Street and Spencer Street No 1 Box were renamed as follows: Country Line formerly East Country line, Up & Down East Country lines formerly Main Country lines and

Up & Down Main Country lines formerly Through Country lines. The home signals protecting the crossovers between Through Suburban and Main Suburban lines, which are shown on the diagram as No 559 and 713, are now worked from the relay interlocking panel in lieu of from the electro-mechanical interlocking frame. Automatic signal No 811 was abolished. Automatic signals Nos 485 (down Main Suburban line), 712 (up Through Suburban line) & 809 (down Through Suburban line), and up home signal No 556 (Main Suburban line) were provided. An arrow indicator was provided on home signal No 556 (Main Suburban line). New crossovers were provided between the Up and Down Main Suburban lines and the Up & Down Main Country lines.

- ✓ 22/3/1984 GORDON-WARRENHEIP. New signalling diagram No 7/84 was issued and diagram No 11/79 was cancelled. At Bungaree a new down starting (light) signal, post 8 lever 9, was provided. Flashing light signals were brought into use at Lester Road (103.827 Km).
- 30/3/1984 FLINDERS STREET. Indication lights for guards were provided on Nos 8, 9, 11 and 14 platforms. These indicators display a green indication when the signal at the west end of the platform is displaying a proceed indication.
- 1/4/1984 NORTHERN UNDERGROUND LOOP LINE. The signalling arrangements as indicated on diagram No 30/83 became available for service.
- 3/4/1984 DIMBOOLA-NHILL. New signalling diagrams Nos 14/84 (Dimboola-Nhill) & 15/84 (Tarranginnie-Diapur Loop) excluding signal 417/6 at Diapur Loop became effective, diagrams Nos 10/84 (Dimboola-Nhill) & 4/70 (part Gerang Gerung-Kaniva) were cancelled.
- ✓ 6/4/1984 DIAPUR LOOP. The signalling for this location shown on diagram No 15/84 was brought into service. Diapur Loop is remotely controlled from the CTC panel in Melbourne. A local control switch for signals 417/30 and 417/32 is provided in the down end pilot staff cabin. The CTC system will be in operation for the section Salisbury Loop-Diapur Loop, Nhill will become a switch locked siding in the section. The staff & ticket system will remain in force on the sections Diapur Loop-Kaniva-Serviceton.
- 4/4/1984 POMBORNEIT. Flashing light signals were brought into service on the Koallah Road level crossing (182.686 Km) on the upside of Pomborneit station.
- ✓ 15/4/1984 BOX HILL. The signal cabin at Box Hill was relocated to three metres off the up end of the island platform in lieu of on the up platform.
- 17/4/1984 BIRREGURRA-COLAC-PIRRON YALLOCK. Flashing light signals were brought into use at Warrowrie Road level crossing (146.519 Km) on the upside of Colac and at Larpent Road level crossing (161.347 Km) on the upside of Pirron Yallock station.
- WN 17/1984 MURTOA-WOLSELEY. Instructions for the working of the Centralised Traffic Control system between Murtoa and Wolseley were issued.

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LETTER TO THE EDITOR: from R.B.Smith.

Dear Mr Langley, In reading Mr.S.McLean's excellent article on "No van in the rear" (March 1984, pl8), I was reminded of Friday, 15 December 1972, when a goods train derailment blocked the south-bound Intercapital Daylight north of Kapooka. Passengers were brought from Wagga to Albury by bus and a broad gauge special with six carriages and two vans was assembled. However, for passengers connecting to The Overland, a two carriage standard gauge special was provided with vehicles from the South Mail: X37, MAM663, TAM905. This had no van and conveyed 51 people with two compartments filled with luggage.

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ALAN JUNGWIRTH'S QUESTION TIME.

When and where was the last set of interlocked gates installed?

Victorian Railway Kerosene Hand Lamps

George Mirfin 1866.	Contract November 2nd. 1866.	Lamps.
	Contract 1868.	Lamps.
Whitney Chambers & Co.	Contract 1867.	Lamps & Lamp Glasses.
	Contract No 6. October 6th, 1868.	Lamps & Lamp Glasses.
	(P.P. 1869 Vol 4)	Glasses.
	Contract December 2nd, 1870.	Lamps & Lamp Glasses.
	(P.P. 1871 Vol 3)	Glasses.
The above two firms were suppliers, not manufacturers of hand lamps.		
Henkel and Paterson	Contract 1167. 16 January 1873	Lamps (P.P. 1874)
30 Little Collins St.	Contract 1091. 11 September 1874	Lamps 120 at
Melbourne.	£2.5 each (£270). (P.P. 1875 Vol 3. Gazette	
Founded 1866, Closed	pl673, 1874 J to D.)	
1878. Railway, Ship	Contract 743. 29 October 1875.	100 Lamps £412.
& Carriage Lamp Makers.	(P.P. 1876, Vol 3)	
	Contract 864. 100 Lamps at 82/6 each. (£412.10).	
	(Gazette, p2045. 1875)	
	Contract 672. 144 Lamps at £4.5.0 each (Gazette	
	p 1535. July 1876)	
	Contract 917. 25 May 1877. 300 Lamps at £1117	
	each. (P.P. 1878 Vol 3).	
	Contract 2053. 300 Lamps at £3146. (Gazette Jan	
	& June 1877. p1016).	
James Paterson.	Contract 1182. 2 May 1878.	Supply of lamps £504
Lamp Manufacturer.		(P.P. Vol 3 1880-81)
30 Little Collins St.		
Melbourne. carried on		
from Henkel & Paterson		
1878, firm closed 1887.		
J.W.Paul. Tinsmiths.	Williamsons Street, Sandhurst.	1880
John W. Paul. Tinsmiths.	Barnard Lane, Sandhurst.	1884
	Hargreaves St, Sandhurst.	1884
	Queen St, Sandhurst.	1884
J.W.Paul. Ironmonger.	Contract 1185. 200 Lamps £615 (Gazette, July &	
Fauls Gas Machine Co.	Dec. 1880)	
Gas Engineers.	Contract 1392. 10 June 1880. 100 Lamps £227	
273 Hargreaves St,	(P.P. 1882-83 Vol 3)	
Sandhurst.	Contract 1333. 17 December 1880. 200 Lamps £615	
(Bendigo from 1891)	(P.P. 1881 Vol 2)	
Firm closed 1913.	Contract 1641. 30 June 1881. 250 Kerosene Lamps	
	(P.P. 1883 Vol 3)	
Hughes and Harvey. Manufacturer Tinsmiths. Founded 1899.		
560 Lonsdale Street, Melbourne.		
Harvey, Shaw and Co. (carried on from Hughes and Harvey.)		
560 Lonsdale Street, Melbourne. 1890-1910.		
Harvey, Shaw and Drake. (carried on from Harvey Shaw.)		
560 Lonsdale Street, Melbourne. 1911-1931.		
Harvey Shaw and Co. (carried on from Harvey, Shaw and Drake.)		
560 Lonsdale Street, Melbourne. 1932-1941.		
Firm closed in 1941.		

P.P. - Parliamentary Papers.
Gazette - Government Gazette.

Details of the contracts ceased
to be gazetted etc. from the
early 1890's.

The information above has been taken from details supplied by Brad Wooding.

V.R. SIGNALLING HISTORY
WODONGA-BANDIANA-COAL SIDINGS

by David Langley.

continued.

The first two parts of this article appeared in the July 1983 and September 1983 issues of Somersault.

No 31. Coal Sidings Box

Weekly Notice No 3 of 1916 announced that "New Coal Storage Sidings situated three-quarters of a mile beyond the Down end of Wodonga station have been opened and are available for use. These sidings are situated on the east side of the New South Wales Line and are connected to the Victorian Line as well as to the New South Wales Line. The entrance to the sidings from the New South Wales Line is at the Down end, and the entrance from the Victorian Line at the Up end of the sidings; a train passing from the Victorian Line to the Coal Storage Sidings will therefore cross the New South Wales Running Line.

The Points in each Main Line are rodded to Catch Points or Derails in the sidings, and the Points in the Main Lines are each secured by Miniature Staff Lock.

Also two Sidings, forming separate Loop Sidings for each of the Running Lines, are situated on the left hand side of each Line. These Loops are provided to enable the respective engines to run round the train preparatory to backing the train into the Storage Sidings. The Points in the respective running at each end of these Loop Sidings are connected by rodding to Catch Points or Derails at each end of the Loop, and secured by Miniature Staff Locks. The Victorian Loop is approximately 750 feet and the New South Wales Loop approximately 1000 feet in length.

The Miniature Staff Locks can only be opened by the Staff for the two sections, Wodonga-Albury, which, until the engineering work (see clause 2 of Weekly Notice 39/15) in connection with the bridges between Wodonga and Albury is completed, will be worked under one Electric Staff system."

The staff lock register shows that five miniature electric staff locks were installed on 4 August 1916 and the suggested layout at the time is shown in Figure 24.

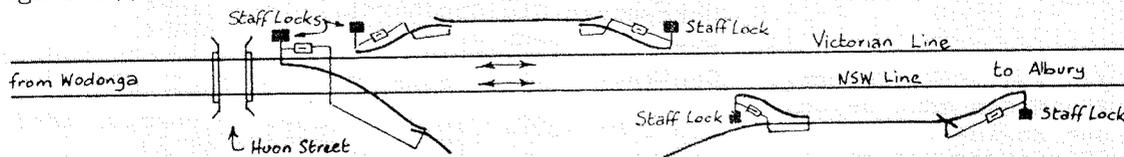


Fig 24. Wodonga Coal Sidings.
(suggested layout)

The miniature staff locks were in use on both lines because of the engineering works between Coal Sidings and Albury necessitating a gauntlet track being laid over one of the river bridges at a time. This work ceased soon after and the NSW line points were secured by Tablet Locks. As the connection from the Victorian line crossed over the NSW line, some security was required to ensure that a conflict did not occur on the diamond. This was achieved by securing the points by a miniature staff lock and a tablet lock, requiring both sections to be clear before the shunting train could proceed to the sidings.

During World War Two, the movement of coal between New South Wales and Victoria increased dramatically and it was decided that the Coal Storage Sidings should be enlarged and the first alteration was the provision of a new connection from the Victoria line to the sidings about 200 metres further out towards Wodonga on 18 April 1941. This connection was in use for ballast trains only but after 2 June 1941, all Victorian movements used the crossover and the original connection was removed. Two days later, the connection from the NSW line to the sidings was moved about 165 metres further out towards Albury. Figure 25 shows the layout as it is thought to be after these alterations.

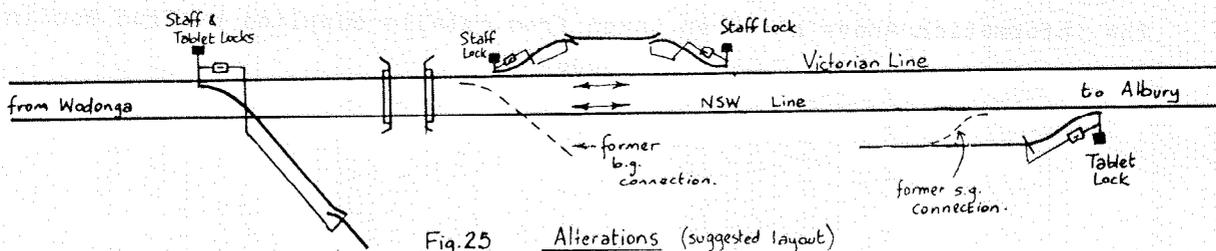
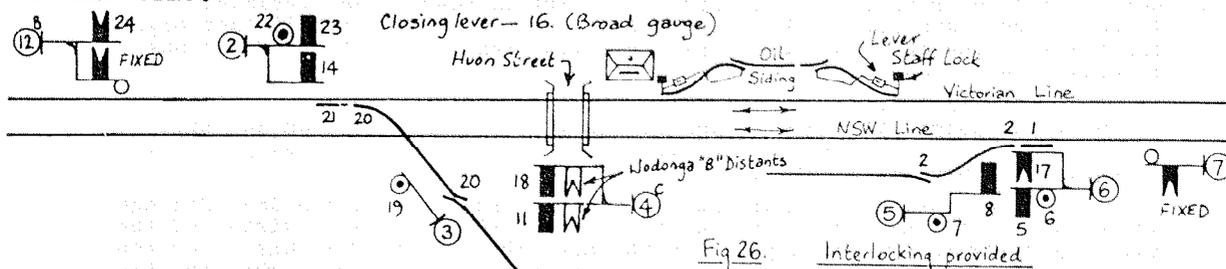


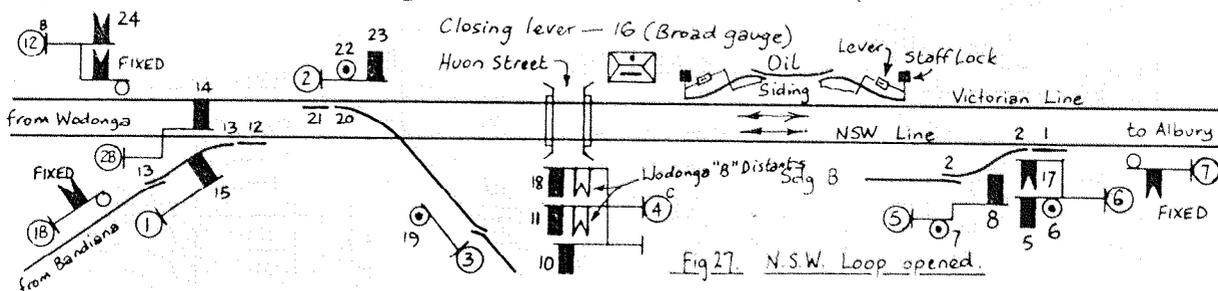
Fig.25 Alterations (suggested layout)

The standard gauge shunting siding that crossed the broad gauge lead from the Victorian line to the sidings was equipped with a set of catch points on either side of the broad gauge diamond. The lever working these catch points was crosslocked with the lever working the points in the Victoria main line. This alteration was brought into use on 29 July 1941.

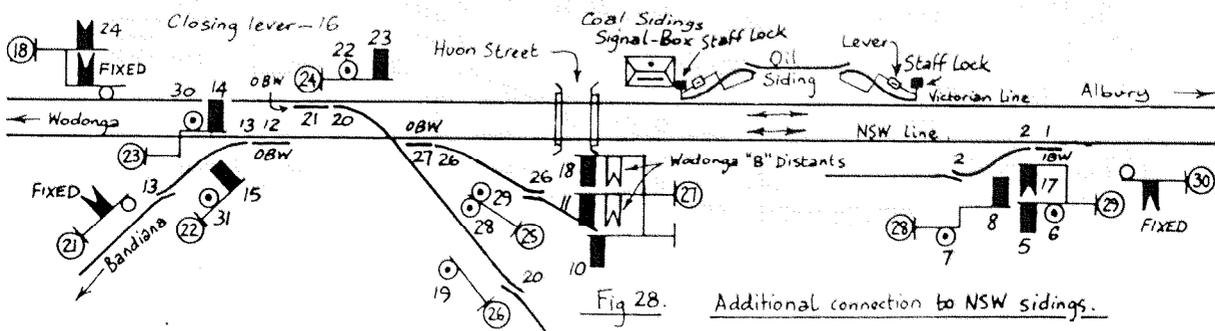
The second world war had produced increased traffic on a grand scale and with the break of gauge at the border, the transfer of coal and other goods multiplied dramatically. The number of sidings was increased and the working of the sidings, i.e. staff and tablet locked points, was deemed to be slow and inefficient. To speed up the operations in the area, a 24 lever interlocking frame provided in the existing signal box on 21 September 1941 but was not brought into use immediately. Weekly Notice No 43 of 1941 informs us that the signal box will switch in when required and when so opened, the points will be worked from the interlocking frame. However, when the box was closed, the points are worked from ground levers and are secured by staff or tablet locks. Miniature electric staff was worked on the long and short sections between Wodonga "B" Box, Coal Sidings and Albury South Box but short section working only was in force on the NSW line, large pattern electric staff to Wodonga "B" and Tyers Tablet system (No 5 instruments) to Albury South. It can be seen therefore that Coal Sidings was required to be switched in for all movements along the NSW line. Regular use of Coal Sidings box commenced on 22 March 1942 and Figure 26 has been adapted from signalling diagram No 9/41 which was issued at this time.



The Commonwealth Government sidings on the Tallangatta line were opened on 22 April 1942. A standard gauge line was laid from Coal Sidings and this line joined the Tallangatta branch line a little way out of Wodonga and from this point ran as dual gauge to Bandiana (as the sidings were known). Figure 27 shows the arrangements after this line was opened.



Ten more levers were added to the Coal Sidings frame on 24 October 1944 when a connection from the NSW main line to Sidings "B" was added. The new arrangements are shown in Figure 28. The signal posts were renumbered at this time and signalling diagram No 4/44 was issued for Wodonga-Coal Sidings. It will be noticed that the distant signals were of the NSW style (with the upper green light) even though they were in Victoria and used Victorian style somersault arms. It can only be presumed that as only NSW crews and trains worked over the NSW line, the signalling should be familiar to them, at least the distant signals as discs were still used in lieu of the NSW shunting arms. All this changed of course when the NSW line became the standard gauge line to Melbourne.



In 1954 repairs to the bridge over the Murray River carrying the NSW line necessitated the provision of gauntlet track on the broad gauge bridge and this was brought into use on 24 October. The distant arm on Post 29 was replaced by a home signal and a new down home signal for NSW trains (Post 26B) was added. The down home signal on Post 18 was added on 16 April 1961 in preparation for through running on the standard gauge line. It was worked by Wodonga "B" as a down starting signal and was controlled by Coal Sidings Box. Figure 29 shows the arrangements at this time.

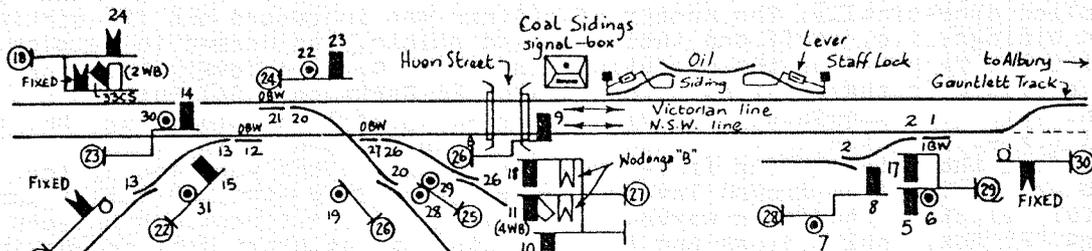
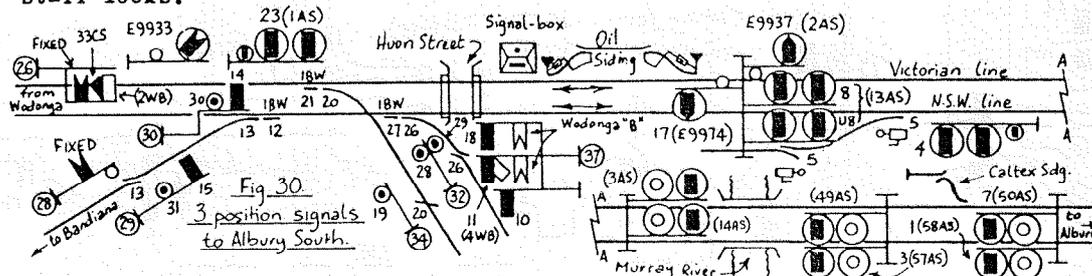


Fig. 29. Gauntlet track at down end.

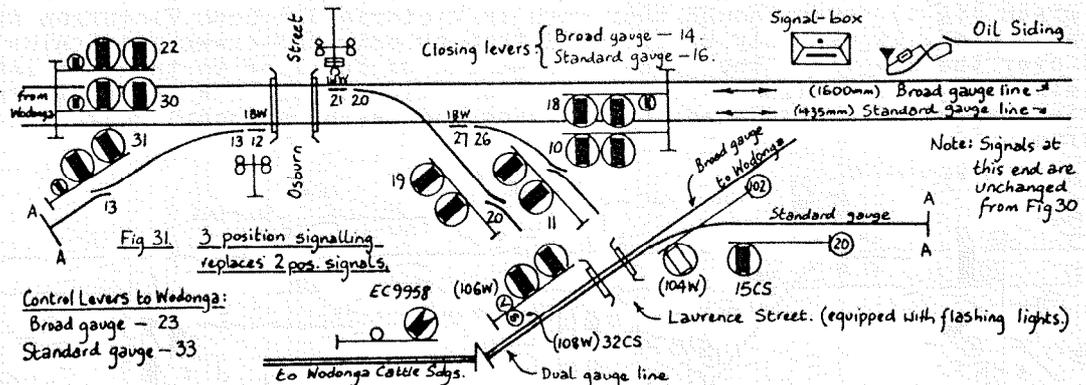
The gauntlet track was changed over to the NSW line bridge at some stage during the repairs and the broad gauge bridge placed out of use. The two tracks were restored again on 17 December 1961. Signal post 35 (as Post 26B had become) was removed and the right hand arm on post 39 was replaced by a distant signal arm for the broad gauge. Signal post 40 was the distant signal for the NSW line only during the repairs even when the gauntlet track was diverted via the NSW bridge.

As a prelude to the three position signalling, the double wire operation of the points at the down end of the yard was abolished on 30 April 1962 and the points spiked normal. The closing facilities on the broad gauge line were removed three days later.

Three position signalling was brought into use between Coal Sidings and Albury South on 14 May 1962 and this coincided with the provision of the existing relay interlocking panel in the new Albury South Box. One lever was added to the frame at Coal Sidings and it presumably came about when the two double wire levers were removed leaving space for three conventional levers. Figure 30 shows the arrangements at this time and you will notice that the down broad gauge arrival home signal has been replaced by a three position home signal, this also being the signal governing entry into the section to Albury South. A repeating signal replaced the distant on Post 26 for the broad gauge line and switch locks were fitted to the oil siding points in lieu of staff locks.



The remaining two position signals at Coal Sidings were replaced by three position colour light signals on 28 April 1962 and the staff systems to Wodonga "B" replaced by Lever Locking and Track Control. Switching facilities were not provided until 12 May 1964 two days after Wodonga "B" Box had been replaced by the panel in "A" Box. Figure 31 shows the arrangements.



Control Levers to Wodonga:
Broad gauge - 23
Standard gauge - 33

Note: Signals at this end are unchanged from Fig 30

Huon Street level crossing (adjacent to Coal Sidings Box) was closed on 27 October 1964 and a new level crossing, with flashing lights, was provided at Osburn Street a short distance towards Wodonga.

As mentioned in the section on Wodonga "B" Box (Somersault, Vol 6 No 5, pp49) the level crossing at Laurence Street on the former Tallangatta line was equipped with flashing lights on 20 March 1980. Two additional signal levers were provided at Coal Sidings - No 15 to work the new down home signal protecting the crossing from down movements and No 32 to control the up home signal, worked by Wodonga, for standard gauge movements from Bandiana.

No 32. Bandiana, Bandiord and Bandolier

When the line from Wodonga to Huon Lane was opened on 10 September 1889 two intermediate stations were provided - East Wodonga and Bethanga Road. Huon Lane became just Huon in 1904 and in March 1910 the other stations became Bandiana and Ebden respectively. East Wodonga was closed for about four months from 1 October 1892 and when it reopened on 23 January 1893 it was a flag station only although the goods siding remained until September 1895. The passenger platform was removed in January 1938 having been only a Rail Motor Stopping Place for some years, the stopping place remained at 190 1/4 miles but existed only as a station sign post on the ground. The name was transferred to the new Defence sidings at 188m 70c in July 1942 and the stopping place then received a number only - RMSF No 69.

The first sidings at Bandiana were opened on 22 March 1942 and were off both gauges. An intermediate electric staff instrument was provided so that trains running between Wodonga and Tallangatta could continue to do so whilst a local Bandiana train was locked away. NSW trains that came via the loop from Coal Sidings Box picked up a Wodonga "B"-Ebden staff from the signalman at that box, it having been withdrawn from the intermediate instrument located there. This meant that NSW trains did not see either end of the electric staff section a strange situation indeed.

More sidings for the Defence Department were opened further out at Bandolier on 11 March 1943 and the dual gauge was extended accordingly. Another intermediate electric staff instrument was provided here making three all told in the section.

All this staff working must have kept the man at Ebden pretty busy although he would have seen few trains at his station. So busy in fact that either the hours became too long for one shift or that the railways were unable to provide a second shift, and thus a means of working the Defence Departments sidings was required without manning Ebden. Weekly Notice No 6 of 1944 contained instructions relating to this working - a) prior to the signalman at Ebden ceasing duty, the signalman at Wodonga "B" must withdraw a staff, b) if the staff is used for any Victorian train to proceed to either Bandiana or Bandolier it must be retained by the driver except when required to release the points at these sidings, it must not be placed in any intermediate instrument, c) if the staff is required for a NSW train a competent employee is to be instructed to take it to Coal Sidings Box for use and the same instructions at Bandiana or Bandolier apply to the NSW trains. When the staff is no longer required at Coal Sidings Box it is to be conveyed back to Wodonga "B" Box. If a special light engine is used for this purpose that engine must also be in possession of a staff for the section Wodonga "B"-Coal Sidings. d) when the staff is at Wodonga "B" Box it must be kept in the holder of the instrument when not in use and is not to be placed in the instrument until the signalman at Ebden has indicated he is on duty.

The sidings at Bandiana were extended on 17 May 1943 to serve stores Nos 5-12. The new sidings were on the eastern side of the existing sidings and are connected to their respective lead on the approach to store No 1, and then junction into two Victorian and two NSW roads serving their respective stores and extending to a dead end at the end of the sidings. Loops are provided opposite stores Nos 6, 9 & 11 on the Victorian and NSW lines.

It appears that the present junctions to Bandiana are not at the first position for on 7 October 1943 the NSW line junction points were moved about 75 metres towards Albury and one week later the Victorian line points were moved about five metres towards Wodonga (which is the same compass direction of course). This alteration was made to facilitate the operation of Bandiana sidings and the new sidings at Bandiord. These sidings were located opposite Bandiana but the sidings faced the opposite direction with the junction points for both sidings located close together. On 26 November 1943 the Victorian section of the sidings was made available for construction trains and the points giving access were brought into use. These points and the Bandiana points were worked from three lever ground frames secured by annett keys. The NSW section of the sidings were as yet not available for trains and the points not yet in use.

The interlocking register tells us that three ground frames were provided in the area - two three lever ground frames at Bandiana and a two lever frame at Bandolier. The Bandolier frame was installed on 24 April 1942 nearly a year before the sidings were officially opened to traffic and worked the NSW connection to the sidings. A fixed dual gauge point was not provided because that would have necessitated a severe speed restriction for branch line trains. Instead a half set of points were provided, rodded to a catch point in the siding and worked by one lever in the ground frame. The other lever worked the facing point lock and was secured normal by an annett lock. The annett key was kept in a duplex lock adjacent to the siding and when the staff for the section was inserted, the key could be removed and used on the ground frame. The broad gauge connection to Bandolier sidings was a simple staff lock and the points, worked from a small point lever, were rodded to catch points in the siding.

At Bandiana both ground frames were installed on 4 December 1943 and were named Apparatus "A" and Apparatus "B". Later they were known as 'Broad Gauge Frame' and 'Standard Gauge Frame'. No 1 lever on both frames worked the facing point locks on both sets of points in the respective line. No 2 lever worked the points leading to Bandiana and No 3 lever worked the Bandior points both sets of points being rodded to catch points in the respective sidings. It will be noticed that the dual gauge separates at this location into two lines and it seems that this was done to simplify the connections. Previous to this time the former connections to Bandiana appeared to be separate connections some distance apart and both fitted with a staff lock. The ground frames at Bandiana were also locked by an annett lock the keys of which were normally kept in duplex locks located adjacent to the respective ground frames - an "A" pattern key for the Victorian frame and a "B" pattern key for the NSW frame.

After the end of the war, the number of movements to the Bandiana area reduced considerably and it was deemed unnecessary to retain Ebden as a staff station as the additional time that the section to Huon was occupied by a branch train did not cause any unnecessary delays to local shunting movements. Ebden thus ceased to be a staff station on 17 August 1949 and the intermediate instruments were now in the Wodonga "B" - Huon section. Late in 1961 a pilot staff was provided at Wodonga "B" and this enabled a train to leave the local sidings in the Bandiana area and proceed to Wodonga (but not Coal Sidings) after the branch train had departed Bandiana for Huon. The pilot staff was kept in a switch lock at Wodonga "B" Box and connected to the staff line so that when removed the staff line was broken and no further bell signals were possible nor was it possible to remove a staff if the branch train cleared.

The safeworking on the line changed yet again on 10 April 1968 when Huon was closed as a staff station and the electric staff system withdrawn between Bandiana and Tallangatta. Bandiana became a permanent staff station and the intermediate instrument was removed, so too was the instrument at Bandolier sidings. The two lever ground frame at Bandolier was removed and both junction points were converted to hand operation with hand locking bars and CCW levers. At Bandiana two home signals were provided, the signal quadrants being fitted with annett locks and the duplex locks were removed.

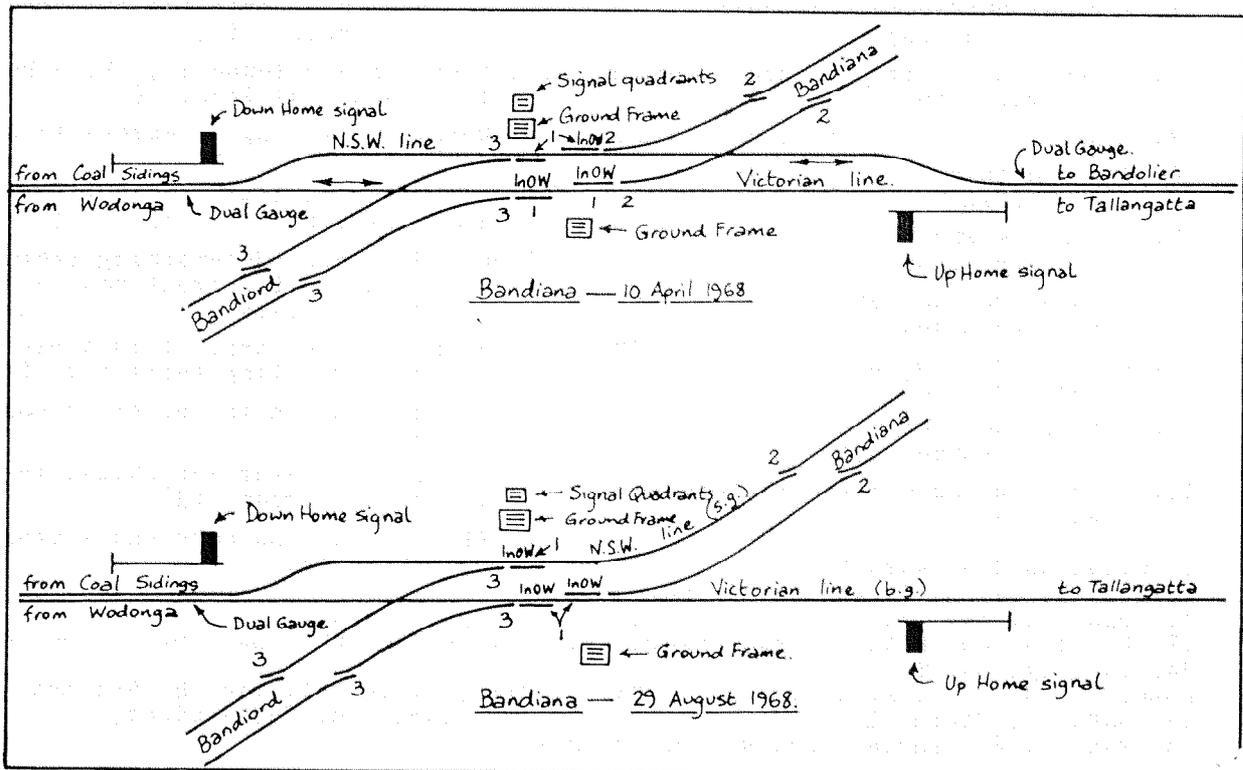
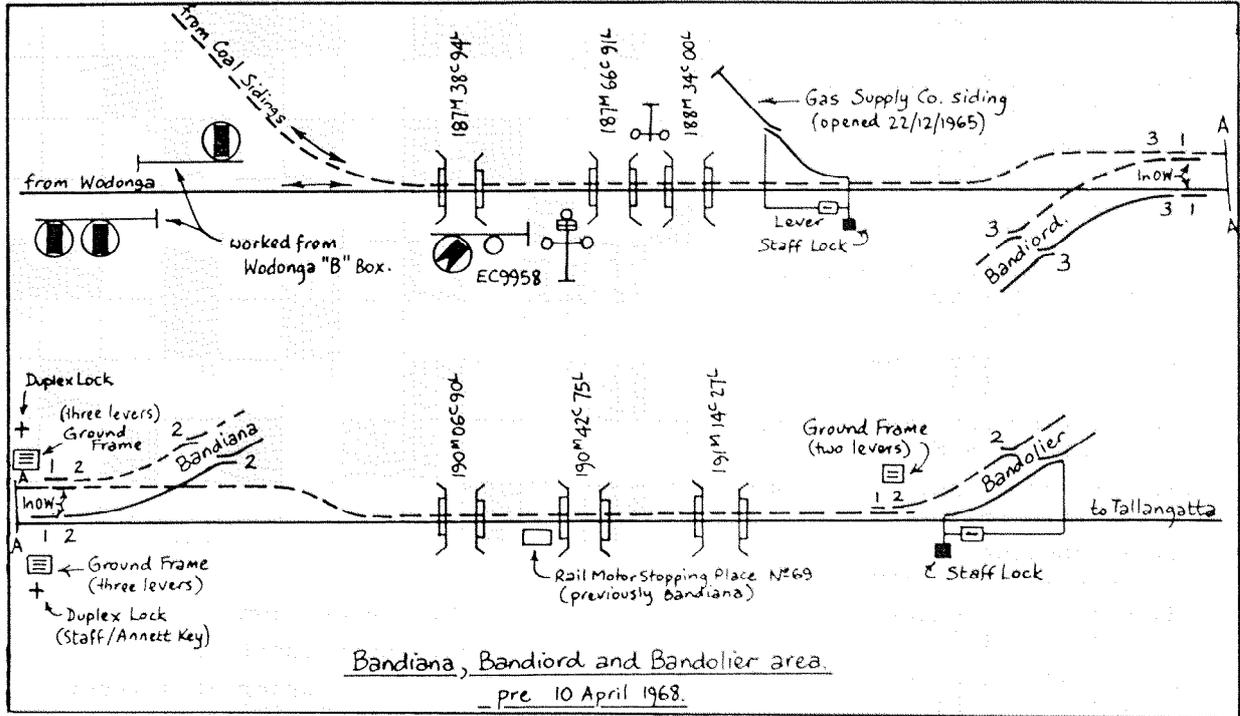
Bandolier sidings were closed on 29 August 1968 and the standard gauge line from Bandiana was removed along with the broad gauge connections to the sidings.

The general decline in rail freight traffic through the 1970's saw many lines become very doubtful and the Tallangatta line was one of these. After the opening of the freight centre at Wodonga most rail freight was sent by road to the area to the east of Wodonga and branch trains to Tallangatta and Cudgewa were reduced to as required only. The end came on 1 March 1983 when the line beyond Bandiana was closed. This meant that the Bandiana line became something of a rarity in Victoria - a branch line worked entirely by electric staff (and having an intermediate instrument in the section).

This situation was short lived, however, as the livestock transfer facilities at Wodonga were becoming something of an embarrassment and relocation was deemed necessary. Suitable land was available adjacent to the railway beyond Bandiana on the closed branch line. Construction commenced late in 1982 and on 17 October 1983 the new livestock transfer sidings were opened. The section of branch line was reopened and the dual gauge extended beyond Bandiana once again. The staff section became Wodonga-Wodonga Cattle Sidings and the instrument at Bandiana was replaced by an intermediate electric staff instrument. Wodonga Cattle Sidings was unattended and an automatic operator was provided there so that Wodonga could withdraw a staff if the section was clear without having to have a signaller in attendance. A staff being removed from the instrument at the sidings requires a signaller in attendance at Wodonga in the normal manner.

The home signals were removed from Bandiana and two staff/annett key exchnagers provided. A pilot key was provided at Wodonga in case of failure of the electric staff system, enabling the various staff locked points to be released if pilot working is in operation and no staff is available.

The following diagrams are self explanatory and show the arrangements in the area at various times.



S.R.S.V. CROSSWORD No 6.

compiled by S.McLean

Across

1. For this point, you won't need 29 and 28 (8)
5. Trouble starts if engines are late at this point (2)
7. Station where French/Japanese money (5)
9. is found under the rails (7)
10. Found on the line or in 3 down (3)
11. 6 down trains do this all the time (3)
13. Sparks found in two states at 21 (9)
16. Where to expect late arrival of the train from San Diego (2)
17. State of the line to Alice Springs (3)
18. Sleeping car can be found in Nambucca Heads (3)
19. Type of signal found near Exeter (9)
21. A junction station on the main (Mayne?) line (6)
23. A member inclined to let trains proceed (3)
25. Despite 22 down, you won't find this in a BK! (2)
26. Station some way past Yabba North (5)

1		2			3		4		5	6	
							7	8			
9								10			
									11		12
13	14						15			16	
17									18		
			19								
20											
21		22							23		24
		25			26	27		28			
29										30	
				31							

29. See 22 down
30. Isn't isn't (2)
31. One quarter of a lever frame? (8)

Down

1. Furious battle to safeguard single line (6)
2. Friends have time off from counting passengers (6)
3. Musical container for 1 down (10)
4. You can only do this if 19 down isn't horizontal (2)
5. His block was not part of an aboriginal land grant! (4)
6. It's normal to detach nothing from our large mixed (7)
8. What's wrong with the train to Melbourne? (2)
12. This feature of a station is often found in enamel (4)
14. This sleeping car starts late at night (3)
15. Set coal up - onto the caboose, not the engine (6)
18. Loco company found in, oh, a Baltic country at least (5)
19. Result of gluing 23 across to 24 down (5)
20. Often behind time, or in the case of 1 down, ahead of time (5)
- 22 and 29 across. Safeworking feature not found on the front door of a signal box (4,4)
24. Found at the start of multiple aspect signalling territory (4)
27. Closed station in the hilly eastern area (3)
28. Where the lawyer was called in the refreshment room (3)
30. What Queensland cuts and Victoria switches (2)

Solution to Crossword No 5.

Across: 1. CA, 3. Jungwirth, 9. HR, 10. OIC, 11. IA, 12. Amend, 14. Reset, 16. Gauge, 18. RBJ, 21. Run, 22. Relieve, 26. Pit, 27. Exchanger, 29. Odd, 30. Railcar, 31. Up, 33. Detach, 34. Langley, 35. TR.

Down: 1. Chair, 2. Arm, 3. Jung, 4. Go, 5. Wire, 6. Ice, 7. Tie, 8. Hatchet, 13. DAM, 15. Steep, 17. Glengarry, 19. BR, 20. Junction, 23. Viaduct, 24. Metrol, 25. Parcel, 28. Roads, 32. Per.