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SIGNALLING RECORD SOCIETY OF VICTORIA INC



The large pattern Electric Staff instrument at Upfield in 1990. Electric Staff working between Upfield and Somerton was probably provided on 10 October 1968 in preparation for the commencement of services to the Chrysler Siding. This siding was to the south of Upfield, but the goods trains working the siding returned to Melbourne via Somerton. In some senses, the usage of this instrument was odd. Most of the time the instrument would have only been used to release Staffs at Somerton and Ford's Siding (which had an intermediate instrument). Perhaps once a day, a Staff would be withdrawn from the instrument to allow the Chrysler Goods to travel north to Somerton, but it would have been very uncommon for a Staff to be inserted in the Instrument. The fitter would probably need to attend once a fortnight or so to transfer Staffs from Somerton. On the date this photo was taken there were four Staffs in the instrument, but it had been several years since the Chrysler Goods had run. The instrument was painted bright red, but was in fact a grey pattern instrument. Note that the bell key (which had been on the right hand side of the instrument next to the galvanometer) has been removed as this is a magneto instrument.

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MINUTES OF MEETING HELD FRIDAY MARCH 17, 2000,

AT THE SURREY HILLS NEIGHBOURHOOD CENTRE, 1 BEDFORD AVENUE, SURREY HILLS

- Present: - J.Black, W.Brook, G.Candy, B.Cleak, G.Cleak, B.Crosby, G.Cumming, C.Gordon, A.Gostling, W.Johnston, K.Lambert, D.Langley, B.McCurry, J.McLean, T.Murray, N.Reed, C.Rutledge, L.Savage, B.Sherry, P.Silva, R.Smith & R.Whitehead.
- Apologies: - J.Churchward, A.Hinde, I.Michaelson, G.O'Flynn, T.Penn, A.Ratcliffe & A.Waugh.
- Visitors: - I.Chan.
- The President, Mr. David Langley, took the chair & opened the meeting @ 20:43 hours, following the completion of the Annual General Meeting.
- Minutes of the November 1999 Meeting: - Accepted as published. W.Johnston / R.Whitehead. Carried.
- Minutes of the February 2000 Meeting: - Accepted as published. W.Johnston / R.Whitehead. Carried.
- Business Arising: - Nil.
- Correspondence: - Payment for the use of the meeting room was sent to the Surrey Hills Neighbourhood Centre. Many items of correspondence were sent & received regarding the 25th Anniversary Tour. The completed documents for the lease of the Archives Room at Seymour were sent to Colliers Jardine. W.Brook / P.Silva. Carried.
- Reports: - Tours. Glenn Cumming reported on the recent 25th Anniversary Tour through 3 states which was judged to be a success. Glenn Cumming asked the members to consider the future of signal box tours in Victoria. Problems are being faced in organising these tours mainly through the reduced number of locations available for inspection & the reduced opening hours for many locations. Considerable discussion followed with many suggestions & comments being made. It was agreed that the Secretary should seek the input of all members and report back to a future meeting. Moved Bill Johnston, seconded Colin Rutledge, that a vote of thanks be given to the organisers of the 25th Anniversary Tour. Carried. Glenn Cumming responded by thanking the following people for their assistance: - Andrew Hayne & Bob Taaffe for the New South Wales leg of the tour; David Langley & Andrew Waugh for compiling the tour notes; David Langley, Colin Rutledge & Bob Whitehead for the dinner & rail motor arrangements; Keith Lambert, Colin Rutledge & Bob Whitehead for arranging the display at the dinner and all the participants for making the tour a success.
- General Business: - Chris Gordon reported that the Heidelberg re – signalling will be commissioned on 1st April 2000. The lever frame will be removed. Rod Smith noted that the next re– signalling project will be Broadmeadows. Roderick Smith asked if Spencer Street No.1 Box had been officially renamed. The answer was believed to be no. Keith Lambert reported that the Metrol building had been demolished & that Fairfield was to have been demolished over the weekend of 26 & 27 February 2000. Keith Lambert noted that a mechanical locking bar was still in service at Morwell, worked from the auxiliary frame at the down end of the platform.

Keith Lambert reported that the dual gauge line from Tottenham "B" Box to Newport was now controlled from A.R.T.C. in Adelaide. The line is worked using Automatic Block Signalling with remote control of the power signals. The points & signals at Goninan's Siding are worked from Adelaide. Discussion followed regarding the working of the signalling in this section.

Colin Rutledge advised that Freight Australia had called tenders for power signalling on the West Line between Sunshine & Newport in order to remove Brooklyn altogether.

Colin Rutledge reported that main line controls at South Dynon Junction worked from the control panel in West Tower had been transferred to the A.R.T.C. Control Centre in Adelaide. More discussion followed concerning these arrangements.

Noel Reed asked about the arrangements for the BG Line between Albion Junction - Jacana Junction. This section of line is part of the North East CTC system & is currently worked from Adelaide.

Tom Murray asked about the work to be done at Broadmeadows. Keith Lambert answered that a new crossover will be provided at the Up end to allow Down trains to arrive in the Up platform & the area will be re-signalled. The sidings will be retained for stabling purposes.

David Langley noted that the platform & building at Gheringhap had recently been removed as part of a proposal to straighten the SG loop roads.

Colin Rutledge was able to expand on this. In addition to realigning the SG loop at Gheringhap, it is proposing to realign the BG/SG diverge at North Geelong "C" Box & Gheringhap to make the SG the straight line instead of the BG line. This work is being carried out by the A.R.T.C. who now manage the corridor.

Colin Rutledge outlined plans for work at Maroona. The curve at the south end of the yard is to be eased by moving the level crossing 18 metres to the east. The junction points will be moved in the down direction. The loop will be extended at the north end of the yard & will include a new bridge over the creek. Signals will be provided & the yard will be converted to remote control from Adelaide with S.A.W. to remain for the time being. No alterations have been proposed for Ararat.

Bob Whitehead reported on efforts of a local group at Fairfield who are attempting to retain the signal box as part of a redevelopment plan for the local area. Bob also spoke about a suggestion to redevelop the station area at Ringwood.

Rod Smith advised that only 2 shifts during weekdays are worked at Wodonga "A" Box while Wodonga Coal Sidings is down to 1 shift only on weekdays.

It was noted that the BG rail between Wodonga & Bandiana is to be removed.

Tom Murray reported on proposed works in the Laverton area. A.R.T.C. have called tenders for a new SG loop. Track will be constructed but no signals at this stage.

Colin Rutledge was able to provide further details concerning the signalling for the new loop. A.R.T.C. had called tenders for the track work & the signalling, but the signalling proposals were complicated because of level crossings at each end of the loop at Galvin & Aircraft. An early proposal was to use D.I.C.E. & Harmon Electrocode track circuits but this equipment is not compatible with the DC traction equipment on the adjacent BG lines. It had also been proposed to place the loop on the down side of Aircraft, but the location will now be at Laverton, with remote control from Adelaide. Each location has problems with shunting near level crossings. An early signalling design scheme planned for 13 signals but the quoted price for this scheme had been rejected. A revised scheme proposed using 8 signals but the signalling issues have not yet been resolved. The track work will be built on the Laverton site. It is possible the S.C.T. Siding may have a triangle connection & the up end connection to the new loop may be in the vicinity of Galvin. A.R.T.C. is also considering some sort of remote control system for Newport to Manor.

A number of suggestions have been made regarding the lengthening of Seymour Loop including providing co-acting departure home signals.

Colin Rutledge reported that the A.R.T.C. loop extension program on the Albury & Wolseley SG lines was now complete.

Noel Reed was invited to speak about the inquiry into the rail collision at Glenbrook, N.S.W. On Thursday 02.12.1999, the 06:39 up Lithgow Interurban train collided with rear of the Up "Indian Pacific" after the IP had been delayed by signal failures. Noel has been attending the public hearings of the inquiry & was able to provide many details of the circumstances surrounding the collision & the evidence that had been given so far. Many questions & much discussion followed Noel's remarks. The whiteboard in the meeting room was used to draw a map of the locality of the collision.

Meeting closed @ 22:01 hours.

The next meeting will be on Friday 19 May, 2000 at the Surrey Hills Neighbourhood Centre, 1 Bedford Street, Surrey Hills, commencing at 20:00 hours (8.00pm).

SIGNALLING ALTERATIONS

The following alterations were published in WN 4/00 to WN 10/00. The alterations have been edited to conserve space. Dates in parenthesis are the dates of the Weekly Notice

- 24.01.2000 **Traralgon - Bairnsale** (SW 16/00, WN 4/00)
 On Monday, 24.1., Master Key 16 was provided at Sale for use at Hillside. The Master Key is engraved 'Traralgon - Bairnsdale' but is not available for use between Sale and Traralgon. The Signaller must endorse the TRB each time the key is issued to the RTL Driver.
- 25.01.2000 **Sydenham** (SW 13/00, WN 4/00)
 On Tuesday, 25.1., traffic light co-ordination was commissioned at Melton Road.
 The level crossing test switch was also altered to operate the traffic lights. The test switch is coloured yellow (instead of the usual red). When the switch is operated, a call is placed on the traffic lights and the boom barriers will commence to operate after the lights cycle to train mode (about 25 seconds).
- 27.01.2000 **Somerton** (SW 18/00, WN 6/00)
 The Down end Standard Gauge connection from No 2 to No 3 Tracks has been relocated further out. Catch 5 was provided at the fouling point of No 2 Track. Down Dwarf SOM/V6 was relocated further out to a point immediately in the rear of Catch 5. The points leading from No 3 Track to No 3A track (lead to sidings) are now worked by hand. Up Dwarf 7 (from No 3A to No 3 Track) was abolished.
 Operating Procedure 99, Section 34, Book of Rules, is suspended. The following procedures will apply until the yard management at Somerton is finalised.
 Only one train is to operate in No 3 Track or the lines which extend from No 3 Track at any one time. After admitting a Standard Gauge movement into No 3 Track, the ARTC Train Controller must ensure that Points 1 and 5 have been restored to normal and apply a blocking command to prevent their movement. The points may be moved if a run-around movement is required via No 1 or No 2 Tracks, or the train has departed from No 3 Track and the Train Controller has been informed that No 3 Track is clear of vehicles.
 Prior to admitting a Broad Gauge train to the yard, the Signaller must check with the ARTC Train Controller to determine if a Standard Gauge move is being made in No 3 Track. If a Standard Gauge move is taking place, the Driver of the Broad Gauge train is to be instructed not to proceed beyond the Stop Board protecting the diamond crossing at the Down end of the yard. Permission must not be granted to pass the Stop Board until the Standard Gauge train has departed. If no Standard Gauge move is being made, the Signaller may permit the Broad Gauge train to pass the Stop Board to the Blue Circle Cement Siding. The ARTC Train Controller must be advised and Points 1 and 5 secured normal. The Signaller must advise the ARTC Train Controller when the move has been completed.
- 30.01.2000 **Caulfield Loop** (WN 5/00)
 On Sunday, 30.1., Homes 611 and 612 at Flagstaff were altered to display Normal Speed Warning and Homes 623 and 636 at Melbourne Central were altered to display Clear Normal Speed.
- 31.01.2000 **Sale - Bairnsdale**
 On Monday, 31.1., the Train Staff and Ticket System replaced Siding Conditions working between Sale and Hillside. The section between Hillside and Bairnsdale remains booked out of use and a baulk was provided on the Down side of Hillside at 263km.
 Down Home A at Stratford and the Up Home at Fernbank were abolished. The Up end points at Stratford and the Down end points at Fernbank have been spiked.
 The level crossing protection equipment at Raglan Street, Maffra Road, Myrtle Bank Road, McAllister Road, Hobson Street, Princess Highway and the Dargo-Fernbank Road were recommissioned.
 The Staff is engraved 'Sale - Bairnsdale'. Tickets will not be issued. The Master Key for the section remains in use. The primary form of Train Communication is by SMR and Train Crews are responsible for notifying the Train Controller of the arrival and intended departure times at Hillside.
 Vehicles are not permitted to be stabled on the main line at Hillside.
- 06.02.2000 **Caulfield Loop** (WN 5/00)
 On Sunday, 6.2., Homes 645 and 654 at Parliament were altered to display Clear Normal Speed.
- (07.02.2000) **Book of Rules - Defined Station Limits (Rule 23c, Section 2)** (SW 11/00, WN 5/00)
 The following is to be inserted as a new Rule 23c, Section 2, Book of Rules
 23c Defined Station Limits
 'Station Limits' is defined as the section of line between opposing Home Signals (Electric Staff, Train Staff & Ticket, Automatic Electric Staff, Train Orders, CTC, and ATC), between the Home Signal and the Starting or departing Home Signal (Double Line Block & Track Block), or between the Home Arrival Signal and the first Automatic Signal in advance of the Home Departure Signal (or Home Arrival where a Home Departure is not provided) (Automatic Block).
 Wrong Direction movements within Station Limits
 When a wrong direction movement is to be made within station limits, the Signaller must: ensure that all

signals protecting the line over which the movement is to be made are secured at Stop; set and sleeve all facing and trailing points for the movement; give a verbal authority for the movement to take place (by radio, post phone, or in person); and endorse the TRB with the details of the movement.

07.02.2000 **Mildura** (WN 6/00)

On Monday, 7.2., the Up and Down Yard Limit Boards were abolished. The Up and Down Location Boards were relocated to be 2000 metres from the station yard facing points. The Down approach to Seventh Avenue and the Up approach to San Mateo Avenue were altered for an approach speed of 25 km/h. A permanent speed restriction of 25 km/h applies between the Up side of Seventh Ave and the Down side of Chaffey Ave.

The operating procedure for Mildura (in SW 1282/99) is to be replaced:

93 Mildura

Mildura is an Intermediate Siding in the Yatpool Block Point - Yelta section. Trains fouling the main line must be in possession of a Train Order. All trains proceeding to Mildura to shunt and stable must be instructed to Lock Away upon arrival; this text is to be included in the text of the Train Order. Trains are not permitted to cross or lock away whilst one or more trains pass through.

Vehicles are not permitted to be stabled in No 1 Track. Upon completion of shunting, the employee assisting the shunting must ensure that all vehicles are secured within the sidings and all derails and locking bars are applied.

(14.02.2000) **Flemington Racecourse Line** (SW 23/00, WN 6/00)

Diagram 3/00 replaced 17/98. The diagram shows the provision of the baulk at the Up end of the Loop line, the spiking of the points to the Loop line at Showgrounds Junction normal, the abolition of Automatic UR247, and the conversion of Up Home 36 at Newmarket to Automatic E188.

(14.02.2000) **Blackburn** (SW 24/00, WN 7/00)

The LED Illuminated Letter 'A' on Home 308 was replaced with a normal incandescent Illuminated Letter 'A'

14.02.2000 **Essendon** (SW 24/00, WN 7/00)

On Monday, 14.2., an LED Illuminated Letter 'A' replaced the standard incandescent Illuminated Letter 'A' on Up Home 18. The LED lamp came from Blackburn.

(21.02.2000) **Woodend** (SW 25/00, WN 7/00)

The signalbox hours will be:

Monday - Friday	0510 hours to clearance of Train 8024
.....	1239 hours to clearance of Train 8049
Saturday	0955 hours to clearance of Train 8015
Sunday	Switched out

27.02.2000 **Moonee Ponds Creek Junction - West Tower - West Footscray** (SW 28/00, WN 9/00)

On Sunday, 27.2., the control of the Standard Gauge line between Moonee Ponds Creek Junction and Sims Street Junction and the Dual Gauge line between Sims Street Junction and West Footscray was transferred to ARTC Train Control Centre, Adelaide.

Permission must be obtained from the ARTC Train Controller before any movement fouls the Standard Gauge main line or advances to any track controlled by ARTC Train Controller. The ARTC Train Controller must check with the appropriate authority that a movement can be accepted at a rail terminal prior to signalling the movement.

Drivers will use Channel 11 to communicate with the Train Controller, Adelaide, and Channel 9 to communicate with the Signaller West Tower.

Control of signals is shared between the ARTC Controller (main line movements) and West Tower. An intercom is provided to allow direct communication between the Signallers at Newport, and West Tower, and the Train Controller Adelaide.

Moonee Ponds Creek Junction

All the points formerly worked by Spencer Street No 1 Box are now worked from Adelaide. These are: Points 213 (Broad Gauge fly-over to Dual Gauge Track), 205 (Dual Gauge Track to Great Northern Terminal), 215 (Dual Gauge Track to Coke Road), 207 (Standard Gauge to Dynon Loco), and 209 (Standard Gauge to NRC Yard).

The following signals are worked by the ARTC Train Controller (for the moves specified): Up Dwarf 286 (Broad Gauge flyover Dual Gauge line over Points 213 reverse); Down Home 218 (Dual Gauge line to Standard Gauge flyover over Points 213 normal); Down Home Up Home 206 (Dual Gauge line to Coke Road, South Dynon Loco, Standard Gauge line, or NRC Yard); Up Dwarf 204 (Great Northern Yard to Main Line), Down Dwarf 208 (South Dynon Loco to Main Line); Down Dwarf 210 (NRC Yard to Main Line), Down Dwarf 214 (Coke Road to Main Line); and Down Home 212 (Standard Gauge Main Line towards Spencer Street or to GNR Yard).

The following signals are worked by Spencer Street No 1 Box and controlled by Metrol: Up Home 202 (Standard Gauge Line to Gauntlet Track and thence Standard Gauge flyover). This signal must not be cleared without authority of the ARTC Train Controller.

The following signals are worked by West Tower (for the moves specified): Up Dwarf 286 (Broad Gauge

flyover to Fuel Point over Points 213 normal); and Down Home 218 (Dual Gauge line to Broad Gauge flyover).

All moves not otherwise specified are controlled by West Tower who will issue the authority to pass a defective signal at Stop after communicating with the ARTC Train Controller.

Dock Links Road Area

The points in the Standard Gauge main line are worked from Adelaide. These are: Points 119 (Standard Gauge Melbourne Operations Terminal Track to Wagon Maintenance Centre; released by Wagon Maintenance Centre operator), Points 139 (Standard Gauge main line to Melbourne Operations Terminal), Crossover 123 (Standard Gauge main line to NRC Yard), and Crossover 127 (Standard Gauge main line to NRC Provisioning Centre). All other points are worked from West Tower.

The following signals are worked by the ARTC Train Controller (for the moves specified): Down Home 122 (along Standard Gauge main line or to NRC Provisioning Centre); Down Dwarf 154 (Wagon Maintenance Centre to SG main line); Down Dwarf 142 (Melbourne Operations Terminal to SG main line); Down Dwarfs 126, 228, 230, and 232 (NRC Yard to SG main line); Up Home 138 (Along SG main line or to NRC Yard, Wagon Maintenance Centre, or Melbourne Operations Terminal); Up Dwarf 128 (NRC Provisioning Centre to SG line over Points 127 reverse).

The following signals are worked by the Signaller West Tower (for the moves specified): Down Dwarf 132 (from Appleton Dock to Y Track); Up Dwarf 136 (to Appleton Dock); Down Dwarfs 126, 228, 230, 232 (NRC Yard to Dwarf 108); Down Dwarf 108 (NRC Yard to NRC Provisioning Centre or North Dynon); Up Dwarf 114 (NRC Provisioning Centre to NRC Yard); Down Dwarf 124 and Up Dwarf 128 (Along No 1 Track NRC Provisioning Centre over Points 127 normal); and Up Dwarf 134 (North Dynon to NRC Yard).

The instructions relating to Standard Gauge movements to Appleton Dock line are similar to those given in the last issue of Somersault, except that permission is now to be obtained from the ARTC Train Controller (except for permission to pass Dwarf 136 is to be obtained from the Signaller West Tower). Note that this includes the permission for Standard Gauge moves to pass Dwarf 132 (worked by Signaller West Tower) at Stop. The key to the Safeworking Cabinet continues to be held by the Signaller West Tower who must obtain permission to release it from the ARTC Train Controller. This permission must be noted on the Train Graph and the Train Register.

Sims Street Junction

It appears that all points are worked by the ARTC Train Controller. These are: Points 131 (Standard Gauge Access to NRC Provisioning Centre); Points 143 (Standard Gauge main line to Dock Link Road or North Dynon); Points 155 (end of dual track Standard Gauge main line); Points 147 (Broad Gauge main line to Dock Link Road or North Dynon); and Points 151 (end of dual track Broad Gauge main line).

It appears that the following signals are worked by the ARTC Train Controller (for the moves specified): Down Dwarf 148 (BG Appleton Dock line to Down Dual Gauge line); Down Home 150 (Standard Gauge main line to Down Dual Gauge line); Down Dwarf 130 (Standard Gauge NRC Provisioning Centre to Down Dual Gauge Line); Down Home 146 (SG North Dynon to Down Dual Gauge line); Down Home 152 (BG North Dynon to Down Dual Gauge line); Up Home 158 (Up Standard Gauge line to Dock Link Road area, North Dynon, or NRC Provisioning Centre); Up Home 162 (Up Dual Gauge line to Homes 158 or 160); Up Dwarf 164 (Down Dual Gauge line to North Dynon (Broad Gauge or Standard Gauge), NRC Provisioning Centre (Standard Gauge), SG main line, or Y Track)

The following signals are worked by the Signaller West Tower (for the moves specified): Up Home 160 (Up Broad Gauge line to North Dynon or Y Track)

Operation of Up Home MG272 (Up Dual Gauge line)

This Home is an uncontrolled Home Signal (that is, the aspect is solely controlled by track circuits and not from a signalbox) and is provided to prevent the entry of more than one train into the section in advance of the signal. If a train comes to a stand at MG272 because the signal is at stop, the Driver is to contact the ARTC Train Controller who will determine if a train is in the section in advance. If the signal has failed, the Train Controller will instruct the Driver to pass the signal and proceed cautiously to MG242.

West Footscray Junction

The Standard Gauge points at the end of the double track (Points 191) are worked by the ARTC Train Controller.

The following signals are worked by the ARTC Train Controller (for the moves specified): Down Home 186 (Down Dual Gauge line to BG Down Independent Goods line or SG main line - controlled by 27 West Footscray when switched in); Down Home 188 (along BG Down Independent Goods line - controlled by 26 West Footscray when switched in); Down Home WFJ/6 (Down SG Departure - controlled by NE ARTC Train Controller); Up Home 194 (SG main line to Up Dual Gauge line); Up Home 192 (BG Up Independent Goods line to Up Dual Gauge line when West Footscray is switched out)

The following signals are worked by the Signaller West Footscray when switched in (for the moves specified): Down Dwarf 25 (Up Dual Gauge line to Tottenham Yard or Down Independent Goods line); Down Home 188 (Down Independent Goods line to Tottenham Yard); Up Home 192 (Up Independent Goods line to Up Dual Gauge line - released by ARTC Train Controller); Up Dwarf 5 (Tottenham Yard to Up Dual Gauge line - released by ARTC Train Controller).

Caution Orders

If it is necessary to authorise a Train to pass a signal at Danger, the authorisation will be given by the person who would operate the signal for that move (which may be the ARTC Train Controller, the Signaller West Tower, or the Signaller West Footscray). Where a signal is jointly worked, the Signaller and the Train Controller must come to an understanding and ensure that the appropriate blocking commands have been applied. The Train Controller must not remove a blocking command until it has been confirmed that the movement has been completed.

The authority to pass a Home signal at Danger will be by a Signallers Caution Order. It will not be necessary for the Driver to take down a copy of the Caution Order. Only a verbal authority is necessary to pass a Dwarf signal at Danger.

28.02.2000 **Fairfield** (SW 29/00, WN 9/00)

On Monday, 28.2., the signalbox and interlocked frame was abolished. Down Home 21 and Up Home 39 were converted to Automatic signals and renumbered S257 and S266 respectively. Up Automatic S258 was abolished. Diagram 5/00 replaced 15/98.

28.02.2000 **Heidelberg** (SW 30/00, WN 9/00)

On Monday, 28.2., Points 11 and 21, and Crossover 24 were removed. Points 12 (Single line to Tracks 1 or 2) were fitted with a dual control point machine. Plunger 10 was converted to a pilot lever.

05.03.2000 **Tottenham B - Brooklyn - Newport**

At 0800 hours on Sunday, 5.3., the ARTC Train Controller at Adelaide assumed control of all points and signals on the Dual Gauge line between Tottenham B and Newport. The Electric Staff system Tottenham B - Brooklyn and Brooklyn - Newport was replaced by Automatic Block Signalling. It is no longer necessary for Signallers to be in attendance at Tottenham B, Brooklyn, or Newport for the passage of Standard Gauge trains, or at Brooklyn for Broad Gauge trains passing along the Dual Gauge line.

At Tottenham B a reverser was provided on Home 3 (Down Home Down Independent Line to Brooklyn). The closing facility was withdrawn. Closing lever 6 was sleeved normal and the Annett lock removed.

The Electric Staff system remains in use on the West Line, Newport - Brooklyn and between Brooklyn and Sunshine.

Tottenham

The Standard Gauge points and signals at Tottenham are worked by the NE ARTC Train Controller. Points 5 are released by the West Tower ARTC Train Controller (Release 5). The Broad Gauge points and signals at Tottenham are worked by the Signaller Tottenham B. Broad Gauge moves are released by the West Tower ARTC Train Controller (Release 15) which allows the Signaller Tottenham B to restore lever 15 normal. The ARTC Train Controller is not able to give Releases 5 and 15 at the same time.

Before giving permission for a Down train to depart from Tottenham Loop or Tottenham B towards Brooklyn, the ARTC Train Controller must check that no Up Standard Gauge train are approaching from Manor. However, the interlocking is arranged so that the Train Controller may signal opposing moves to allow Broad Gauge trains to proceed from Tottenham to the West Line while an Up train is approaching Brooklyn on the East line.

The ARTC Train Controller must not allow an Up Broad Gauge train for Tottenham B onto the Dual Gauge line unless clear passage of the train into Tottenham can be provided without delaying other movements. This must be checked with the Signaller Tottenham B.

Should Broad Gauge Release 15 fail, a Signal Maintenance Technician must attend to release the lever lock. The permission of the ARTC Train Controller must be obtained prior to releasing the lock, and the Train Controller must ensure the NE ARTC Train Controller has blocked Points 5 normal before granting permission. The Signaller Tottenham B must obtain permission from the Train Controller prior to allowing any movement.

Should Standard Gauge Release 5 fail, the ARTC Train Controller must apply blocking commands (for a Down movement) and instruct the Signaller Tottenham B to sleeve lever 15 reverse (if Tottenham B is attended). The NE ARTC Train Controller must observe that the blocking commands have been applied. The NE Train Controller will then instruct the Driver to manually operate Points 5. The NE Train Controller will issue the Signallers Caution Order to the Driver (in the case of a Down movement) or CTC Arrival Message (in the case of an Up movement).

Should signals TOT/6, TOT/U6, or TOT/U8 fail for a Standard Gauge movement, the NE ARTC Train Controller will be responsible for authorising the Driver to pass the signal at Stop. Should signals TOT/6 or TOT/U6 fail for a movement towards Brooklyn, the NE ARTC Train Controller must come to an agreement as to the required movement and ensure blocking commands have been applied to prevent a conflicting movement. If Points 5 are detected reverse, the NE ARTC Train Controller can issue a Caution Order to pass the signal at danger. It will not be necessary for the Driver to take down the Caution Order. Should signal TOT/U8 fail the NE ARTC Train Controller will issue at CTC Arrival Message to pass the signal. The Driver must record and repeat back the details of the message. If Points 5 are not detected reverse, the NE ARTC Train Controller must instruct the Driver to manually operate the points reverse before issuing the CTC Arrival Message.

Should Home 3 or Dwarf 12 fail for Broad Gauge movements towards Brooklyn, authority to pass the signal at Stop will be granted by the ARTC Train Controller. The Signaller Tottenham B must inform the

ARTC Train Controller that the points are set appropriately. The Signallers Caution Order will be dictated to the Signaller Tottenham B who will deliver it to the Driver. The Driver must stop at each set of points to check that they are in the correct position for passage.

Should Home U8 fail for a Broad Gauge movement, or Calling-on arms 2 or 14, or Disc 13 fail for Broad Gauge movements to or from the Independent Goods Lines, the Signaller Tottenham B will grant authority for the Driver to pass the signal. The ARTC Train Controller must be advised and a blocking command placed on Points 5 normal. For moves along the Independent Goods Lines, the Signaller must confirm that Release 15 has been given.

Brooklyn

The ARTC Train Controller works Points 18 (to Sunshine) and 19 (to West Line). The Train Controller also works all signals applying to or along the Dual Gauge line. These are: left hand Home on Post 1 (Sunshine to East Line), right hand Home on Post 2 (Tottenham to East Line), Home on Post 4 (along East Line), right hand Home on Post 6 (East Line to Tottenham) and right hand Home on Post 7 (West Line to Tottenham). All other signals are worked by the Signaller Brooklyn.

Movements to Tottenham or Newport via the East Line will be signalled by the ARTC Train Controller. Movements to the West Line or to Sunshine will be signalled by the Signaller Brooklyn, who will require the ARTC Train Controller to set the points appropriately before operating the lever to clear the signal. Prior to a Broad Gauge train being permitted to depart from the West Line at Brooklyn for Tottenham or from the Sunshine line at Brooklyn for Newport, the ARTC Train Controller must check with the Signaller at Tottenham or Newport to ensure that the train can be accepted at that signalbox. Prior to a Broad Gauge train being permitted to depart from Tottenham for the West Line at Brooklyn, or Newport for Sunshine, the ARTC Train Controller must check with the Signaller Brooklyn to ensure that the train can be accepted.

Should a signal worked by the ARTC Train Controller fail, the Train Controller will issue the Signallers Caution Order to pass the signal at Stop. It will not be necessary for the Driver to take down the Order. A blocking command must be placed on Points 18 and 19 before issuing the Order. If Points 18 or 19 are not detected for the movement, the Driver must be instructed to operate the points to the Hand operating mode and set them for the required position (unless the movement is from the Sunshine or West lines in which case the Signaller Brooklyn will operate the points).

Should a signal worked by the Signaller Brooklyn fail, the Signaller will issue the Signallers Caution Order after obtaining permission from the ARTC Train Controller to operate the points required manually.

Newport

The ARTC Train Controller works all points and signals to and from the East Line. The Signaller Newport releases Homes 707 (East Line) and 709 (West Line) for moves towards the platforms (via Stabling Siding No 2) or the Goods Line.

Should a signal worked by the ARTC Train Controller fail at Stop, the Train Controller will issue the Signallers Caution Order. It will not be necessary for the Driver to take down the Order. For a Broad Gauge movement, the Signaller Newport must sleeve normal the levers for all opposing movements and not remove the sleeves until the movement has been completed. Points 600 (to Goninans), 602 (to the West Line), and 603 (to Stabling Siding No 2) are provided with Dual Control Point Machines and should the points or detection fail the Driver must be instructed to place the points in the Hand mode and operate them for the desired movement before the Caution Order is issued.

The Section Authority System is in force on the Down side of Newport. Before allowing a Down Standard Gauge movement to depart from Tottenham the ARTC Train Controller must check with the Section Authority Train Controller that the movement can be accepted. The ARTC Train Controller must not clear Home 707 at Newport until it has been established that a Section Authority has been issued for the movement to continue. The system has been provided with an additional confirmation window as part of the process of clearing Home 707.

The Train Controller must not let a movement for Goninans Siding depart from Tottenham or Manor Loop unless it can enter the siding. Similarly, a movement for Anzac Siding must not be allowed to approach Newport unless it can enter the siding. Movements from Goninans or Anzac Siding must not be made unless the movement can be accepted at its destination or by the adjoining Train Controller.

When a Broad Gauge train is approaching Newport on the Dual Gauge East Line the ARTC Train Controller must check with the Signaller Newport as to the track the train is required to enter. When a Broad Gauge train is approaching Newport on the West Line the Signaller Newport must inform the ARTC Train Controller as to the movement. The Signaller must provide the appropriate release to the Train Controller who will set the route requested by the Signaller.

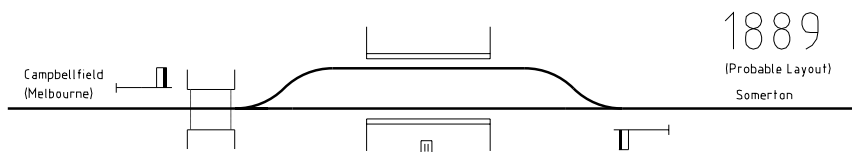
When a Broad Gauge train is to depart Newport towards Brooklyn, the Signaller must inform the ARTC Train Controller who will set the route. Movements to the West Line must prove that a Staff has been obtained for the section. The Signaller Newport must place the Staff in the Staff Proving Box which will provide a release for Homes 702 or 704. If the staff proving fails the Signaller Newport will inform the ARTC Train Controller who must reverse Points 602 and place a blocking command on them. A Caution Order will then be dictated.

UPFIELD

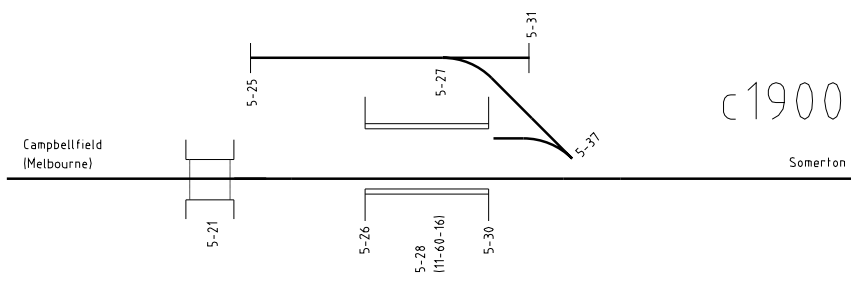
Upfield was opened with the line on 8 October 1889 as 'Campbellfield North'. The centre line of the platform was situated at 11 miles, 60 chains, 16 links, just north of Barrys Road. The station was initially open for passengers only, and served the northern end of Campbellfield village. In the first full year of operation (1890/1) 2855 tickets were issued at Campbellfield North. To put this in perspective, this was an average of just 11 tickets per weekday.

closed to goods traffic and was only open for passengers. Very few passengers used the station, however. Traffic figures from 1896/7 show between 200 and 300 passengers per annum - roughly one each weekday - with two years (1899/1900 and 1902/3) reaching heady heights of 500 passengers.

A diagram drawn around the turn of the century shows that the only the platform on the main line was in use. The platform on the loop was noted as 'facing removed, earth mound remains'. The goods siding was intact, but the main line points (at the Down end) had been removed. This may have occurred in November 1896 when the remaining main line points



The station appears to have been a Staff station from opening, and was certainly a Staff station by August 1890 when the WTT shows that the sections were Campbellfield - Campbellfield Nth (No 4 Pattern, Red Ticket Box with black lettering) and Campbellfield Nth - Somerton (No 2 Pattern, White with blue lettering). Single line block was superimposed over the Staff working. Exactly why Campbellfield North was a Staff station is a mystery. No crosses were scheduled at the station, nor was the service sufficiently dense for late running trains to cause problems. Most likely the reason was that as the station was staffed, why not open as a Staff station?



From a diagram of the station drawn c1900, it appears that a crossing loop was situated on the Down side of the line. Timber faced earth platforms were situated on both the main and loop lines. The platform on the main line was 300' by 18'; the platform on the loop was probably of similar dimensions. There may have been a goods siding on the Down side behind the loop platform, but this may have been added later. Up and Down Homes were provided, and Hand Gates would have been provided at Barrys Road (11 miles, 52 chains, 31 links).

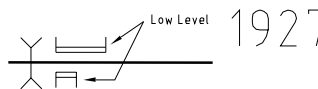
between Coburg and Somerton were Tablet locked. What appears to be a short remnant of the loop remained at the Down end.

Campbellfield North was closed on 13 July 1903 with the line.

Rail Motor Stopping Place

The rail motor service was introduced between Fawcner and Somerton on 5 March 1928. On that day, Campbellfield North was reopened as a Stopping Place and an additional Stopping Place (No 14) was provided half a mile south of Campbellfield North.

The Stopping Place at North Campbellfield was adjacent to Barry's Road and the usual two rail level platforms were provided and a shelter was probably provided on the Down side of the line. The former platform was no doubt left to decay. Stopping Place 14 was half a mile south of Campbellfield and was probably located in the vicinity of Augusta or Gentles Avenue. Indeed there is a foot crossing across the line at Augusta Avenue which could mark the site.



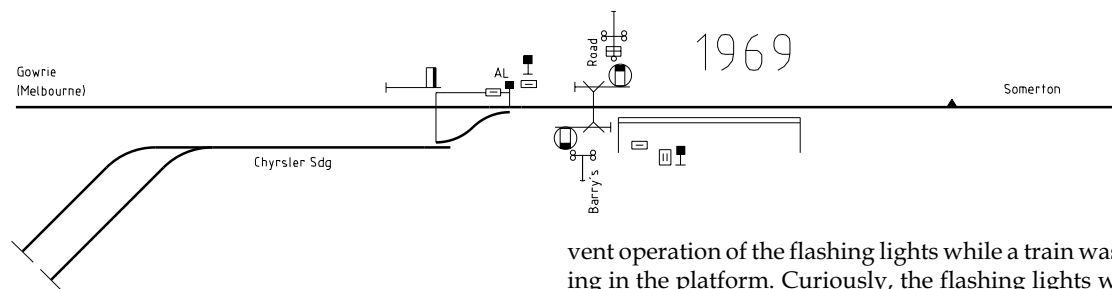
The one excitement each day was the arrival of the 0740 Down which terminated at Campbellfield North at 0830 and returned to Melbourne at 0845. At this time, the line was still single north of South Brunswick and this train had crosses at Coburg on the Down and Moreland on the Up. No doubt tight scheduling south of Coburg required the saving of the 12 minutes which otherwise would have been required to run to Somerton and return. This train, incidentally, was cancelled as from 2 September 1890 when the service north of Coburg was reduced.

RMSP 14 had around 5,000 passenger journeys per annum until the middle thirties when it climbed in two years to around 9,000 per annum and then to nearly 10,000 per annum in 1938/9. After the war traffic started at 12,500 in 1945/6 before reaching 16,000 around 1950. Traffic then fell to 10,000 by 1953/4 where it remained until closure.

The loss of the terminating train was balanced, to a certain degree, on 19 June 1891 when Campbellfield North was opened for goods traffic. Traffic accepted was stone traffic (only) outwards, and wool, timber, oats, etc inwards. No goods traffic figures are known as during this period the Commissioner's Report did not publish these figures.

By contrast, Campbellfield North had much lower traffic figures. During the first third of the thirties, traffic was between 600 and 800 passengers per annum. During the second third, this climbed to just over 1000 passengers, and to around 2000 passengers in the last third before the war. In the first year after the war (1945/6) traffic was at a high

North Campbellfield was closed as a Staff station on 9 May 1892, the section becoming Campbellfield - Somerton. The station staff were probably withdrawn shortly afterwards; certainly by early 1893 the station was no-one-in-charge. The Home signals were taken out of use on 21 August 1895. By December 1896 Campbellfield North had



of 5,200. Traffic then fell and fluctuated between 2,500 and 3,900 until 1950/1 when traffic plummeted to 750 per annum. It remained at this level for three years when it began a slow recovery, improving to 1700 in 1953/4 and 1954/5, and then to jumping to 2800 in 1955/6.

The rail motor service was withdrawn on the 5 May 1956 and both Stopping Places were closed on that date.

Upfield

The station was reopened a second time on Monday 17 August 1959 as 'Upfield' to serve the new Ford assembly plant built between the railway line and the Hume Highway. The station consisted of a single 480 foot platform on the Up side of the line. The centreline of the new platform was slightly to Melbourne than the original one at 11 miles, 57 chains, 31 links. The station was NC and was supervised by Coburg. Electrification had been extended from Fawkner to a 'Stop Board' on the Down side of the platform on 19 July. A single Down Home signal was provided. The single line section was worked by Train Staff and Ticket with the section Fawkner - Upfield.

The November 1959 showed just four trains to Upfield daily; two in the morning and two in the evening. The first arrived at 0711 (returning empty cars to Fawker at 0750) and the second at 0814 (returning empty cars to Flinders Street at 0818). In the evening, one train arrived at 1528 and went off. A second train arrived at 1615 and returned at 1632. The first train then came on and departed at 1657. Clearly, the afternoon working would have required a train to stand beyond the platform and one train each way to run on Ticket. No trains ran Saturday or Sunday.

Traffic was initially healthy, with 22,000 passengers in the first full year of operation (1960/61). This halved the following year (due to completion of construction?), and then climbed to 18,000 in 1962/3, 22,000 in 1963/4, and 33,000 in 1964/5.

From 22 August 1962 a Stationmaster was appointed to Upfield. The Stationmaster also supervised Somerton. The main task of the Stationmaster was clearly to supervise the traffic at Ford's Siding (particularly the accountancy) as by May 1963 there were only two trains each day. The morning train arrived at 0711 and returned empty cars to Fawkner at 0750. The evening train arrived at 1615 and returned at 1632.

The general suburban service was extended north of Fawkner as from 16 May 1965 when Gowrie was opened (the Staff section to Fawkner had been divided the previous day when Gowrie was opened as a Staff station). The October 1965 WTT shows that Upfield had 24 trains each week-day; roughly one in every three trains to Gowrie was extended to Upfield. Traffic at Upfield quadrupled the next year, reaching 138,000 journeys per annum. Unfortunately, the railways then ceased to publish traffic figures.

Flashing lights were provided at Barry's Road (11 miles 52 chains) on 29 July 1965. An Up starting signal was provided between the platform and the level crossing to pre-

vent operation of the flashing lights while a train was standing in the platform. Curiously, the flashing lights were not controlled through the Down Home, just through the track circuits.

Chrysler's Siding

On 30 January 1969 a siding for Chrysler Australia Ltd was provided on the Up side of Upfield. The points were situated at 11 miles 45 chains and faced Up trains. The actual sidings - two dead ends 680' clear - were situated nearly half a mile south of the station and a long lead paralleled the main line with 1350' between the catch points and the points. The main line points were secured by an Annett lock and were rodded to a catch in the siding. A new outer Down Home was provided to protect the points and could be operated from the points or from the platform. Concurrently, the two existing mechanical home signals were converted to two position light signals. A small two lever 'panel' was provided in the station building adjacent to the platform door. The Annett key was normally kept in a switch in the station building; removal of the key secured the Up Home at danger. The inner Down Home could also be worked from the points.

An Intermediate Electric Staff Instrument had been provided at Ford's Siding in the Upfield - Somerton section on 10 October 1968. This date probably also marks the replacement of Staff and Ticket working Upfield - Somerton with Electric Staff working - a date otherwise not recorded. Large Staff Instruments were provided. The lack of run-around facilities at Upfield meant that the Chrysler trains would have to continue on to Somerton. Clearly Electric Staff would be more convenient than transferring the Train Staff when required.

By 1972, Chrysler's Siding was served by a goods train four times a week (ME). This train ran Down via Coburg and shunted the siding between 1238 and 1500. It then continued to Somerton where it returned to Dynon via Broadmeadows and Albion. The train was marshalled loco, brakevan, vehicles, to allow shunting at Upfield.

A light was shone on the working at Upfield in early 1974 when the following exchange of memos took place. Reading between the lines, it would appear that a new Stationmaster had been appointed to Upfield and the new broom was questioning some practices. On 28 December 1973 the SM at Upfield wrote a memo to the Metropolitan Superintendent:

On several recent occasions the 11.15 am Chrysler Goods has either been marshalled incorrectly or has been routed via Broadmeadows and it has been necessary to run from Fords Sdg Upfield to Coburg to reverse to enable wagons to be placed at Chrysler Sdg.

Could consideration be given for permission to push vehicles from Fords Sdg to Chrysler Sdg. It would be necessary to push on running line approx 1 km and cross Barry's Road which is protected by flashing lights.

In the event of 11.15 am Chrysler arriving via Coburg and either being too long to handle comfort-



The 1969 and 1997 panels at Upfield, taken during the SRS Tour of 1997. The 1969 panel is the lower, wooden, panel with the two thumb switches. It was installed when the two home signals protecting the level crossing were converted to light signals. When this photo was taken the Signaller had pulled off for a Down train to arrive, the lefthand switch for Signal E is reverse with the reverse indication lamp illuminated. Notice that no indication lights are provided for Signal U (the Up Departure signal); the aspects for this could be checked if necessary by opening the door and glancing along the platform. No illuminated diagram is provided, but a single indication light labelled "Tracks" is provided between the two thumb switches. Above the 1969 panel is the new panel installed to work the new Stabling Sidings. From left to right, the four switches are: crosslock release for the Up end points (76); crosslock release for the Down end points (77); Up Home (75); and finally the release for the adjacent Annett Lock. Note the out of order numbering! The E Pattern Annett Key to operate the Up end points of the Stabling Sidings could be obtained in two ways. Reversing lever 76 released an Annett Key held in a crosslock at the points. Alternatively, the rightmost lever on the panel could be reversed allowing the Annett Key to be removed from the panel itself. Indication lights were provided on the panel to indicate when the Annett Keys were in the crosslock, to repeat the normal and reverse aspects of Home 75, to indicate when the panel Annett Key could be removed, and to indicate when the gates at each end of the Stabling Sidings were closed.

ably at Chrysler Sdg or being marshalled incorrectly it is permissible to leave portion of train outside home arrival signal to expedite shunt and to eliminate necessity to run to Coburg. There is a down grade to Gowrie

I understand Senior Train Controller is arranging instructions re marshalling of Chrysler Goods.

The SM at Upfield followed this up with a second mis-sive dated 3 January 1974

Could a ruling be obtained on where section Upfield - Somerton commences [...]

When trains (Suburban) are stood outside platform at Down end they are required to stand outside Derail Block which has been locally taken as commencement of section. If this assumption is correct is it necessary to obtain a staff for the section. This would be difficult at times due to working of goods trains to Ford's and other sidings.

If it is permissible to stand suburban trains outside derail block is it also permissible to stand goods trains ex Chrysler outside block to prevent them being delayed and blocked by Suburban trains at platform while waiting for staff to continue to Ford's Sdg?

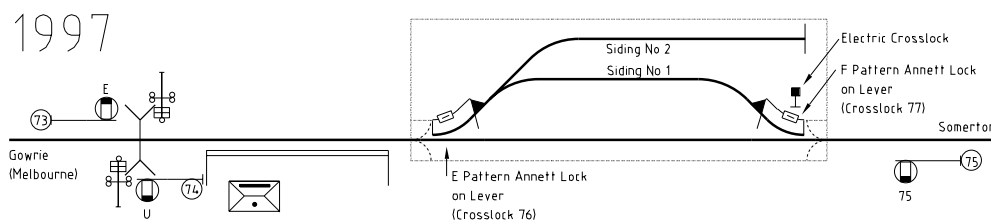
On occasion when 1115 [am] Chrysler Goods

does follow 1138 [am] Down Upfield it is necessary to stand 1138 [am] Down outside Derail Block.

Should Suburban Trains be driven to stand outside Derail Block or is it permissible to push to position [...]

A flurry of memos resulted. The S&C Engineer was asked when boom barriers would be installed at Barrys Road. The response was that no definite date had been set as the proposal was awaiting a decision by the City of Broadmeadows as to whether they would contribute to the cost, but that it would be at least 4 to 5 months.

The B&S Inspector noted that the section commenced at the scotch block and that there was sufficient room to stand a 7 car suburban set between the platform and the block. The Assistant Chief Traffic Manager did not agree that there was sufficient room and suggested the provision of an Up home near the notice board at Ford's Siding. (The ACTM was correct: the litho showed only 299 feet between the end of the platform and the scotch block, around 420 feet would have been required to stand a 7 car set.) The SM agreed to the provision of the Up Home clear of Stanton Pipes Sdg, and the Inspector noted that the scotch block should be removed as only suburban trains in running stood on the line. The S&C Engineer, however, noted that the provision of a



light signal and repeater would cost approximately \$7500.

Armed with these facts, the Assistant Chief Traffic Manager then proposed:

The cost (\$7500) involved in providing a home signal could not be justified.

Please comment on the following proposal:

Upfield station limits be regarded as commencing at the staff locked points [at Ford's Siding].

Pushing from Ford's to Chrysler would not then require special permission as it is covered by Regulation 201 "within station limits".

As the staff locked points lie for Ford's the safety of trains or vehicles standing on the main line between Upfield platform and the points would be assured insofar as Up movements are concerned.

Movements in a down direction would, of course, be under the control of the Signaller and could be permitted to proceed as far as the Notice Board without a staff.

All agreed and the Stationmaster at Upfield was accordingly notified on 3 July 1974.

By 1974, the Chrysler Goods ran daily (including Saturday) and was restricted to 18 vehicles plus locomotive to allow it to be overtaken at Coburg. The return journey departed at 1400, and the extra hour was used to shunt Ford's Siding and Shaw Pipes Siding (if required). The return journey ran via Broadmeadows and Albion, but now terminated at Tottenham Yard, except on Saturdays when it was extended to Melbourne Yard. By 1980 the Chrysler goods only ran MWF and arrived at Upfield at 1106, still via Coburg. The WTT, however, does not show any path for the train to return to Melbourne.

The Chrysler Goods was withdrawn in the mid '80s. I photographed T359 hauling a van passing O'Heas Road on the Down on 30 June 1986. The service was not shown in the Metro Goods Services WTT issued on 11 October 1987. With the abolition of Chrysler service, the section of line between Upfield and Ford's Siding fell out of use.

The points to the Chrysler Siding were removed on 10 January 1990 and the Annett lock removed. In late January 1990, the use of Staff Tickets was prohibited on the Gowrie - Upfield section; mainly because there was not considered sufficient capacity at Upfield for two electric trains. Post 72 (the outer Down Home) was abolished on 4 December 1990.

The section of line between Gowrie and Upfield was temporarily closed as from Monday, 5 November, 1990 to allow construction of a bridge over the new Western Ring Road. Busses provided a connecting service to Gowrie. The line to Upfield was reopened on 21 July 1991 (the train service resumed the next day). With the reopening all suburban trains were extended to Upfield.

The PTC held an open day on Sunday 20 October 1991 with activities throughout the state. On the Coburg line a special steam train ran between Coburg and Somerton; this section was chosen to minimise the number of staff necessary to operate the interlocked and hand gates. Access was gained by way of Broadmeadows. This was probably the

first use of the section between Upfield and Ford's Siding since termination of the Chrysler Goods, and the section was probably not used again for nearly six years.

Permission was granted to use Staff Tickets on the Gowrie - Upfield section on 15 November 1993.

Stabling Sidings

Construction of the City Link south of the Tullamarine Freeway required the closure of the Upfield line between North Melbourne and Flemington Bridge. A shuttle service was maintained between Flemington Bridge and Upfield during the closure and new stabling sidings were constructed at Upfield. The broad gauge line between Upfield and Somerton was rehabilitated to allow EMU sets to be transferred to and from the otherwise isolated section.

The new sidings were constructed on the Down side of the line beyond the platform. Two sidings were provided: a loop line and a spur. The points at each end of the loop were rodded to a Hayes Derail and Crowder and the point levers were secured by miniature Annett locks. The Annett keys were normally kept in electric crosslocks. A new two position Up Home (light) was provided to control movements from Somerton. A small additional panel was provided above the existing panel.

The sidings were commissioned on 30 April 1997 and the last through train ran that evening. Initially, four three car Comeng sets were stationed at Upfield to maintain the service (three in use with one spare). It was planned to swap two of the sets each Wednesday; a diesel hauling a six car set from Broadmeadows to Upfield via Somerton, and returning with the last two arrivals. The Comeng sets, however, proved unreliable and it was decided to use Hitachi sets instead and transfers were then only run as necessary. On 2 May 1997, the Electric Staff system between Upfield and Somerton was replaced by Train Staff & Ticket, although Tickets were not to be issued. In practice, the line wire between Upfield and Somerton had been derelict for a number of years and it was extremely unlikely that the Electric Staff instruments were in working order. It is very likely that a fitter released one of the Staffs when the line was reopened, and this probably formed the Train Staff after the Electric Staff was abolished.

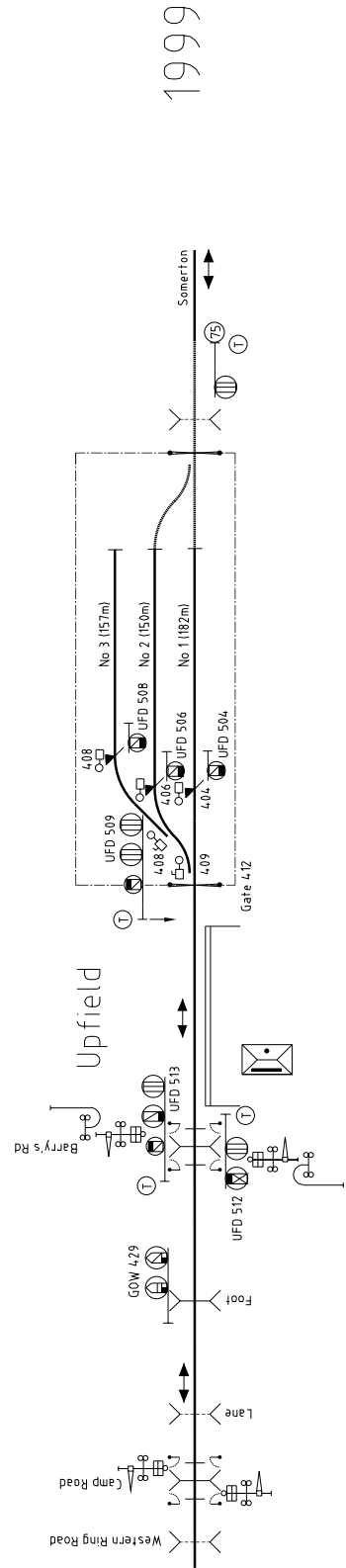
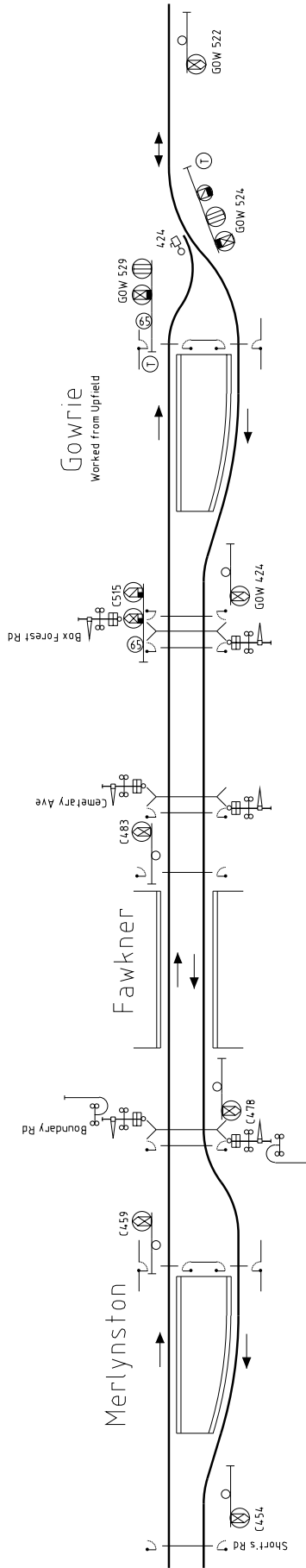
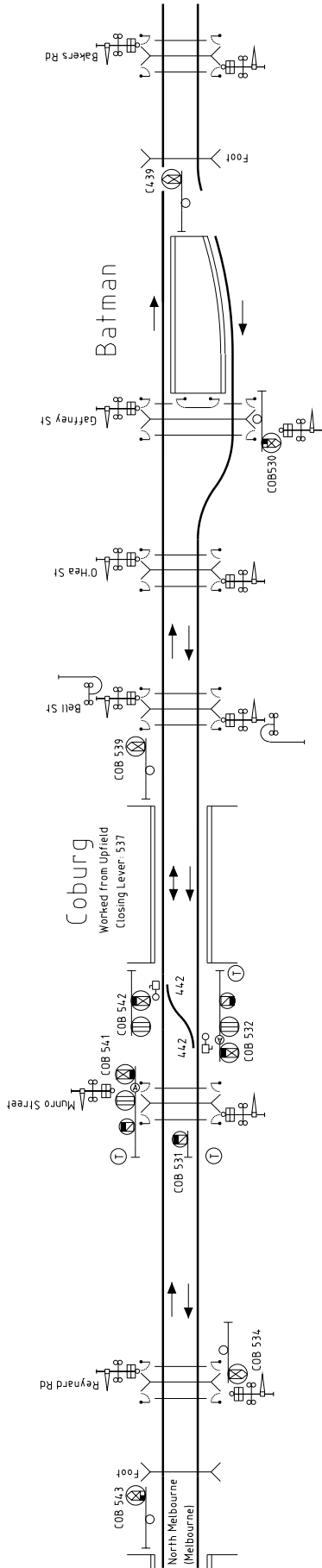
Through traffic recommenced on 22 February 1998, but the stabling sidings remained in use to stable two sets each night.

Resignalling

In late 1997 work commenced on resignalling the Upfield line. Among the first works was the closure of Gowrie as a Staff station on 28 September 1997, the Train Staff and Ticket section then becoming Fawker - Upfield.

In the new scheme of things, the interlockings at Coburg, Gowrie, and Upfield itself would be worked from a new panel at Upfield. The panel was initially brought into service on 18 October 1998 to control the new Coburg SSI.

On 26 October the Down end Annett locked points were secured normal and the associated Derail and Wheel Crowder was replaced by a baulk.



1999

On 1 November 1998 the Upfield SSI was commissioned. The existing panels were abolished. Down Homes 73 and 74 were replaced by new two position light signals. The connections to the stabling sidings were properly interlocked with motor operated points and three position signals provided for moves into and out of the sidings. Motorised gates were provided at the Up end of the stabling compound. At the Down end, the Home on Post 75 was fixed at Stop. The Train Staff section between Upfield and Somerton now commenced at Post 75 and no train was to operate between Post 75 and the security compound without the authority of the Superintendent Safeworking, Manager Track & Civil (Bayside), and District Engineer (Southern). Boom barriers were provided at Barrys Road. A baulk was subsequently provided in No 1 Track (on 15 April 1999) 20 metres from the end of the track.

South of Upfield, the Train Staff and Ticket system remained in use between Fawkner and Upfield until 16 November 1998. On this date the section of line between Fawkner and Gowrie was duplicated. The new end of the double line at Gowrie was worked from the Upfield panel. The single line between Gowrie and Upfield was worked by ATC. At Upfield, Homes 73 and 74 were converted to three position signals, and Post GOW529 was commissioned.

The Train Staff & Ticket working between Post 75 at Upfield and Somerton was withdrawn in late December 1998 and the line operated under siding conditions.

FORD'S SIDING

The construction of the massive Ford assembly plant at Upfield was the trigger for the reopening of the line north of Fawkner. The assembly plant was situated between the

railway and the Hume Highway north of Barry's Road.

Sidings for the plant were laid in on the Up side of the line north of Upfield station. The sidings consisted of three marshalling roads each 1000 feet in clear which lead to either two inwards loading roads (300 and 800 feet long) or two outwards loading roads (500 and 100 feet long). Inwards traffic was parts from the older Ford factory at North Geelong. Outwards traffic was completed cars.

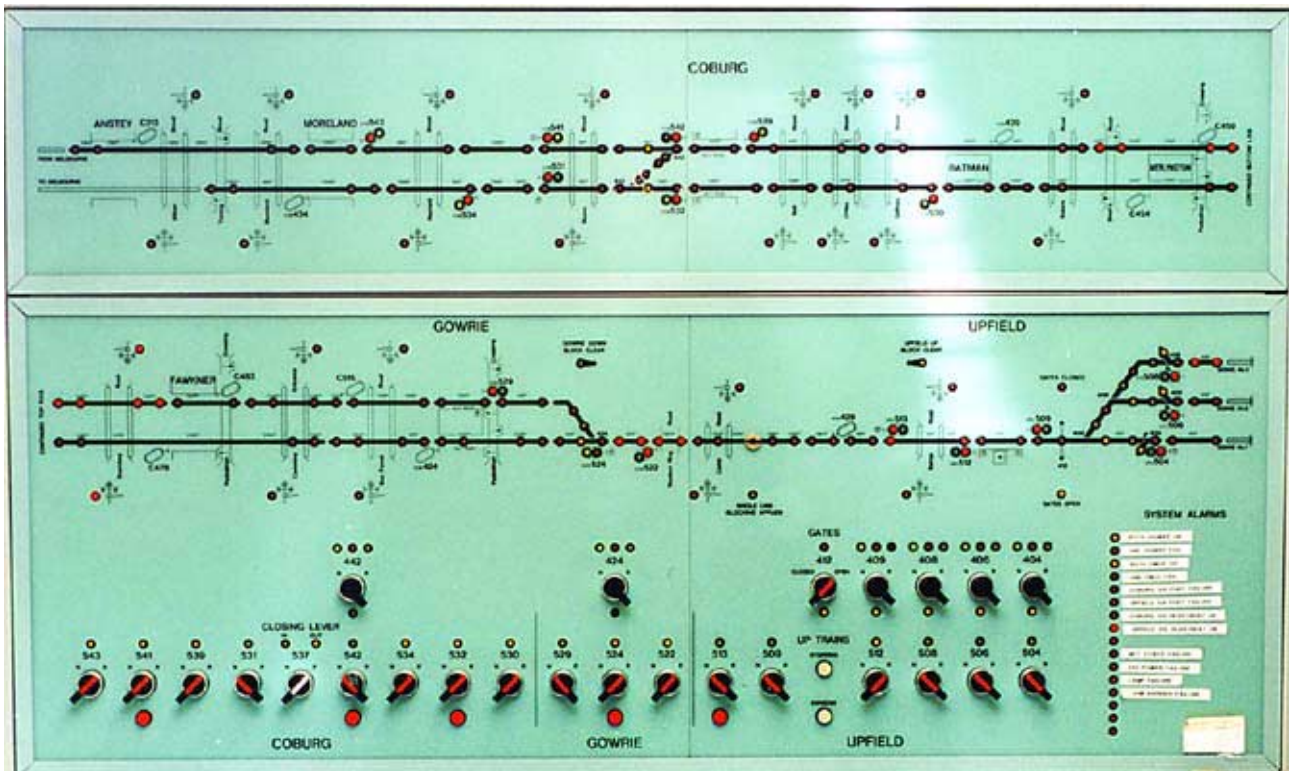
A single set of points provided access at the extreme Down end of the sidings. These points faced Up trains and were situated at foot of the final bank into Somerton at 12 miles 40 chains (via Coburg) or 14 miles, 51 chains, 76 links (via Somerton). The points were Staff locked and the normal lay was for the sidings. A Stop Board was provided for moves from Upfield.

The sidings were opened on 19 July 1959 - nearly a month before Upfield station itself was opened. The line was worked by Staff and Ticket with the sections being Upfield - Somerton, a fact curiously omitted from the Weekly Notice. The Weekly Notice did, however, that the section was to be added to the list of sections on which Staff Tickets are ordinarily not in use.

No trains to Ford's Siding were shown in the November 1959 Metro WTT. Probably at this date only irregular construction trains were run. In the first year (1959/60) inwards traffic was 28,000 tons while outwards traffic was a mere 4,000. The following year inwards tonnage was 37,000 while outwards tonnage had built to 19,000 tons.

The year 1962 saw, of course, the opening of the NE Standard Gauge through Somerton. On 11 January 1963 the Standard Gauge was extended from Somerton to Ford's Siding. From Somerton a four rail gauntlet dual gauge track was laid. Just before Ford's Siding, the Standard Gauge line

The 1998 SSI Upfield Panel. This panel controls the Coburg and Gowrie interlockings as well as Upfield itself. The panel shows the line from Anstey through to Upfield. At the time the photo was taken there was an Up train in the single line section crossing Camp Road with the signals at Gowrie clear for the train to arrive at that station. The Down train is just leaving Merlynston. Express and Stopping buttons are provided for Up trains departing Upfield, but the express button would be rarely used as all trains stop all stations. Coburg is switched out, indeed it is rarely switched in.



slewed to the Down side as a separate line and then crossed the broad gauge using a diamond crossing. Inside the Ford's plant, the Standard Gauge sidings initially consisted of a 1250 foot loop before crossing the lead to the Broad Gauge inwards sidings by a diamond and then splitting into two dead end roads each 700 feet long.

The May 1963 WTTs are the first I have that show the goods service to Ford's Siding. Inwards parts traffic was accommodated by a daily Goods running Tuesday to Saturday from North Geelong which ran via Brooklyn, Albion, Broadmeadows, and Somerton to arrive at Ford's Siding at 0615. On Monday, there was no train from North Geelong, instead the Goods ran from Melbourne via Coburg to arrive at 0615, and on Saturday an additional Goods ran from Melbourne via Coburg and arriving at 0625. The Up Goods ran, Monday to Saturday, to Melbourne via Coburg and departed at 0930 (0935 on Saturdays). The Up Goods via Coburg were limited to 41 vehicles when run during passenger traffic; Down Goods via Coburg was limited to 60 vehicles.

The Standard Gauge service was run from Dynon. An 'as required' Goods departed from Dynon at 1530 and arrived at Ford's Siding at 1645 where it shunted until 1735. The return journey arrived at Dynon at 1845 where it connected with No 4141 (dep Dynon, Monday - Friday at 2100) whose authorised loading was Flexivans ex Dynon and Motor Vehicles ex Upfield to Cooks River (Sydney). The empty car wagons were returned on No 4132 which arrived at Dynon, Tuesdays to Saturdays, at 1410, in time to connect with the Goods to Ford's Siding. There was also an additional 'as required' Ford's Siding goods which ran almost 12 hours earlier.

The Staff working must have been interesting. The line was still worked by Staff - probably without tickets. The Staff would have been normally kept at Somerton, and the Standard Gauge trains would have simply worked to and from Ford's with the Staff. The Broad Gauge trains were more interesting as only trains normally ran only in the Up direction and the Staff must have been transferred by road (or foot) from Upfield to Somerton after the arrival of the Up train there. Notice that there would have been no benefit to using Staff Tickets. A train on Ticket would need to be issued with a Master Key to allow it to depart Ford's Siding for Upfield. So, instead of transferring the Staff, it would have just been necessary to transfer the Master Key each day. In addition, it was necessary to transfer the Staff to Upfield each Monday and Saturday for the two Down trains.

Although the Standard Gauge was glamorous, the Broad Gauge traffic from North Geelong was more significant in terms of tonnage, if not revenue. Inwards traffic during this early period was between 40,000 and 45,000 tons per annum (except for 1963/4 when it fell to 30,000 tons). Outwards traffic was only between 25,000 tons and 31,000 tons.

By May 1965 the timetable had been modified so that all trains ran via Somerton. No trains were now scheduled to traverse the section between Upfield and Ford's Siding.

The Broad Gauge trains from North Geelong continued to run Tuesday to Saturday (Monday as required) via Brooklyn and Broadmeadows to arrive at 0615. The return journey departed Ford's at 0805 and ran via Somerton and Essendon to Melbourne Yard. On Monday morning (and other mornings as required), a train departed Melbourne Yard and, running via Essendon, arrived at Ford's at 0640.

On the Standard Gauge there were now three 'as required' Dynon - Upfield Goods services. These departed Dynon Monday - Friday at 0300, 0950, and 1500, shunted Upfield 0430 to 0530, 1155 to 1400, and 1650 to 1830 and

arrived at Dynon at 0640, 1535, and 1945 (the early morning train also ran, as required, on Saturday). Cars were conveyed ex Dynon seven days a week: on No 4141 (departed Dynon 2100 Monday - Friday & 2040 Sunday) and 4201 (departed Dynon 2020 Saturday). The empty car wagons were returned on 4132 (Dynon arrival 1440 Tuesday - Saturday). In addition, there was one as required Through Albury Goods each way that shunted Ford's Siding. No 4081A ran as required Monday - Friday and conveyed Motor Vehicles (only). The Goods departed Dynon at 1100 presumably 'Bona' (engine and van), reversed at Somerton between 1220 and 1240, shunted Ford's between 1255 and 1400, and then ran straight to Albury. The corresponding Up service was No 4472 (as req Tuesday - Saturday) which conveyed empty car wagons and flexivans for Dynon. Presumably the flexivans were left at Somerton while the loco took the empty car wagons to Ford's which was shunted from 0810 to 0920. The loco would have returned to Somerton, coupled up and departed at 0930 for Dynon.

In preparation for the commencement of the Chrysler traffic, an Intermediate Electric Staff Instrument was provided in the Upfield - Somerton section on 10 October 1968. The Intermediate Instrument was located in a cabin adjacent to the Shunters Cabin near the Up end of the marshalling sidings at Fords; note, not near the actual Ford's Siding points. A Master Key was provided at Upfield for use when the Instrument failed. Permission was granted for a Staff to be used for multiple journeys between Somerton and Ford's Siding without being passed through the Instruments.

I don't propose to describe in detail the Standard Gauge timetables during the '60s and '70s, as they varied over the years depending on traffic from Ford's and the ideas of the railways. Overall, however, the following pattern was followed. Motor vehicles from Ford's were lifted by one to three daily 'as required' Through Goods trains. A typical service was 4081 in May 1968 which was shown in the Authorised Working as '(900 tons "S" or "X" class, 550 tons "T" class) Through. Motor Vehicles from Upfield'. This departed Dynon at 1330 and arrived at Somerton at 1442. After reversing, it departed for Ford's Siding at 1500 and arrived at 1510. The train was almost certainly made up ready as departure from Ford's was scheduled at 1530. Arrival at Albury was at 2230 and the train terminated at Enfield (Sydney) at 1058 the following morning. There was normally just one daily train for the returning empty car wagons - empties, of course, weigh much less than the full wagons - and this train could also contain flexivans for Dynon. In most timetables, the empty train ran direct to Dynon and the car wagons were returned to Ford's by a local Upfield goods. Two or three of these local goods trains were shown in each WTT. One was a regularly scheduled Goods, ran mid morning, and shunted the sidings at McIntyre Loop, Somerton, and Upfield. There was an early morning Goods which ran 'as required' and shunted Upfield, and a late afternoon Goods which also was also 'as required' but must have run regularly as it would have returned the empty car wagons to Ford's.

By 1970, the WTT authorised Standard Gauge trains of up to 60 vehicles to run between Upfield (i.e. Ford's Siding) and Somerton without a brakevan at the rear. By 1976, the Standard Gauge WTT also authorised trains consisting of a brakevan only to be pushed between Somerton and Upfield.

Even as late as the 1972 Metro WTT the Broad Gauge Goods from North Geelong ran as previously described - from North Geelong early in the morning via Brooklyn, Albion, Broadmeadows and Somerton, and return to Melbourne via Somerton and Essendon. By 1974, however, two daily Goods trains were scheduled, one in the morning and one in the evening. Both trains to Upfield ran via Brooklyn,

Albion, Broadmeadows, and Somerton. On the return journey, however, the morning train ran to Melbourne Yard via Essendon on M,W,F and direct to North Geelong via Brooklyn on the other days. The evening train always returned direct to North Geelong via Albion and Brooklyn. There were also two trains to Ford's Siding on Saturday, but only one from the siding; the loco off the afternoon train returned light to Dynon via Somerton and Essendon. A second 'as required' train could be run from Ford's in the afternoon, and the loco for this ran light from Melbourne via Broadmeadows.

In 1979, the General Appendix had this to say about shunting at Ford's Siding:

A Notice Board lettered "SHUNTING MOVEMENTS MUST NOT PROCEED BEYOND THIS BOARD UNLESS THE ENGINEMAN IS IN POSSESSION OF THE STAFF" is provided adjacent to the Ford Motor company gates.

When a train (Victorian or Standard Gauge) arrives at the Siding, the Staff, if practicable must be retained by the Engineman in order that shunting movements can be performed towards the main line.

If it is necessary for the Staff to be placed in the Instrument to permit another staff to be withdrawn at Somerton or Upfield, no shunting outside the Notice Board must be permitted and the Dual Gauge Siding track must not be fouled by shunting movements until the train for which the staff has been withdrawn has arrived in the siding or the staff has been replaced in the instrument at Somerton or Upfield as the case may be, and a staff has been withdrawn from the Intermediate Instrument at the siding and handed to the Engineman.

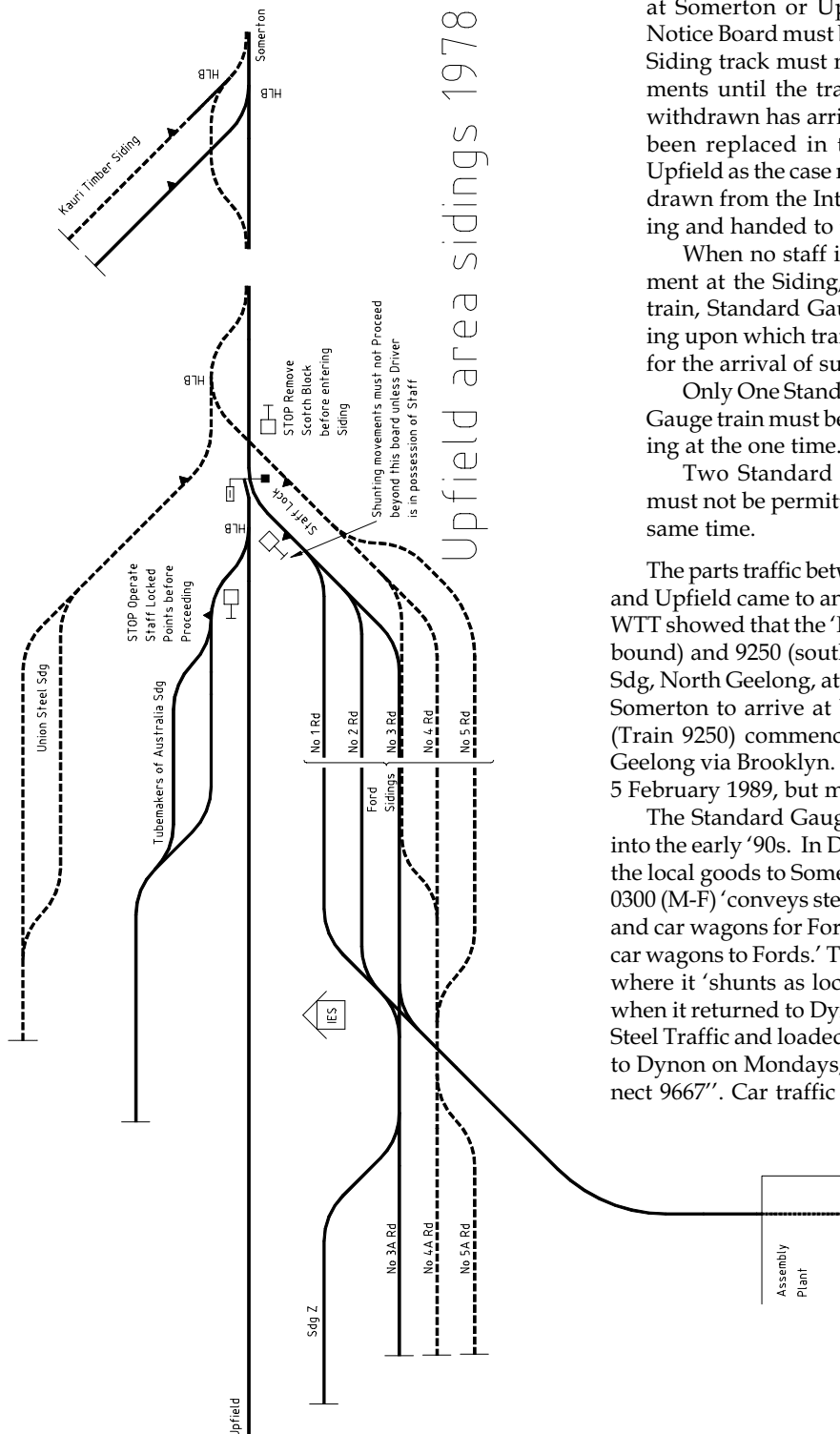
When no staff is out of the Intermediate Instrument at the Siding, the tracks upon which another train, Standard Gauge or Victorian Gauge depending upon which train is involved, must be kept clear for the arrival of such trains.

Only One Standard Gauge and/or One Victorian Gauge train must be permitted to operated at the siding at the one time.

Two Standard Gauge or Two Victorian trains must not be permitted to operate at the siding at the same time.

The parts traffic between the Ford plant at North Geelong and Upfield came to an end in early 1989. The October 1988 WTT showed that the 'Fords Parts Trains' were 9310 (north-bound) and 9250 (southbound). Train 9310 departed Fords Sdg, North Geelong, at 0230 (M-F) and ran by Brooklyn and Somerton to arrive at Upfield at 0515. The return journey (Train 9250) commenced at 1305 and returned to North Geelong via Brooklyn. This schedule was cancelled as from 5 February 1989, but may have ceased running earlier.

The Standard Gauge traffic of complete cars continued into the early '90s. In December 1990, the WTT showed that the local goods to Somerton, Train 9605, departed Dynon at 0300 (M-F) 'conveys steel for ATM Sunshine and Steel Mains and car wagons for Ford's Upfield. First job daily is to place car wagons to Fords.' The goods arrived at Somerton at 0440 where it 'shunts as locally arranged to Upfield' until 1600 when it returned to Dynon as Train 9606 'Empty wagons ex Steel Traffic and loaded Clapham wagons ex Ford's Upfield to Dynon on Mondays, Tuesdays, and Fridays only to connect 9667'. Car traffic ex Ford's was lifted by this pilot to





Ford's Siding looking in the Down direction in September 1994. The Ford's Sidings themselves are behind the camera on the right, and the broad and standard gauge leads to the sidings can be seen coming in from behind the clump of trees. The Standard Gauge line is the furthest siding and it can be seen how this crosses the Broad Gauge 'main' line at a diamond crossing before swinging back to become the Dual Gauge track to Somerton just at the start of the curve in the distance. The points in the foreground led to the Tubemaker's Siding, but this siding had been lifted at the date of the photo. The Union Steel Siding leads from the Standard Gauge line adjacent to the diamond crossing.

Somerton where it was attached to Train 9689 'Ex Dynon Motor Car Superfreighter, clear Somerton. Conveys Motor Cars ex Dynon clear Somerton for Enfield cars only. [...] "Y" type car wagons only." This train ran M-F departing Dynon at 1315, shunting Somerton 1405 to 1535 and arriving Enfield the following morning at 0605. The returning empty wagons were returned by Train 9652 'Superfreighter Car Wagons. Conveys 21 Hi-speed car wagons. Detach Car Wagons at Somerton for Fords' This train ran WFSaO departing Enfield at 1240, shunting Somerton 0424-0500 and arriving Dynon at 0550.

Rail shipment of motor vehicles out of the Ford's siding ceased on 26 June 1992. The withdrawal was triggered by the SRANSW closing the terminal at Enfield to allow the yard to be redeveloped. Ford did not want to relocate to Cooks River.

On 2 May 1997, the Staff Lock was removed from the points to Ford's Siding and the points spiked for the straight. The two notice boards were removed. The Intermediate Electric Staff instrument was abolished, but remained in the decaying remains of the cabin until at least December 1997. From February 1998 the Standard Gauge line between Somerton and Ford's Siding was officially taken out of use. No doubt this was due to track condition; in December 1997 it was noted that the Standard Gauge track in the vicinity of the Kauri Siding was almost entirely innocent of dog spikes. Standard Gauge trains could once again operate as from March 1999. An inspection of the rails at at Ford's Siding in April 2000 suggested that there had been recent Standard Gauge movements.

TUBEMAKER'S SDG

On 3 May 1962, points were provided for the construction of a siding for Metters-Clow Pty Ltd. The points were situated 153 feet south of the points to Ford's Siding at 12 miles 31 chains (via Coburg) or 14 miles 35 chains (via Somerton), faced Up trains and were secured by a hand locking bar and padlock. When opened in late August 1962 the siding was situated on the Down side of the line and consisted of 250 foot loop 80 feet from the points and a single lead of 1100 feet beyond the loop. A scotch block was provided in the neck of the loop.

This siding was subsequently renamed Stanton Pipes Aust Siding in January 1966. Some idea of the traffic worked to and from this siding can be gained from WN 16/68 which gave special instructions for the working of pipe traffic in South Australian FCD wagons from Stanton Pipes Siding Somerton account the Victorian Pipeline Commission. This Commission built the natural gas pipeline from Longford to Dandenong.

By August 1980 the siding was owned by Tubemakers of Australia and was still listed in the Goods Rates Book. But by 1 September 1994 the siding had been lifted back to the main line points. The points to Tubemaker's Siding had been removed by December 1997.

UNION STEEL SDG

In late January 1975 a Standard Gauge siding was provided for the Union Steel Pty Ltd. The siding was 1060 feet in length with a loop siding 380 clear. The main line points faced Up trains and were situated slightly on the Down side of the

Broad Gauge points to Ford's Siding. They were worked by a CCW lever and secured by a Hand Locking Bar and Padlock.

The Union Steel Siding was formally abolished on 2 May 1997, though it had not been used for a long time. The siding remains physically intact in April 2000.

SHAW'S SIDING

The siding for Shaw Pipe Protection (Aust) Pty Ltd was situated near top of the bank between Ford's Siding and Somerton. The main line connections were provided on 1 September 1969 and the sidings were opened on 18 September.

Both Broad Gauge and Standard Gauge sidings were provided, and the Dual Gauge main line was separated into separate Broad and Standard Gauge lines at the siding to avoid dual gauge points. The Broad Gauge points were situated at 12 miles 69 chains 30 links and the Standard Gauge points at 12 miles 69 chains 74 links (both mileages via Coburg). The sidings were located on the Down side of the line and faced up trains. The main line points were fitted with CCW levers and secured by hand locking bars and padlocks. The standing room in each spur siding was 480 feet.

Due to the falling gradient on the main line, special instructions were issued as to the working of these sidings. They could be worked by a switch trip from Somerton, or by a train or switch trip from Upfield. When worked from Somerton, permission was granted to push up to 6 bogie vehicles from Somerton to the siding during daylight. The standing of vehicles on the main line was prohibited and two journeys were necessary if vehicles had to be both placed and removed from the siding. The locomotive had to first clear the vehicles from the Siding and return to Somerton. The inwards vehicles were then pushed from Somerton to

the siding.

When a Down train (from Upfield or Ford's) was to clear vehicles from the siding, the vehicles had to be attached to the rear of the train. When a Down train was to place vehicles, these must be marshalled at the rear of the train before departing from Upfield or Ford's.

The 1979 General Appendix had slightly different instructions:

The clearing of vehicles from the siding must be effected, either by (a) light locomotive from Somerton or Upfield or (b) attaching the vehicles behind the brakevan or last vehicle of a down train. When placing vehicles, push up to 6 bogie wagons and a brakevan, the brakevan leading from Somerton to a point short of the scotch block at the entrance to Ford's siding. The Guard must ensure that the scotch block is locked on the rail.

The brakevan must then be detached and secured and the locomotive with vehicles attached must proceed to Shaw's siding and place the vehicles.

After completion of the work at Shaw's siding, the locomotive must return to Ford's siding for attachment of the brakevan.

The sidings were subsequently transferred to the Kauri Timber Coy, and then (by August 1980) to Greer Nominees Pty Ltd.

The sidings were formally abolished on 2 May 1997. They were still physically in existence on 15 December 1997. Curiously, a rake of NSW passenger cars (NDS 2283, RDH 2239, FIH 2217) was noted in the siding on that date.

ACKNOWLEDGEMENT

I would like to acknowledge information from Rail News Victoria and the Melbourne University Archives used to produce this article.

Kauri Timber (Shaw's) Siding looking in the Up direction in September 1994. Ford's Siding is around the corner in the middle distance. Note the use of four rail gauntlet Dual Gauge track. The Standard Gauge track is on the right and loops out of the Broad Gauge line so that the points can be in plain track.

