

Module LNW(S)1

LNW South Route

Sectional Appendix General Instructions and miscellaneous items

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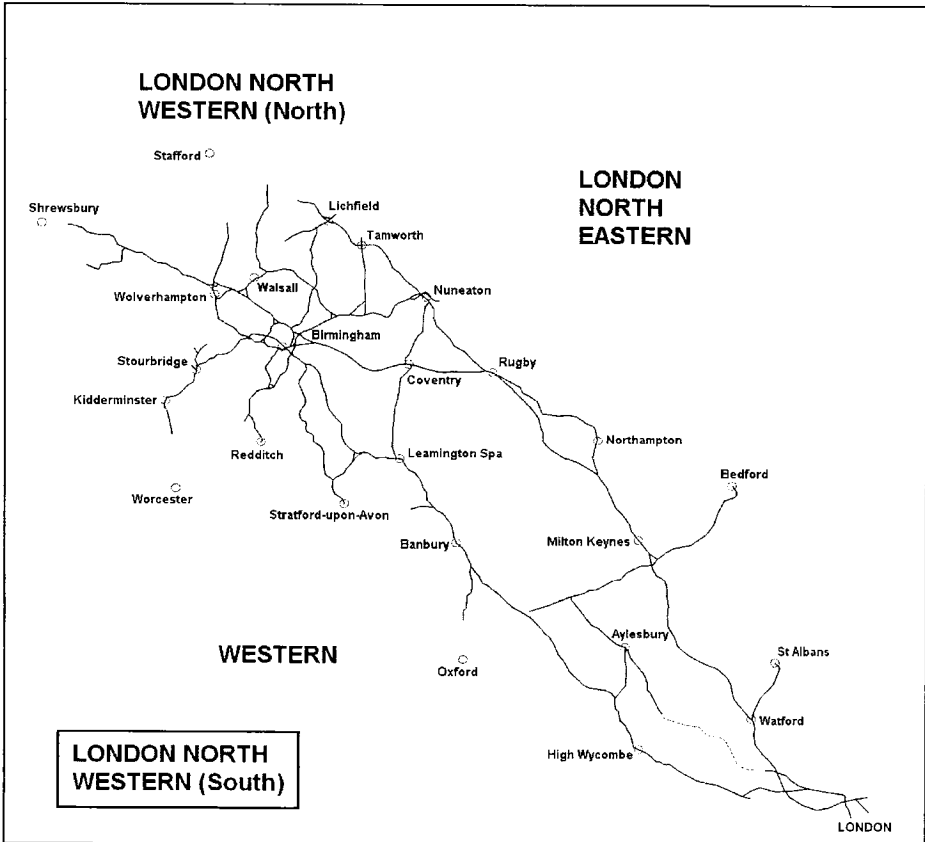
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OVERVIEW MAP



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General Instructions

Rule Book Module M4 - Floods and snow

The following additional instructions are applicable to electric point heaters:-

Electric Point Heaters

At certain locations point heaters are switched on automatically at predetermined temperature levels.

If advice is received that frost or falling snow is forecast or that the air temperature is expected to fall below freezing point and at the same time there will be rain, the Signaller must operate the heater switch for the area/s concerned to the ON position two hours before the weather conditions are expected to occur. If less than two hours warning is received, the heater switch must be operated to the ON position immediately advice is received.

If a warning is not received but the Signaller considers that there is a risk of the points becoming frozen or if he observes or is advised that snow is beginning to fall, he must immediately operate the heater switch to the ON position for the area/s concerned.

The Signaller must operate the heater switch/s to the OFF position when there is no further risk of the points being frozen or blocked by snow.

LNW South Route GI - Dated: 07/10/06

Rule Book Module S4 - Trains or shunting movements detained, or vehicles left, on running lines

Section 2, Clause 2.1 - Contacting the signaller

ZERO (0) MINUTES PLATE

In certain areas covered by this Appendix, and during times of service disruption, certain signals may be temporarily fitted with an additional telephone identification plate exhibiting the number Zero (0) inset on black and white diagonal stripes, in the manner shown in Rule Book, Module S4, Section 2.1.b). Signals are also fitted with a Zero (0) Minutes Plate as a permanent measure. Drivers must contact the Signaller immediately when stopped at any signal displaying this plate.

LNW South Route GI - Dated: 07/10/06

Rule Book Module SS1 - Station duties and train dispatch

Section 6, Clause 6.5 - The READY-TO-START signal

READY TO START INDICATORS (TABLE 'R')

As referred to in the above Module, 'Right Away' indicators are provided at the following locations.

Where signalled departures can be made in either direction from an individual platform shown in the 'Platform(s)' column, the directions to which 'Right Away' indicators apply is shown in the 'Direction(s)' column.

Station	Platform(s)	Direction(s)
MD101 EUSTON TO ARMITAGE JN. (EXCLUSIVE)		
Euston	All	-
Watford Junction	6 Down Fast 7 Up Fast 8 Down Slow 9 Up Slow	- - Both Both
Bletchley	1 Down Fast 2 Up Fast 3 Down Slow 4 Up Slow 5 Down Cambridge 6 Up Cambridge	Down Up Down Up Up Up
Milton Keynes Central	All	-
Rugby	1 Down Slow 2 Up Slow 7 south end bay 8 south end bay	Both Up Up Up
Nuneaton	3 Down Fast 4 Up Fast	Down Up
MD105 HANSLOPE JUNCTION TO RUGBY (VIA NORTHAMPTON)		
Northampton	All	-
MD301 RUGBY TO PENKRIDGE (EXCLUSIVE) (VIA BIRMINGHAM)		
Coventry	1 Up Slow 2 Up Fast 3 Down Fast	Down Up Down
Birmingham International	1 2 3 Down Stour 4 Up Stour 5	Both Both Down Up Both
Birmingham New Street	All	-
Sandwell & Dudley	Down Stour Up Stour	- -

Station	Platform(s)	Direction(s)
Wolverhampton	1 Down Stour 2 Up & Down line 3 Up Stour 4 Down Slow	Down Both Up Both
MD701 MARYLEBONE TO AYNHO JUNCTION		
Marylebone	All	Down

LNW South Route GI - Dated: 07/10/06

Rule Book Module T2 - Protecting engineering work or a hand trolley on a line not under possession

Section 8, Clause 8.2 - When a T-COD can be used

Routes and locations on which TCOD can be used	Remarks (Locations/Sections where TCOD cannot be used in Addition to those in the RULE BOOK)
MD101 EUSTON TO ARMITAGE JN. (EXCLUSIVE) North Wembley Jn. (excl) to Armitage Jn. (Excl.)	
Down Fast ahead of WM.141 North Wembley Junction (excl) to in rear of WJ.753 Watford South Jn (excl)	
Down Slow ahead of WM.345 North Wembley Junction (excl) to in rear of WJ.755 Watford South Jn (excl)	
Down Fast ahead of WJ.775 Watford Tunnel (incl) to in rear of WT.133 Apsley (incl)	
Down Fast ahead of BY.137 Linslade Tunnel (excl) to in rear of BY.9 Stoke Hammond (incl)	
Down Slow ahead of WJ.777 Watford Tunnel (incl) to in rear of WT.5135 (22m 43ch)	
Up Fast ahead of BY.167 Wolverton South (incl) to in rear of BY.55 Milton Keynes Central (incl)	
Up Fast beyond WJ.195 (21m 45ch) on approach to WJ.762 Watford Tunnel (incl)	
Up Fast ahead of WJ.744 Watford South Junction (excl) to in rear of WM.140 Kenton (excl)	
Up Slow beyond BY.172 (53m 21ch) on approach to BY.93 Milton Keynes (excl)	
Up Slow ahead of WJ.746 Watford South Junction (excl) to in rear of WM.344 Kenton (excl)	
Up Main ahead of RY.287 Rugby South Junction (excl) to in rear of RY.265 (79m 60ch)	
Down Main/Down Passenger Loop/Down Slow ahead of RY.295 Trent Valley Jn. (excl) to in rear of NN.76/NN.77 Nuneaton South Jn. (excl)	
Up Fast ahead of NN.118 Nuneaton South Junction (excl) to in rear of RY.179 Trent Valley Junction (excl)	
Up Slow ahead of NN.117 Nuneaton South Junction (excl) to in rear of RY.178 Trent Valley Junction (excl)	
Down Fast ahead of NN.4 Ashby Junction (incl) to in rear of NN.341 Polesworth (excl)	
Up Fast ahead of NN.342 Polesworth Jn. (excl) to in rear of NN.9 Nuneaton North Junction (excl)	
Down Fast ahead of NN.353 Polesworth (excl) to in rear of TH.43 Tamworth (excl)	
Up Main ahead of TH.101 Alders LC (excl) to in rear of TH.16 Tamworth (excl)	
Up Fast ahead of TH.17 Tamworth (excl) to in rear of NN.356 Polesworth (excl)	
Down Main ahead of Hademore Crossing (113m 60ch) to in rear of LD.79 Lichfield Trent Valley (excl)	
Down Fast ahead of CH.135 Lichfield Trent Valley Jn. (excl) to in rear of CH.69 Armitage Jn. (excl)	

Routes and locations on which TCOD can be used	Remarks
(Locations/Sections where TCOD cannot be used in Addition to those in the RULE BOOK)	
MD101 EUSTON TO ARMITAGE JN. (EXCLUSIVE) – Continued	
Up Fast ahead of CH.61 Rugeley South Junction (incl) to in rear of LD.3 Lichfield Trent Valley (excl)	
Up Main ahead of LD.5 Lichfield Trent Valley to in rear of HC.10 Hademore Level Crossing (excl)	
MD105 HANSLOPE JUNCTION TO RUGBY (VIA NORTHAMPTON)	
Down Main ahead of RY.1039 Northampton North Junction (excl) to in rear of RY.271 Crick Tunnel(excl)	
Down Main ahead of RY.277 Daventry North Junction (incl) to in rear of RY.57 Rugby South Junction (excl)	
Up Main ahead of RY.63 Rugby South Junction to in rear of RY.274 Daventry North Junction (excl)	
Up Main/Up Goods Loop ahead of RY.41 Watford Lodge Tunnel (incl) to in rear of RY.1036 Northampton North Jn. (excl)	
MD140 BLETCHLEY TO BEDFORD ST. JOHNS (INCL.) Bedford St Johns to Bedford	If used the signaller at West Hampstead PSB must be informed
MD301 RUGBY TO PENKRIDGE (EXCLUSIVE) (VIA BIRMINGHAM)	
Down Birmingham/Fast ahead of RY.293 Flyover G.F. (incl) to in rear of CY.18 Coventry South Junction (excl)	
Down Main ahead of Canley (95m 40ch) to Tile Hill (97m 00ch)	
Down Main ahead of Berkswell (99m 40ch) to in rear of NS.13 Hampton-In-Arden	
Up Main ahead of NS.412 Birmingham International South Junction (excl) to in rear of CY.82 Berkswell	
Up Main ahead of Tile Hill (97m 20ch) to in rear of CY.75 Canley	
Up Fast/Birmingham ahead of CY.16 Coventry South Junction (excl) to in rear of RY.177 Rugby Flyover (incl)	
Down Stour ahead of NS.417 Birmingham Int. North Jn (excl) to in rear of NS.35 Lea Hall	
Down Stour ahead of NS.293 Arena Tunnel to in rear of NS.312 Soho South Junction (excl)	
Down Stour ahead of NS.334 Soho North Junction (excl) to in rear of NS.339 Galton Junction (excl)	
Down Stour ahead of NS.478 Smethwick Galton Bridge to in rear of NS.351 Sandwell and Dudley	
Down Stour ahead of NS.353 (6m 40ch) to in rear of NS.365 Dudley Port	
Up Stour ahead of NS.489 Dudley Port to in rear of NS.485 Albion	
Up Stour ahead of NS.483 Sandwell and Dudley to in rear of NS.337 (3m 00ch)	
Up Stour ahead of NS.438 Grand Junction (excl) to in rear of NS.41 Stechford North Junction (excl)	
Up Stour ahead of NS.425 Lea Hall to in rear of NS.32 Birmingham International North Jn. (excl)	
Down Stour ahead of Tipton Level Crossing (8m 20ch) to in rear of WN.122 (11m 20ch)	
Down Main/Birmingham ahead of WN.24 Bushbury to in rear of SD4.95 Trent Valley Jn No.1 (excl)	
Up Fast Birmingham/Up Main ahead of SD4.98 Rickerscote to in rear of WN.7 Four Ashes	

Routes and locations on which TCOD can be used	Remarks (Locations/Sections where TCOD cannot be used in Addition to those in the RULE BOOK)
MD301 RUGBY TO PENKRIDGE (EXCLUSIVE) (VIA BIRMINGHAM) – Continued	
Up Main ahead of WN.217 Four Ashes to in rear of WN.25 Bushbury Junction (excl)	
Up Stour ahead of WN.263 (11m 40ch) to in rear of WN.183 Tipton	
MD315 STECHFORD SOUTH JN. TO ASTON SOUTH JN.	
Down ahead of Stechford North Junction (0m 20ch) to in rear of NS.65 Aston South Junction (excl)	
Up ahead of NS.436 Aston South Junction (excl) to in rear of NS.38 Stechford station (incl)	
MD320 PROOF HOUSE JN. TO BUSHBURY JN. (VIA BESCOT)	
Down Vauxhall/Down Vauxhall Fast/Down Main ahead of NS.82 Proof House Junction (excl) to in rear of WL.2 Tame Bridge Parkway (excl)	
Down Main ahead of WL.211 (9m 20ch) to in rear of WN.48 Portobello Jn LC (Noose Lane LC) (excl)	
Down Main ahead of Portobello Jn LC (Noose Lane LC) (12m 60ch) to in rear of WN.36 Bushbury Oxley Junction (excl)	
Up Main ahead of WN.233 Bushbury Oxley Jn. (excl) to in rear of WN.47 Portobello Jn LC (Noose Lane LC) (excl)	
Up Main ahead of Portobello Jn LC (Noose Lane LC) (12m 40ch) to in rear of WL.37 Bescot Junction (excl)	
Up Main/Up Vauxhall/Up Vauxhall Fast ahead of WL.3 Tame Bridge Parkway (excl) to in rear of NS.141 Proof House Junction (excl)	

LNW South Route GI - Dated: 07/10/06

Rule Book Module T10 - Protecting personnel when working on rail vehicles and in sidings

Section 1, Clause 1.2 - Depot

SAFETY OF EMPLOYEES WORKING ON RAIL VEHICLES

At the following locations, sidings are used for maintenance and repairs or form part of depots as shown in Rule Book, Module T10, Section 1.2. When sidings are in use by Maintenance personnel the movements of rail vehicles will be under the control of the Designated Person, Responsible for Protection (DP) who will be identified by an orange armband endorsed 'DP' in black letters. At other times movements will be under the control of operating staff. Movements must not exceed 5 mph.

When Maintenance personnel are in the sidings visitors and staff of other departments/ Companies must report to the designated person and must not start work until their presence in the depot or sidings has been recorded and the relevant protection has been provided.

<u>Location</u>	<u>Line(s)</u>
Bescot EWS TMD	Depot Roads 1 to 4
Bletchley TMD	All Depot Roads
Camden C & W Sidings	Cripple Roads 6 and 7
Camden Carriage Sidings	Roads 2 to 9
King's Norton Electrification Depot	Sidings 1 to 5
Oxley WCTC CMD	Depot Roads 17 and 18
Rugby EMD	Depot Roads 1 and 2
Stonebridge Park Heavy Repair Depot	All Depot Roads
Tyseley Maintrain TMD Fuel Apron	Fuelling Apron Roads 13 to 15
Tyseley Maintrain TMD	Depot Roads 1 to 7 (North)
	Depot Roads 9 to 13
Wembley WCTC TMD	Maintenance Shed Roads 1 to 6
Willesden TMD	Depot Roads 1 to 6.

LNW South Route GI - Dated: 07/10/06

Rule Book Module TW1 - Preparation and movement of trains : General

Section 12 - Permissive working

PERMISSIVE WORKING BI-DIRECTIONAL PLATFORM LINES

With reference to Rule Book, Module TW1, Section 12, the following instructions must be observed.

On bi-directional platform lines, trains must not be signalled into a platform from opposite directions until the Signaller has obtained an assurance from the Person in charge of the platform that trains already admitted to the platform are at a stand and will make no further movement.

LNW South Route GI - Dated: 07/10/06

Rule Book Module TW1 - Preparation and movement of trains : General

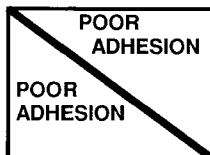
Section 17 - Rail-head adhesion

The list of 'Poor Adhesion Sites' are amended on an annual basis and to avoid confusion they are not published in the Sectional Appendix. Therefore the current list of sites will be published in the first instance in the Weekly Operating Notice then transferred to the Periodical Operating Notice. An Advance Warning sign consisting of an orange L.E.D. flashing indicator alternatively reading 'POOR (then) ADHESION' will be provided at all of the following locations.

Retro-reflective black and white signs (900mm by 900mm) as below will also be provided at these sites.



COMMENCEMENT BOARD ('C')



TERMINATION BOARD ('T')

When the Advance Warning Sign is illuminated, poor adhesion conditions will exist at that site, and in accordance with Rule Book, Module TW1, Section 17.2, Drivers will **not** be stopped specially and advised.

LNW South Route GI - Dated: 07/10/06

Rule Book Module TW5 - Preparation and movement of trains : Defective or isolated vehicles and on-train equipment - Part B : Defective on-train equipment

Section 18 - Hot axle boxes and activation of lineside hot axle box detectors

These instructions do not apply to steam locomotives in steam and former Class 101 to Class 128 Diesel Multiple Units running in departmental service and Class 121 units.

LNW South Route GI - Dated: 07/10/06

Class 165/166 trains - automatic sanding equipment

First Great Western units numbered 165.001 to 165.005, 165.101 to 165.137 and 166.201 to 166.221 have been fitted with automatic sanding equipment that works in association with the Wheel Slip Protection (WSP) and the braking systems.

Units fitted with the sanding equipment are not permitted to leave Reading Traction Maintenance Depot (T.M.D.) with that equipment inoperative. Units may enter service from other locations but must be taken out of service at Reading T.M.D. as soon as possible without causing delay or cancellation.

When WSP activity is indicated and either Step 3 or the Emergency Brake application is selected, the Driver must assume that the automatic sanding equipment has been activated and that sand has been applied to the railhead. The Signaller must be advised of the circumstances, giving the location of the sand application and the approximate length of track to which the sand was applied. This should be done via the Cab Secure Radio or, where this is not available, by the most expeditious means.

Should the above occur and result in a train coming to a stand short of an intended stopping point, the Driver must draw the train forward so that the rear of the train is clear of any switches and crossings BEFORE contacting the Signaller.

The Signaller must apply the provisions of Sandite Train Instructions, Clauses 6.2 and 6.3.

LNW South Route GI - Dated: 07/10/06

Cleaning of locomotive windscreens in platforms

AC electrified lines

This work must not be carried out under Live Overhead Line Electrified wires except where authorised below:-

<u>Location</u>	<u>Traction</u>	<u>Comments</u>
Euston	All traction types	Windscreen washing of trains at Euston is permitted to be carried out on stabled units on all platforms, except platforms 9 and 10. The nominated Person must carry out the nominated Platform 'Lock Out Procedure' before commencing any windscreen washing activities.

NB. The work must only be performed by authorised staff who must use the equipment specially provided for the purpose.

All locations (including the above)

Whilst the work is being carried out the provisions of Rule Book, Module T10 must be applied. The Rule Book, Module T10, Sections 6.2 to 6.4 are modified as follows: A red flag, or a red light (particularly if visibility is poor), must be exhibited 20 yards from the end of the last vehicle nearest the direction from which vehicles might be shunted against those on which men are at work. The red light may be steady or flashing.

If it is possible for vehicles to be shunted against both ends of the vehicle on which the men are at work, the same precautions must be taken at both ends. In addition, a "Not to be moved" reminder device must be positioned on the driving desk in each cab. Only the staff carrying out the work are authorised to position and remove the reminder devices.

Whilst a reminder device is exhibited, the locomotive must not be moved. At no time must the equipment in use be raised above the top of the windscreen.

LNW South Route GI - Dated: 07/10/06

Coasting boards

Rectangular shaped coasting boards, consisting of a white diamond sign on a black background mounted on a pole, are positioned at the side of the line, at an appropriate distance on the approach side of stations, on the sections of the line shown below. Drivers of EMU trains, which are running to time and are due to stop at the station concerned, must shut off power at the coasting board and allow the train to coast before bringing the train to a normal stop at the platform.

Watford Junction to St. Albans Abbey

Euston to Watford Junction (DC lines)

Camden Junction to Northampton via Hanslope Junction (Slow Lines).

LNW South Route GI - Dated: 07/10/06

Freightliner terminals with overhead line equipment

Limiting the movement of electrically hauled trains. At all Freightliner Terminals equipped for overhead electric traction it is necessary to restrict the movement of a Freightliner train entering the Terminal to ensure that it is berthed within certain prescribed limits, which are related to the termination of the overhead line equipment and the position of the pantograph and the electric locomotive. An illuminated board lettered 'Locomotive Stop-Await Instructions' is provided at a minimum distance of 12 feet 6 inches on the main line side of the last overhead electrification structure within the Terminal and Drivers, when propelling, must bring their train to a stand when the locomotive reaches this board. All further propelling movements from the board will be carried out under the direction of the Terminal Overseer who will ensure that the train is correctly berthed.

To indicate the limiting tolerances within which a Freightliner train must be berthed in the Terminal a double row of ground markers is provided on the Terminal side of the overhead line anchor structure. The Terminal Overseer will ensure that the train is brought to a stand with the buffers on the outer end of the last Freightliner vehicle positioned between these rows of markers and will, on no account, permit the train to over-run the inner row. When the train is berthed in this position, the Terminal Overseer will ensure the locomotive is withdrawn to a point to or beyond the 'Locomotive Stop-Await Instructions' board.

LNW South Route GI - Dated: 07/10/06

General instructions applicable to the DC electrified lines between Euston and Watford Junction

RULE BOOK, MODULE, MODULE G1, SECTION 5 AND RULE BOOK, MODULE TW1, SECTION 4.2

London Underground Limited trains normally display two built-in electric tail lamps whilst such trains are on running lines. If the Signaller, or person in charge of a station becomes aware that one of the built-in tail lamps has failed, he must arrange for the Driver to be advised of the circumstances at the next station at which the train is booked to call.

RULE BOOK, MODULE SP, PART B, SECTION 4.2

Portable AWS magnets will not be provided on the approach side of warning boards erected for temporary speed restrictions between Kilburn High Road and Watford Junction.

TRACK CIRCUIT OPERATING CLIPS

Track Circuit Operating clips must not be used on any portion of a line where the 4th rail conductor is provided between Euston and Watford Junction.

ISOLATIONS

Referring to the DC Electrified Lines Instructions (GO/RT/3091), dated April 1998, Clauses A26 to A39 and clause B26.3 are not applicable on the above sections of line.

FLOODS

Referring to Rule Book, Module M4, Section 1.1:-

- (i) if water is more than half-way up either running rail, DC electric trains must not exceed a speed of 5 mph through the flooded section.
- (ii) if water is above the top of either running rail, the passage of DC electric trains must be suspended except in the most urgent circumstances and then only on the authority of a Network Rail Production representative on site in consultation with Civil Engineering and Electrification Engineering staff.

TRAIN STOPS

Running signals between Kilburn High Road and Harrow & Wealdstone inclusive are fitted with train stops which will engage with the tripcocks on London Underground Limited (LUL) trains and Silverlink Metro operated Class 313 and Class 508 units.

If a train stop fails in the lowered position, the person becoming aware of the irregularity must inform the Signaller at Wembley Mainline SCC immediately. A Handsignaller must be appointed and positioned at the signal concerned and until the signal displays a proceed aspect and exhibit a hand Danger signal to approaching Drivers and place one detonator on the rail to which the signal applies. Until the Handsignaller is in position at the signal, a train must not be allowed to approach the signal unless it exhibits a proceed aspect or the Driver has been advised of the circumstances.

TRIPCOCKS

To prevent a train running in service with a tripcock arm inoperative, train tripcock testing apparatus consisting of a treadle and test indicator is provided at:

<u>Location</u>	<u>Treadle location on approach to signal</u>	<u>Test indicator location at</u>
Queen's Park station	WS.11	Near signal WS.11
Harrow & Wealdstone station	WS.54	Platform 2

The test indicator will be illuminated in the cab when a train approaches the apparatus. This indication will be displayed until the tripcock on the train has operated the treadle fixed a short distance on the approach side of the indicator. If the indicator fails to illuminate when the train approaches, the Driver must advise the Signaller at Wembley Mainline SCC before proceeding any further.

Where the tripcock testing equipment has failed, testing of the 'on-train' equipment must be undertaken by means of a 'positive test of the tripcock'. This applies to the failed tripcock testing equipment only.

These instructions will apply at the start of service each 24 hour period and subsequently each 24 hour period thereafter. No tests are required if the tripcock testing equipment fails at other than the start of service. The Signaller at Wembley Mainline SCC must contact Route Control to ascertain the first service of each train diagram for that day and positive testing of the tripcock must take place for each of these first services.

Route Control will also inform the Train Operating Company concerned that no changes of units on the DC Lines will be permitted without the authority of Route Control. On advice of a unit change Route Control must ascertain the first train this will form and advise the Signaller at Wembley Mainline SCC to carry out a positive test of the tripcock.

Positive testing of the tripcock must be undertaken utilising the following method:

- The Signaller at Wembley Mainline SCC will bring trains to a stand, using the normal signalling sequence, to the next signal that can be placed to Danger.
- The Signaller at Wembley Mainline SCC will advise Drivers of the circumstances and authorise them to pass the signal maintained at Danger and to proceed at a speed no more than 5 mph to ensure that no violent braking takes place.
- The Driver must advise the Signaller at Wembley Mainline SCC of the outcome of the test by means of the CSR equipment where provided.

The following action must be taken whenever a train passes a tripcock tester:

Indication	Action
Light is extinguished.	Test satisfactory, no action required by the Driver.
Light is extinguished but train is tripped.	Driver must advise the Signaller at Wembley Mainline SCC, re-set the Tripcock and continue on his journey.
Light is not extinguished and train is/is not tripped.	Driver must immediately advise the Signaller at Wembley Mainline SCC then continue his journey, but proceed at a speed no more than 25 mph between Kilburn High Road and Harrow & Wealdstone and vice versa. The Signaller at Wembley Mainline SCC will arrange for the Signal Technician to examine the test apparatus and for the tripcock to be examined at the train's destination. The train must not be returned to service until the tripcock is working correctly. In such cases passengers must be immediately detained and the train taken out of service.

If a tripcock becomes defective or cannot be re-set, it must be isolated. The Driver must immediately advise the Signaller at Wembley Mainline SCC and continue his journey, but to travel at a speed not exceeding 25 mph between Kilburn High Road and Harrow & Wealdstone and vice versa. An entry must be made in the unit defect book and the train must be taken out of service at the first suitable location, without causing unnecessary delay or cancellation and not to re-enter service until the defect is remedied. If a Driver becomes aware that a tripcock is isolated whilst in service, he must first inform the Signaller at Wembley Mainline SCC, then check the unit defect book. If there is no entry in the repair book regarding the tripcock, he must de-isolate it and attempt to re-set it. If the tripcock re-sets, the Driver may proceed as normal but must enter the circumstances in the unit defect book. If the tripcock will not re-set, the Driver must proceed as described in the previous paragraph.

WORKING OF CLASS 313 AND CLASS 508 ELECTRIC MULTIPLE UNITS

Class 313 and Class 508 EMU trains or a mixture of these trains must not be operated in multiple in the DC mode unless specially authorised by the Network Rail Electrification Engineer or when required to assist one another when the following arrangements will apply:

- When the failed unit has a total loss of traction power, the trains may be worked normally.
- When the failed unit has a fault other than a total loss of traction power, the Driver of the assisting unit must not advance the power controller beyond notch 2.

LONDON UNDERGROUND LIMITED (LUL) ONE PERSON OPERATED TRAINS

An emergency door cock is provided on the outside of each coach, located towards the centre of the coach, to enable one pair of doors on that side of the coach to be opened in an emergency. Staff must not operate these cocks until they have informed the Train Operator of the circumstances.

When it is necessary for a train which has been taken out of service, owing to a defective deadman's valve or tripcock, to proceed to the nearest suitable depot or siding, a member of staff specially authorised by the Network Rail Co-ordinator to assist the Train Operator in the observance of signals must be provided. If this is not possible, the LUL Line Controller must be requested to provide an authorised member of LUL staff. If the defect occurs on the last train of the day to a destination, the train may remain in service, but it must be driven at a speed at which it can be stopped short of any obstruction, and an authorised member of staff, as defined above, must accompany the Train Operator.

LNW South Route GI - Dated: 07/10/06

AXLE COUNTERS

The following Lines of Route are equipped with axle counters:

Route	Sections of line Equipped
MD101 Euston to Armitage Junction (Exclusive)	South end of Primrose Hill Tunnels and North end of Kensal Green Tunnels (inclusive). Down Fast line and Down Slow line between 22m 51ch and 42m 69ch. Up Fast line and Up Slow line between 42m 69ch and 22m 12ch. Down Fast line, Down Slow line and Down Main line between 53m 60ch and 79m 32ch. Up Fast line, Up Slow line and Up Main line between 79m 32ch and 54m 07ch.
MD105 Hanslope Jn. to Rugby (via Northampton)	Down Northampton line between 56m 66ch (Hanslope North Jn) and 65m 30ch. Up Northampton line between 65m 30ch and 56m 66ch (Hanslope North Jn).
MD120 Camden Junction to Watford Junction (DC Lines)	South Hampstead tunnels (both Down DC line and Up DC line).
MD420 Hatton Station to Stratford-upon-Avon	Bearley Jn. (excl) to 9m 40ch.
MD705 Greenford West Junction to South Ruislip	South Ruislip (excl) to Territory Boundary.
MD720 Princes Risborough to Aylesbury	Little Kimble (excl) to Aylesbury (excl).
MD801 Wolverhampton North Junction to Abbey Foregate (exclusive)	Down Main line between: 56m 56ch and 160m 68ch 161m 41ch and 170m 52ch Up Main line between: 170m 60ch and 161m 56ch 160m 37ch and 156m 47ch

The following activities require axle counter heads to be disconnected or removed and must be undertaken with appropriate Rule Book, Modules T2 or T3 protection:

- Re-railing, resleepering or reballasting
- Removal of rails with axle counter heads
- Tamper operations past axle counter heads, other than:
 - those using a split-head tamping machine suitable for tamping single sleepers around axle counters
 - journeys of the tamper to or from the work site
- Stoneblower or ballast cleaner/regulator operations past axle counter heads, but not including journeys to or from the work site
- Any other work, which may affect axle counter heads.

In the Rugby SCC area, Engineering Possession Reminders must be applied for Category 1 and Category 2 possessions. A Signalling Technician must be provided for the reset in accordance with EPR procedures. In other areas, co-operative re-setting equipment is provided. A Signalling Technician must be provided to re-set the equipment.

Permanent Way and S & T Equipment utilising wheels for movement along tracks, such as trolleys and engineering skates, must not be used without the permission of the COSS/PC/PICOP.

When giving up a possession, the PICOP must confirm that any affected axle counter sections are fit for use. The following activities may be undertaken with lines open to traffic where a safe method of working has been established in advance that does not require Rule Book, Modules T2 or T3 protection:

- Rail grinding past axle counter heads
- Any work near axle counter heads with tools or any equipment which cannot impact on the operation of the axle counter heads
- Loading and unloading of materials

In the Rugby SCC area Special Train Reminders must be applied by the Signaller. The Signaller may reset the axle counters, if necessary, in accordance with STR procedures.

In other areas, co-operative re-setting equipment is provided. A Signalling Technician must be provided to re-set the equipment.

LNW South Route GI - Dated: 07/10/06

GSM-P RADIO SYSTEM

Trains that are fitted with the GSM-P emergency communication radio system may operate over the following routes not covered by the Cab Secure Radio (CSR) areas:

- Banbury (exclusive) to Small Heath South Junction
- Small Heath South Junction to Stourbridge North Junction
- Stourbridge North Junction to Hartlebury
- Hatton Station to Stratford upon Avon
- Hatton North Junction to Hatton West Junction.

Trains that are fitted with the GSM-P emergency communication radio system must not enter service on any of the above routes with the GSM-P equipment defective in any driving cab that requires to be used when on these routes. If GSM-P equipment becomes defective in service on any of the above routes, the Driver must advise the Signaller immediately. The train must then be taken out of service (or the fault rectified) in accordance with the train operator's Contingency Plan.

GSM-P must be used only as a means of emergency contact between Operations Control and Drivers. If a Signaller requires to stop a GSM-P fitted train(s) in an emergency then he must immediately request Operations Control for this to be done, as for the NRN Radio system.

Any Driver receiving a GSM-P 'Stop' message must stop the train immediately then read the G-SMP message on the handset provided. If the 'Stop' message applies to an area which your train is not in, then you may continue your journey. If a Driver is within the affected area then he must then contact Network Rail Operations Control. The Driver of the train concerned must not make any further movement until authorised to do so by the controlling Signaller.

If any emergency arises on any of the above routes, the Controller must always send a GSM-P 'Stop' message in addition to an NRN broadcast, unless he is sure that no trains that are fitted with the GSM-P emergency communication radio system are in the affected area. A 'Stop' message is designed to reach all GSM-P fitted trains on that route, therefore the Controller must, if necessary, explain the circumstances to any Signaller in whose area an unaffected train might make an emergency stop.

LNW South Route GI - Dated: 07/10/06

Intermediate sidings at which trains may be shunted for other trains to pass (Table 'S')

Trains may be shunted for other trains to pass at all intermediate sidings connected to lines worked in accordance with the Track Circuit Block System.

The following is a list of intermediate sidings connected to lines worked by other than the Track Circuit Block System, at which trains may be shunted for other trains to pass:-

Name of Siding(s)	Situated at or between	Line connected with	Method of Control
MD345 BESCOT JUNCTION TO RUGELEY NORTH JUNCTION (EXCLUSIVE)			
Mid-Cannock OCDP	Bloxwich and Hednesford	Up Main line	Ground frame released from Hednesford.
MD410 COVENTRY NORTH JUNCTION TO NUNEATON SOUTH JUNCTION			
Up Side	Hawkesbury Lane	Up Main line	Ground frame released from Hawkesbury Lane.
Calor Gas Siding	Hawkesbury Lane and Bedworth	Up Main line	Ground frame released from Hawkesbury Lane.
MD430 DROITWICH SPA TO STOURBRIDGE NORTH JUNCTION			
English Property Company	Hartlebury	Up Main line	Ground frame released from Hartlebury.
MD801 WOLVERHAMPTON NORTH JUNCTION TO ABBEY FOREGATE (EXCLUSIVE)			
Allscott	Wellington and Abbey Foregate	Up Main line	Ground frame released from Madeley Junction.

LNW South Route GI - Dated: 07/10/06

7. Faults and failures - immediate actions

In the event of any fault or failure being apparent affecting ATP equipment, suitable action must be taken as shown in the following table. All concerned must ensure that the correct FAULT CATEGORY, as defined in Clause 6, is quoted on each occasion.

LEVEL 1	LEVEL 2	LEVEL 3
WRONG SIDE FAILURE	RIGHT SIDE FAILURE NON-RECOVERABLE	RIGHT SIDE FAILURE RECOVERABLE
<p>Driver stops train at next practicable signal.</p> <p>Driver isolates ATP if fault is non recoverable.</p> <p>Driver informs Signaller.</p> <p>Signaller informs Network Rail Control and gets a fault logged with IMC Fault Control.</p> <p>Network Rail Control informs the appropriate TOC Controls and IMC Fault Control.</p> <p>Signaller advises Drivers of all subsequent ATP-fitted trains of the circumstances and instructs them to disregard the ATP indications in the area concerned. This cautioning must continue until ATP track equipment has been declared in order.</p>	<p>Driver stops train at next practicable location.</p> <p>Driver isolates ATP.</p> <p>Driver informs Signaller.</p> <p>Signaller informs Network Rail Control.</p> <p>Network Rail Control informs the appropriate TOC Control.</p>	<p>Fault should not be reported where a notice has been issued showing a temporary disconnection of the ATP lineside equipment at that location.</p> <p>Driver should only advise the Signaller if delay has been incurred.</p>

Faults and failures affecting ATP equipment must be reported fully and promptly. Failure to do so may cause essential data concerning performance of the equipment to be lost. Reporting of LEVEL 1 faults to the Signaller ensures that subsequent Drivers are suitably advised that the ATP may be unreliable at a specific location. It will also ensure that the on-train equipment is investigated without delay.

8. Faults and failures - subsequent actions

Drivers must complete an ATP Report Form at the end of the journey (or when relieved if sooner) as shown below, whether or not they had previously reported the fault verbally as instructed in Clause 7.

LEVEL 1	LEVEL 2	LEVEL 3
WRONG SIDE FAILURE	RIGHT SIDE FAILURE NON-RECOVERABLE	RIGHT SIDE FAILURE RECOVERABLE
<p>Driver continues journey and completes written fault report at the end of the journey or when relieved.</p> <p>Driver faxes completed form to Network Rail Control.</p> <p>Network Rail Control follows up fault as necessary with IMC Fault Control.</p>	<p>Driver continues journey and completes written fault report form at the end of the journey or when relieved.</p> <p>Driver deals with completed form as per TOC instructions.</p> <p>TOC follows up fault as necessary.</p>	<p>Driver continues journey and completes written fault report form at the end of the journey or when relieved.</p> <p>Driver faxes completed form to Network Rail Production Control.</p> <p>Network Rail Control follow-up fault as necessary with IMC Fault Control and, if fault persists, issues a suitable notice to TOC's.</p>

9. Speed restrictions

(a) Temporary Speed Restrictions

When a Temporary Speed Restriction (TSR) is imposed, the ATP track equipment will be adjusted so as to provide full supervision of speed to accord with the restriction. This adjustment will be made at the same time as the other requirements of Rule Book, Module SP, Part B, are introduced.

(b) Emergency Speed Restrictions

Until such time as the Signaller concerned has been advised that this adjustment has taken place, **the Signaller MUST, in addition to carrying out the provisions of Rule Book, Module SP, Part C, stop and advise Drivers of all ATP fitted trains that ATP will not provide advice for the Emergency Speed Restriction.**

This adjustment to the equipment will be as follows:

The Signal Technician will immediately arrange to adjust the ATP track equipment which involves inserting an ESR 'plug' so that all ATP-fitted trains approaching the restriction will receive an immediately recoverable emergency brake application, together with an indication of 'EsR' in the main cab display window. In these circumstances the target speed will be extinguished until the train has passed beyond the affected area. Supervision will however be maintained in respect of signal aspects, TSR's, PSR's etc.

Signal Technicians must advise the Signaller concerned immediately the above first-phase adjustment has been completed.

Until such time as the Signaller concerned has been advised that this adjustment has taken place, **the Signaller MUST, in addition to carrying out the provisions of the Rule Book, Module SP, Part C, stop and advise the Drivers of all ATP fitted trains that ATP will not provide advice for the Emergency Speed Restriction.**

If the Emergency Speed Restriction is likely to continue for more than a few hours, the appropriate IMC Fault Control must arrange production of TSR type 'speed plugs' which will provide the necessary speed supervision in respect of the ESR.

This second-phase adjustment to the ATP equipment must be carried out as quickly as possible. The Signaller need not be advised when this is done.

10. Work affecting track equipment

ATP track equipment is susceptible to damage if treated roughly. All staff either working or walking on or near the line must take care not to displace, damage or otherwise interfere with ATP equipment.

Instructions issued separately to Contractors must be adhered to in respect of planning and carrying out engineering operations.

In the event of track equipment being taken out of use or being unavailable, Drivers will be advised either by means of the Weekly Operating Notice or by other suitable written Notice.

LNW South Route GI - Dated: 07/10/06

Lockouts - person responsible

The person taking a lockout is responsible for ensuring that all staff, including members of any other working group, are clear of the running line before cancelling the lockout.

The key must not be transferred to another person. Should it be necessary to transfer responsibility for the lockout to another person, all staff must be clear of the running lines, the lockout must be cancelled and another lockout taken by the new person.

LNW South Route GI - Dated: 07/10/06

Locomotives assisting in rear of trains (Table 'J')

1. Trains may be assisted in rear between the places listed below in accordance with Rule Book, Module TW3, Section 12.
2. The assisting locomotive must be coupled to the train except where denoted below by the letter 'N'.
3. Any type of train may be assisted in rear except where denoted below by:
 - F - freight trains only
 - ECS - empty coaching stock trains only
 - P - passenger trains only
4. A shunting locomotive must not be used to assist in rear, nor must a train hauled by a shunting locomotive be assisted in rear except where denoted by the letter 'D'.
5. The locomotive attached in rear of the train must not apply power where denoted below by the letter 'R'.

From	To	Class of Train	Conditions	Remarks
MD155 KENSAL GREEN JUNCTION TO HARLESDEN JUNCTION				
Kensal Green Jn.	Harlesden Jn.	ECS	-	-
MD160 WILLESDEN HIGH LEVEL JUNCTION TO MITRE BRIDGE JUNCTION				
Willesden	Mitre Bridge Jn.	ECS	-	-
Mitre Bridge Jn.	Willesden High Level Jn.	ECS F	N	-
MD165 NORTH POLE JUNCTION TO ACTON WELLS JUNCTION				
North Pole Jn.	Willesden	All	N	-
MD170 ACTON CANAL WHARF TO WILLESDEN				
Acton Canal Wharf	Willesden	P	-	Only in emergency when diverting trains via Dudding Hill Junction.
Willesden	Acton Canal Wharf	ECS P	-	Passenger trains only in emergency when diverting trains via Dudding Hill Jn.
MD325 SOHO SOUTH JUNCTION TO PERRY BARR NORTH JUNCTION				
MD335 PERRY BARR WEST JUNCTION TO PERRY BARR SOUTH JUNCTION				
Perry Barr South Jn.	Soho East Jn.	F	ND	See Local Instructions.
Perry Barr North Jn.	Soho East Jn.	F	ND	See Local Instructions.
MD345 BESCOT JUNCTION TO RUGLELY NORTH JUNCTION (EXCLUSIVE)				
Walsall, signals WL.76 and WL.77	Aldridge crossover	ECS F	N	-
MD430 DROITWICH SPA TO STOURBRIDGE NORTH JUNCTION				
Kidderminster Jn.	Stourbridge Jn.	F	-	-
MD435 SMALL HEATH SOUTH JUNCTION TO STOURBRIDGE NORTH JUNCTION				
Stourbridge Jn. signal SJ.641 Down Siding	Rowley Regis signal SJ.32 Up Stourbridge line	F	-	Driver of the rear locomotive must be prepared for signals to return to Danger before his locomotive passes them. See also Local Instructions.

From	To	Class of Train	Conditions	Remarks
MD450 STOURBRIDGE NORTH JUNCTION TO ROUND OAK				
Stourbridge Junction	Round Oak	F	-	-
MD501 TAMWORTH (INCLUSIVE) TO BIRMINGHAM, PROOF HOUSE JUNCTION				
Saltley, signal SY.206or SY.452	Camp Hill, signal SY.78	All	N*	*Except for passenger trains.
The Driver of a Down direction train not calling at Washwood Heath Sidings requiring assistance, must come to a stand at signal SY.208 or SY.218 and advise the Signaller at Saltley box. The Driver of a train from Washwood Heath Up Sidings to the Camp Hill line requiring assistance must advise the Signaller at Saltley box.				
Lawley Street F.L.T.	Washwood Heath	F	-	-
MD715 NEASDEN SOUTH JUNCTION TO NEASDEN JUNCTION				
Neasden Jn.	Neasden South Jn.	F	-	-

LNW South Route GI - Dated: 07/10/06

Operating instructions for the GSM-R (IVRS) radio system

1. Description of system

GSM-R (IVRS) is a radio system, which enables users to contact the Signaller directly in the event of an emergency.

These instructions relating to GSM-R (IVRS) Radio System do not apply to trains fitted with operational Cab Secure Radio (CSR), operating over infrastructure also equipped with the appropriate shore based equipment.

The entry to and exit from a GSM-R (IVRS) radio network area will be signed as below. Areas fitted with GSM-R (IVRS) are shown in Table A of this Sectional Appendix.



ENTRY BOARD



EXIT BOARD

2. Duties of Signallers

- 2.1 On receipt of an EMERGENCY CALL, the Signaller shall come to a clear understanding with the caller and make the necessary protection arrangements in accordance with Rules and Regulations.

The Signaller should be aware that other users within 3 miles (5 km) of the caller initiating the EMERGENCY CALL will also be included in the call and, if necessary, the Signaller should instruct other Drivers hearing the call to stop in order to complete protection of the line.

- 2.2 If advised of an emergency requiring protection of the line via means other than GSM-R (IVRS), the Signaller must make the necessary protection arrangements in accordance with the Rules and Regulations.
- 2.3 If an NRN emergency broadcast is also required, the Signaller must contact Operations Control and request an NRN emergency broadcast, stating the location and nature of the broadcast required.
- 2.4 The Signaller must also contact any adjoining signal box/Signaller if an EMERGENCY CALL is received from a train outside the area of control to allow the appropriate Rules and Regulations to be carried out.
- 2.5 If the Signaller receives no verbal communication or is unable to come to clear understanding on receipt of an incoming EMERGENCY CALL, the Signaller must try to establish contact with the call originator. If no contact can be established, the Signaller must bring trains in the area to a stand in a controlled way. The Signaller must speak to the Driver of each train stopped and establish whether an emergency exists and carry out the relevant Rules and Regulations.

3. Duties of Drivers

- 3.1 Drivers **must** be in possession of a GSM-R (IVRS) portable handset and must ensure that it is switched on prior to the start of any journey that includes a GSM-R (IVRS) area. However this instruction does not apply if the train cab is fitted with operational Cab Secure Radio (CSR) and the infrastructure is similarly equipped.
- 3.2 Any Driver travelling over the routes described as being fitted with GSM-R (IVRS) in Table A of this Sectional Appendix, carrying a GSM-R (IVRS) hand portable, must use it to contact the Signaller in the event of an Emergency where protection of the line is required in accordance with Rules and Regulations. Once the EMERGENCY CALL has been established on GSM-R (IVRS), it should only be cleared following instruction from the Signaller. If the GSM-R (IVRS) call fails to establish contact with the Signaller within 40 seconds, the Driver must establish communication with the Signaller by any other means.
- 3.3 If a Driver receives an incoming EMERGENCY CALL they must act accordingly. The caller and Signaller must not be interrupted unless requested to so by the Signaller.
- 3.4 If an EMERGENCY CALL is received and not understood for whatever reason (call dropped/lack of clarity/no speech), the Driver must immediately reduce speed to enable the train to be stopped short of any obstruction. The Driver may then proceed to the next location where the Signaller can be contacted.

4. Fault Reporting and System Security

- 4.1 The Signaller should report any equipment or network faults, or system misuse to the IVRS Helpdesk using telephone number 0208 522 3322 (the IVRS network/infrastructure fault reporting number).
- 4.2 Lost, stolen or faulty GSM-R (IVRS) hand portables must be reported immediately by the TOC/FOC to the IVRS Helpdesk using telephone number 0208 522 3314 (the IVRS hand portable fault reporting number).

5. System failure

- 5.1 If advised of a system failure GSM-R (IVRS), Operations Control must arrange for a control 'wire' to be sent to the Train Operator Controls concerned. A blanket speed of 40mph for GSM-R (IVRS) fitted trains must be introduced over the affected area. Affected operators must ensure that practicable arrangements are in place for advising Drivers of the system failure.
- 5.2 Planned outages will be arranged by the IVRS Asset Steward and published in the Weekly Operating Notice.
- 5.3 In the event of a system failure trains must run at a maximum of 40mph. Drivers must contact the Signaller regarding any accident or incident by the quickest way possible using the cab radio, emergency call procedure, any available telephone or any radio system.

6. System testing

The making of Railway Emergency test calls will only be undertaken when details are published in the Weekly Operating Notice.

LNW South Route GI - Dated: 07/10/06

Operation of class 943 propelling advisory control system (Table 'J1')

The provisions of Rule Book, Module TW3, Section 12 are exempt for the operation of trains containing Class 943 vehicles (PCV) in PACS mode, between the locations shown in the table below :

Between	Lines	Other Restrictions
MD101 EUSTON TO ARMITAGE JUNCTION (EXCLUSIVE)		
Euston and Wembley Central	All lines	
West London Jn. and Wembley Yard Watford Jn. and Watford South Jn.	Down Willesden Relief line Up Willesden Relief line All lines	For use of train accessing to/from DC lines.
MD120 CAMDEN JUNCTION TO WATFORD JUNCTION (DC LINES)		
Camden Jn. to Willesden Junction Low Level	All lines	For use of trains accessing to/from North London lines, Euston D.S.S. via DC lines at Watford Junction.
MD135 HARLESDEN JUNCTION TO WILLESDEN CARRIAGE SHED SOUTH		
	All lines	
MD145 CAMDEN ROAD JUNCTION TO CAMDEN JUNCTION		
Camden Road West Jn. to Camden Jn.	All lines	For use of trains accessing to/from North London lines.
MD150 KENSAL GREEN JUNCTION TO WILLESDEN SUBURBAN JUNCTION		
Kensal Green Jn. to Willesden Suburban Jn.	All lines	For use of trains accessing to/from North London lines.
MD155 KENSAL GREEN JUNCTION TO HARLESDEN JUNCTION (CITY LINES)		
	Down City line Up City line	
MD165 NORTH POLE JUNCTION TO ACTON WELLS JUNCTION		
Mitre Bridge Jn. and West London Jn.	All lines	

LNW South Route GI - Dated: 07/10/06

Passenger trains - emergency sanding equipment

Certain passenger trains other than locomotive hauled trains and Class 165/166 Diesel Multiple Units are fitted with sanding equipment, which the Driver will operate when it is necessary to stop the train in conditions of very low adhesion. Where each driving cab carries one application of sand, once the equipment has been operated from that cab, the facility will not be available again until the containers have been replaced.

Drivers' Actions. When the emergency sanding equipment has been used the train must be brought to a stand and the Driver must inform the Signaller immediately and report the following:

- a) that the emergency sanding equipment has been operated,
- b) the location where the emergency sanding equipment was discharged and the current location of the train.

If the Signaller cannot be contacted **immediately** via the Cab Secure Radio or a signal post telephone, the Driver must place a track circuit operating clip on the line immediately in front of the train. To avoid delay, if the Driver alights to use a signal post telephone, a track circuit operating clip should be taken as well. The Signaller may instruct the Driver to place a track circuit operating clip on the line immediately in front of the train.

When the Signaller confirms that the train has been protected by fixed signals, the Driver must provide the following additional information:

- a) why the emergency sanding equipment was operated, i.e. whether for a genuine application, systems fault or operated in error,
- b) the location of the poor adhesion site which required the emergency sanding equipment to be used,
- c) the unit and vehicle number on which the emergency sanding equipment was operated.

Signallers' Actions. Upon advice from a Driver that the emergency sanding equipment on certain passenger trains other than locomotive hauled trains and Class 165/166 Diesel Multiple Units, has been operated the Signaller must **immediately**:

- a) place or maintain the signal in rear of the train at Danger,
- b) if the line on which the train is standing is track circuited, confirm that the track circuit is showing occupied. Should the track circuit not be showing occupied and the signal in rear cannot be placed to Danger, instruct the Driver to apply a track circuit operating clip immediately in front of the train,
- c) advise the Driver when the train is protected and record the information provided. (On Bi-directional lines, protection must also be applied to prevent the approach of trains in the opposite direction).

When it has been ascertained that train movements may re-commence, the controlled signal next in rear of where the emergency sanding equipment was operated must be maintained at Danger until the train has passed clear of the overlap of the signal in advance of where the train stopped and occupied the track circuit ahead. The passage of this first train must be observed to ensure that track circuits operate correctly. This method of signalling must continue until it has been ascertained that the track circuits are working correctly.

Where points are locked by track circuits they must not be operated until the train is well clear. The individual points switches must be used on a route setting panel.

Where poor adhesion problems have been reported the conditions within Rule Book, Module TW1, Section 17 'Rail-head adhesion', must be applied.

Network Rail Control must be informed of any emergency sanding equipment operation giving details of the unit and vehicle numbers, train identity and the time and location of the incident.

All details of emergency sanding equipment activation must be recorded in the Train Register or Occurrence Book.

The Signaller must apply the provisions of Sandite Train Instructions, Clauses 6.2 and 6.3.

LNW South Route GI - Dated: 07/10/06

Sandite application and rail conditioning trains

1. Types of rail conditioning trains

- 1.1 The Railhead Treatment Train (RHTT) consists of converted and specially-adapted wagons hauled by a locomotive at each end
- 1.2 The Multi-Purpose Vehicle (MPV) consists of a specially-built unit with driving cabs at each end.
- 1.3 Where a DMU is used this consists of a specially modified class 117 or 121.
- 1.4 All types of train carry out conditioning of the railhead during autumn by a combination of water jetting and the application of sandite traction gel.

2. Speed

- 2.1 The maximum speed of trains when water jetting and applying sandite is 40mph. Trials underway on West Coast South permit water jetting at 60 mph

3. Notices

- 3.1 Notices will be produced detailing the locations where sanditing and water jetting will take place.
- 3.2 Operations Control must advise signallers of any deviation from the railhead treatment plan which may be agreed to cater for exceptional circumstances or to treat a problem location not normally treated.
- 3.4 Signallers must pass details of changes to the booked plan to the train if instructed to do so by Operations Control.

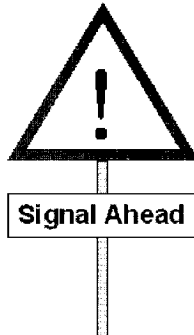
4. Signalling arrangements

- 4.1 Rail conditioning trains will be described, where possible, by train description code 3Jxx when operating water jetting-only diagrams.
- 4.2 Rail conditioning trains will be described, where possible, by train description code 3Sxx when operating diagrams that apply sandite.
- 4.3 Where train describers are not in use the rail conditioning train will be described by special bell signal or special Is Line Clear signal 3-4-2.
- 4.4 All types of rail conditioning trains may be relied upon to operate track circuits whether applying sandite or not. When applying sandite, signallers must specially observe the passage of the train and the next train to follow over track circuits, where provided.
- 4.5 Signallers must deal with any failure by the train to operate a track circuit correctly by immediately applying Rule Book Module T1B, Clause 11 and advising Operations Control of the failure. Signalling General Instruction 12 must be applied to all subsequent trains over the affected portion of line until at least 2 trains have operated the track circuit normally.

National GI - Dated: 01/10/06

Signal reminder board

The following sign consists of a black exclamation mark on a white background within a red triangle and may be provided on the approach to signals at certain locations on London North Western Route (South). The supplementary information sign consists of black letters on a white background. The purpose of the sign is to remind Drivers of the presence of a signal ahead in an effort to reduce the incidence of signals being passed at Danger at the location concerned.



The locations of these boards will be published in Section 'C' of the Weekly Operating Notice as and when they are erected.

LNW South Route GI - Dated: 07/10/06

Special instructions for the working of steam locomotives

1. The conditions of the appropriate Train Operating Company's (T.O.C.) instructions for the working of steam locomotives must be strictly applied
2. Speeds for each movement will be published in the Special Traffic Notice, which will be subject to strict observance of all lower temporary, emergency, or permanent speed restrictions. The special train must not exceed the lower speed of any differential speed restriction.
3. The train must not use crossovers situated between station platforms.
4. Steam emissions must be kept to a minimum if brought to a stand under an overbridge.
5. The Driver/Person in Charge of the locomotive must visually check the axle boxes on the locomotive and tender for any signs of overheating during the journey.
6. The conditions of Railway Group Standard GM/RT1042 "Protection of 25KV A.C Overhead Line Equipment from the effects of steam of steam locomotives" must be adhered to.
7. The requirements of Section 12 of Rule Book, Module AC3, 'AC Electrified lines - Working of trains', must be strictly observed.
8. A competent person nominated by the Electrification Engineer or trained to a standard approved by the Electrification Engineer, must be provided by the T.O.C. and be present on the footplate whilst the locomotive is running under Overhead Line Equipment. (S)he must keep a special watch on the overhead line equipment and advise the Driver of any OLE features which he considers the Driver needs to be aware of. (S)he must make contact with the relevant Electric Control Room before entering and on leaving an electrified section, and in the event of an emergency, and must also notify the appropriate Electric Control Room of how (s)he can be contacted in an emergency.
9. The use of long fire irons is prohibited whilst the locomotive is running under Overhead Line Equipment.
10. The locomotive must not be watered on any line equipped with O.L.E. unless it is fitted with a 'bottom feed', for the water supply.

LNW South Route GI - Dated: 07/10/06

Staff/barrow crossings between platforms

At stations where passengers have to cross the track from one platform to another the staff must exercise the utmost possible supervision to prevent the risk of accident. At all stations where footbridges or subways are provided special care should be taken to prevent passengers using the Staff/Barrow crossings.

LNW South Route GI - Dated: 07/10/06

Terminal platform lines and dead end bays

At a terminal station or dead-end bay where the Absolute Block System of Signalling is in force, a train may be allowed to enter such platform line when it is already occupied by another train or vehicle provided the line is clear to the point to which the train has to run.

No setting back movement should be made without the permission of the Signaller controlling the entrance of trains travelling in the proper direction into the station, except that locomotives may closely follow trains departing from dead-end platforms as far as the platform outlet signal.

After authorising a setting back movement, the Signaller must not allow any other movement on the line concerned until he has satisfied himself that the setting back movement has been completed.

LNW South Route GI - Dated: 07/10/06

Working of ground frames

Unlocked from Signal Box. The ground frame operator must telephone the Signaller and come to a clear understanding regarding the movements to be made and request him to unlock the frame. The Signaller must inform the ground frame operator when the frame has been unlocked. Where a plunger working in connection with a release lever at the ground frame is provided, it must be pressed and held in until the lever is out of the catch. When the movements have been completed, and the train is clear of the points ready to depart or has been shunted into the siding(s) clear of the running line(s), and the ground frame levers placed in the normal position, the ground frame operator must inform the Signaller accordingly and request him to lock the ground frame. The Signaller must inform the ground frame operator when this has been done. Until this advice is received, the ground frame operator must not rejoin the train or allow it to proceed.

At Ground Frames where separate telephone ringing facilities are not provided, the "Attend Telephone" bell code 3-3-3-3 must be used by the person requiring to speak to the Signaller, or vice versa.

If the ground frame operator observes any irregularity on the running lines or should a running line be fouled, he must immediately advise the Signaller and where bell communication is provided, in order to obtain the Signaller's attention without delay he must give six or more beats on the bell in rapid succession. The ground frame operator must also take whatever protective action is required.

At ground frames, where bell communication is also provided with the signal box, the following code must be used if there is a failure of the telephone:-

To Signal Box

Unlock ground frame	2
Train shunted clear of running line(s)-lock ground frame	3
Train on running line ready to depart-lock ground frame	5
These codes will be acknowledged by repetition when the ground frame has been unlocked/locked Running line(s) fouled	6

From Signal Box

Clear running line(s) for train to pass	7
To be acknowledged by repetition and code 3 sent when the line(s) have been cleared	

The call attention signal, 1 beat, must be sent and acknowledged before the required code is sent. Should the Signaller be unable to re-lock the ground frame and special emergency instructions are not in force, he must not allow a following train to proceed until an assurance has been received that the points have been firmly secured in the normal position or the failure has been rectified.

LNW South Route GI - Dated: 07/10/06

Explanation of Table A terms and symbols

Index & Key To Symbology

All information is shown with the Down direction being down the page and the Up direction being up the page - unless indicated otherwise.

Location Column

Station names are shown in CAPITALS.

Ground Frames are indicated by the letters GF, Ground Switch Panels by the letters GSP, and Shunt Frames by the letters SF. Where trains may be shut in, a letter "S" in a circle is shown.

Level crossings are indicated by the letters LC and one of the following abbreviations following the name:

- Crossings operated by a Signaller or Crossing Keeper

MCG	Manned Level Crossing (gates) operated locally by a signaller or crossing keeper
MCB	Manned Level Crossing (barriers) operated locally by a signaller or crossing keeper
CCTV	Manned Level Crossing (full BARRIERS) closed circuit television
RC	Remotely Controlled Manned

- Automatic Crossings

AHBC	Automatic Half-Barrier
ABCL	Automatic Barrier Crossing - road warning lights and barriers monitored by train crew
R/G	Miniature Red/Green Warning Lights (inc. Miniature Stop Lights)
AOCL	Open Crossing - road warning lights monitored by train crew

X shown after the above abbreviations for level crossing type (e.g. AHBC-X, AOCL-X) indicates that the crossing concerned works automatically for movements in the wrong direction.

- Other crossings

TMO	Train Crew Operated
OPEN	Open crossing without road warning lights
UWC	User Worked Crossing
UWB	Crossing with User Worked Barriers
[T]	Accommodation/Occupation crossing equipped with telephone.
BW	Bridleway Crossing

Token Exchange Points on Radio Electronic Token Block lines are identified by the letters - TEP.

Overhead Line Neutral Sections are indicated by the letters OHNS.

Mileage Column

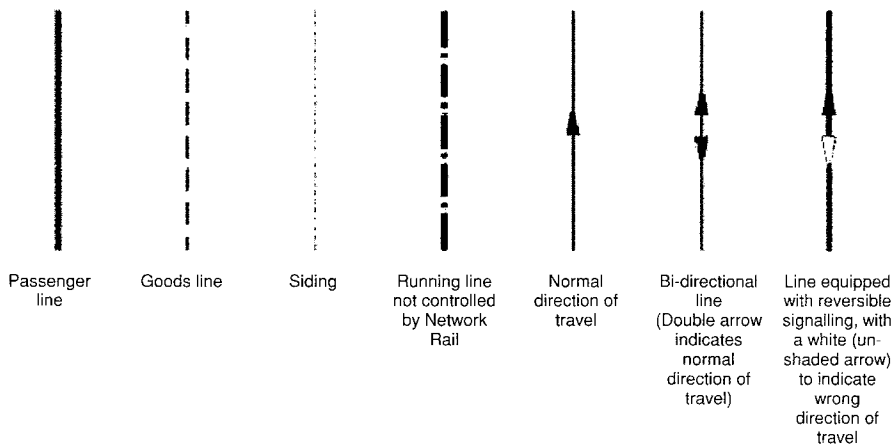
Mileage is shown in miles and chains. (1 mile = 1760 yards / 1.6 Km, 1 chain = 22 yards / 20.11 metres)

Where the lineside mileage changes, the entry is shown:

$$\begin{array}{r} 47 \text{ } 02 \\ 0 \text{ } 00 \\ \hline \end{array}$$

Running lines and speed restriction column

This contains a diagrammatic representation of all running lines and associated connections, but is not to scale. Lines are displayed as follows:



The following abbreviations are used:-

U	Up
UM	Up Main
UF	Up Fast
US	Up Slow
UE	Up Electric
UR	Up Relief
UA	Up Avoiding
UG	Up Goods
USB	Up Suburban
UPL	Up Passenger Loop
UGL	Up Goods Loop
URS	Up Refuge Siding
CL	Crossing Loop in Single Line

D	Down
DM	Down Main
DF	Down Fast
DS	Down Slow
DE	Down Electric
DR	Down Relief
DA	Down Avoiding
DG	Down Goods
DSB	Down Suburban
DPL	Down Passenger Loop
DGL	Down Goods Loop
DRS	Down Refuge Siding
U&D	Up & Down

Where other abbreviations are in use, details are given in the Signalling and Remarks column.

Speed Restrictions

- The maximum permitted speed is shown in Miles per Hour on each running line.
- The location of a change in Maximum Permitted Speed is indicated by a star.
- The mileage at which the speed change occurs is shown in the mileage column, along with a further star.

On bi-directional lines a star may indicate a change in speed in the wrong direction only. This will be indicated by an arrow next to the star and the speed to which it applies (see Diagrammatic explanation of symbols table).

Where a Differential Speed Restriction applies, it is indicated as in the following example:

Standard differential speed restriction	Non-Standard differential speed restriction
<u>20</u> 40	<u>20</u> SP 40

The abbreviation used in the Non-Standard differential speed restrictions is as defined in Rule Book Module SP, Section 2.5 - Permissible speed indicators with letters.

The above example of a non-standard differential speed restriction indicates that Sprinter trains are permitted to travel at 40mph and all other trains at 20mph.

On single and bi-directional lines where different speeds apply in each direction the speeds are shown together with an arrow head indicating the direction in which they apply. The arrow head for the Up direction is to the left of the running line, and that for the Down direction to the right.



On single and bi-directional lines where the same speed applies to movements in either direction, no arrows are shown.

Unless indicated otherwise by speed signs, the maximum speed over connections to sidings and yards is 15 m.p.h. and the maximum speed in Depots and Carriage Sidings is 5 m.p.h.

Where another line or lines lead off from the running line (a loop or additional running line), the speed for that new line will be indicated in the connection and will remain until a change in speed is indicated as normal.

Signalling and remarks column

The Signalling and remarks column contains the following details at the top of each page, and again whenever any of the details therein change:

Mode of signalling	Controlling Signal Box, type and signal prefix	NRN radio channel number where appropriate	CSR number where appropriate
TCB RA8	Liverpool St IECC (L) AC: Romford	NRN 	CSR 
Route availability number for the line(s) concerned	Type of electrification where appropriate and Electrical control room responsible for the area		

GSM-R

Areas covered by GSM-R are indicated with the following symbol (Specific details are shown in the Signalling and Remarks Column);

GSM-R areaMode of signalling

TCB	Track Circuit Block
AB	Absolute Block
AB (PF)	Permissive Block
TB	Tokenless Block
OTS	One Train Working where a staff is provided
OTNS	One Train Working where a staff is not provided
RETB	Radio Electronic Token Block (including the channel number)
ET	Electronic Block
TST	Train Staff and Ticket (Detail in Local instructions where applicable)
NSTR	No Signaller Token with Remote Crossing Loops
NB	No Block
C2	Western only (See Western General Instructions for details)

Electrification

AC	Electrified with Overhead Line Equipment at 25kV Alternating Current.
DC(3)	Electrified with Third Rail at 750 volts Direct Current.
DC(4)	Electrified with Fourth Rail at 750 volts Direct Current.

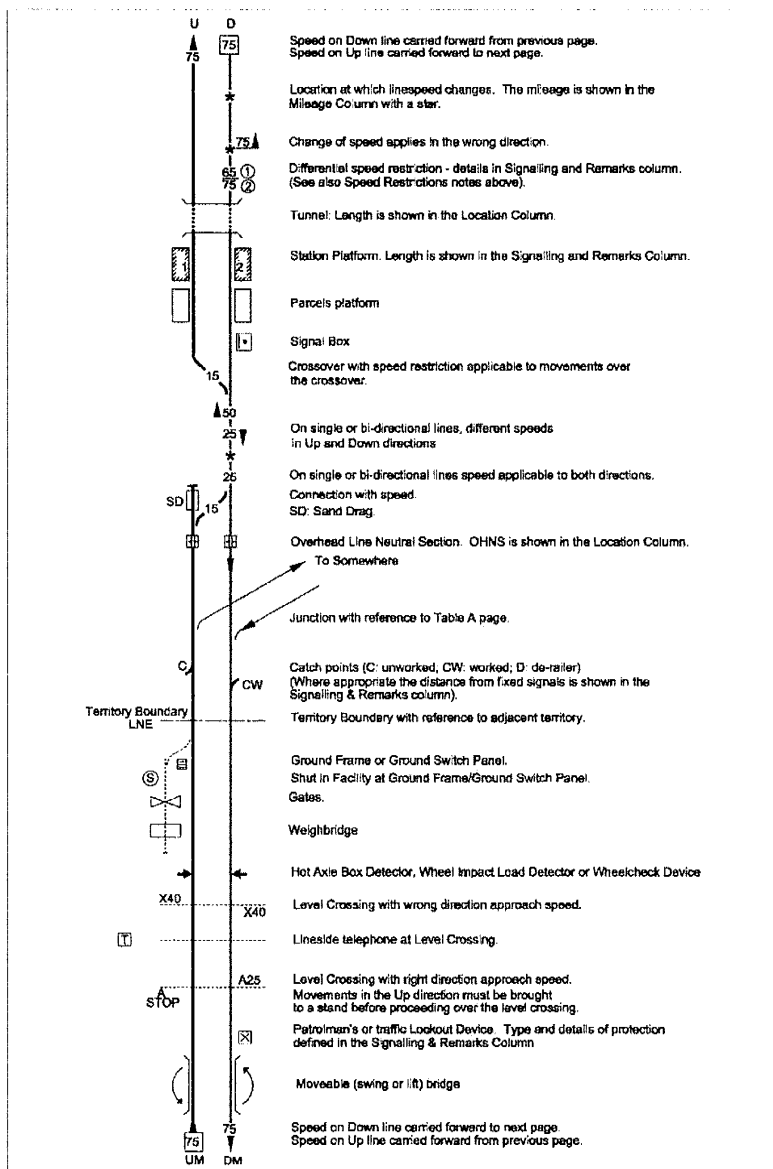
Note: When Cab Secure / NRN radio channel numbers change, an additional symbol with the new channel number will appear adjacent to the point where the channel changes. The information is read DOWN the page, therefore when a change occurs the new channel number will apply to the area below the additional symbol.

The signalling and remarks column contains additional information as follows:

- Special Speed restrictions where denoted by ① (or other number in a circle) in the Running Lines and Speed Restrictions column.
- Automatic Staff Warning Systems using the abbreviation FWS - Fixed Warning System (applies to lines as indicated in the Signalling & Remarks column)
- AWS - Automatic Warning System. Detail is given for those lines or locations where the system is not fitted. Goods lines are not AWS fitted unless otherwise indicated.
- TPWS – Train Protection Warning System. Detail is given for those lines of route where the system is not fitted.
- TASS – Tilt Authorisation and Speed Supervision system.
- Loop and Refuge Siding Standage, given in metres and yards.
- Locations of catch points.
- Other additional remarks e.g. telephones where provided for traffic purposes.
- Length of station platforms in metres and yards.

- Local Instructions are referred to where appropriate.
- Locations of Hot Axle Box Detectors.
- Locations of Lockout Devices (LOD):
 - LOD (P) - Patrolman's Lockout Device - inhibits movements in one direction only on designated bi-directional line(s)
 - LOD (T) - Traffic Lockout Device - inhibits all movements on designated line(s)
 - NB: Full details of the protection afforded is as defined in the lineside case.
- Locations where Permissive Working is authorised:
 - PP - Permissive Working - full use for class 1, 2, 5 and 0 trains.
 - PP-C - Permissive Working - Contingency use only for class 1, 2, 5 and 0 trains.
 - PP-A - Permissive Working - Attaching and Contingency use only for class 1, 2, 5 and 0 trains.
 - PF - Permissive Working for class 3 to 8 and 0 trains

Diagrammatic explanation of symbols



Dated: 07/10/06

Index of Locations

Location	Table A - Module
Abbey Junction	MD232-001-LNW(S)2, MD555-001-LNW(S)2
Abernethys LC (UWC)	MD401-001-LNW(S)2
ACOCKS GREEN	MD401-008-LNW(S)2
Acton Canal Wharf Jn	MD170-001-LNW(S)2
Acton Canal Wharf SB	MD170-001-LNW(S)2
ADDERLEY PARK	MD301-007-LNW(S)2
Albion Sidings	MD301-014-LNW(S)2
ALBRIGHTON	MD801-003-LNW(S)2
Aldridge	MD565-002-LNW(S)2
Allscott GF	MD801-006-LNW(S)2
Althorpe Park GF	MD105-003-LNW(S)2
Althorpe Park HABD	MD105-003-LNW(S)2
ALVECHURCH	MD310-001-LNW(S)2
Alvechurch Station LC	MD310-001-LNW(S)2
Anglesea Sidings	MD350-001-LNW(S)2
APSLEY	MD101-012-LNW(S)2
Apsley Manor Farm No.2 LC (UWC)	MD720-001-LNW(S)2
Ardley Tunnel	MD701-009-LNW(S)2
Arena Tunnel	MD301-011-LNW(S)2
Arley HABD	MD555-001-LNW(S)2
Arley Tunnel	MD555-001-LNW(S)2
Ashby Jn	MD101-026-LNW(S)2
Ashendon Jn, former site of	MD701-008-LNW(S)2
ASPLEY GUISE	MD140-003-LNW(S)2
Aspley Guise LC (CCTV)	MD140-003-LNW(S)2
ASTON	MD320-004-LNW(S)2
Aston North Jn	MD320-004-LNW(S)2, MD340-001-LNW(S)2
Aston SB (AN)	MD320-003-LNW(S)2
Aston South Jn	MD315-001-LNW(S)2, MD320-004-LNW(S)2
ATHERSTONE	MD101-027-LNW(S)2
Attleborough South Junction	MD101-025-LNW(S)2
AYLESBURY	MD712-002-LNW(S)2, MD720-002-LNW(S)2, MD725-001-LNW(S)2
Aylesbury North GF	MD725-001-LNW(S)2
Aynho Junction	MD401-001-LNW(S)2, MD701-009-LNW(S)2
Aynho Park Jn, former site of	MD701-009-LNW(S)2
BANBURY	MD401-002-LNW(S)2, MD401-003-LNW(S)2
Banbury Lane LC (CCTV)	MD101-021-LNW(S)2
Banbury North SB (BN)	MD401-003-LNW(S)2
Banbury South SB (BS)	MD401-002-LNW(S)2
BARNT GREEN	MD305-007-LNW(S)2, MD310-001-LNW(S)2
Barnt Green Jn	MD305-007-LNW(S)2, MD310-001-LNW(S)2
Bath Row Tunnel	MD305-002-LNW(S)2
BEACONSFIELD	MD701-005-LNW(S)2
BEARLEY	MD415-001-LNW(S)2
Bearley Jn	MD415-002-LNW(S)2, MD425-003-LNW(S)2
Bearley Jn SB (BJ)	MD425-003-LNW(S)2
Beaumont Hill LC (UWC)	MD425-003-LNW(S)2
BEDFORD ST. JOHNS	MD140-006-LNW(S)2
BEDWORTH	MD410-003-LNW(S)2
Beechwood Tunnel	MD301-004-LNW(S)2
Bentley Heath LC (MCB)	MD401-008-LNW(S)2
BERKHAMSTED	MD101-014-LNW(S)2
BERKSWELL	MD301-004-LNW(S)2
Berry Lane LC (UWC)	MD140-003-LNW(S)2

Location	Table A - Module
Bescot Down Tower SB (DT)	MD320-007-LNW(S)2
Bescot Jn	MD320-008-LNW(S)2, MD345-001-LNW(S)2
BESCOT STADIUM	MD320-008-LNW(S)2
Bicester Eastern Perimeter Rd LC (TMOB)	MD735-002-LNW(S)2
BICESTER NORTH	MD701-008-LNW(S)2
BICESTER TOWN	MD735-002-LNW(S)2
BILBROOK	MD801-003-LNW(S)2
Birch Coppice Exchange Sidings	MD501-002-LNW(S)2
BIRMINGHAM INTERNATIONAL	MD301-005-LNW(S)2
Birmingham International North Jn	MD301-005-LNW(S)2
Birmingham International South Jn	MD301-005-LNW(S)2
BIRMINGHAM MOOR STREET	MD435-002-LNW(S)2
BIRMINGHAM NEW ST	MD301-009-LNW(S)2, MD301-010-LNW(S)2, MD305-001-LNW(S)2
Birmingham New St PSB (NS)	MD301-010-LNW(S)2, MD305-001-LNW(S)2
Birmingham Railway Museum	MD401-008-LNW(S)2
BIRMINGHAM SNOW HILL	MD435-002-LNW(S)2
Blackwell	MD305-007-LNW(S)2
BLAKE STREET	MD340-003-LNW(S)2
BLAKEDOWN	MD430-003-LNW(S)2
Blakedown LC	MD430-003-LNW(S)2
Blakedown SB (BN)	MD430-003-LNW(S)2
BLETCHLEY	MD101-017-LNW(S)2, MD140-001-LNW(S)2
Bletchley East Jn	MD140-001-LNW(S)2
Bletchley Jn	MD101-017-LNW(S)2, MD140-001-LNW(S)2
Bletchley PSB (BY)	MD101-017-LNW(S)2
Bletchley South Junction	MD101-016-LNW(S)2
Blisworth	MD101-021-LNW(S)2
BLOXWICH	MD345-004-LNW(S)2
Bloxwich GF	MD345-004-LNW(S)2
Bloxwich LC (MCB)	MD345-004-LNW(S)2
BLOXWICH NORTH	MD345-005-LNW(S)2
Bloxwich SB (BH)	MD345-004-LNW(S)2
BORDESLEY	MD435-002-LNW(S)2
Bordesley Down Yard GF	MD435-002-LNW(S)2
Bordesley Jn	MD401-009-LNW(S)2, MD570-002-LNW(S)2
Bordesley South Jn.	MD401-009-LNW(S)2
Boulders Farm No.2 LC (UWC)	MD401-001-LNW(S)2
Bourne End Junction	MD101-013-LNW(S)2
BOURNVILLE	MD305-004-LNW(S)2
BOW BRICKHILL	MD140-003-LNW(S)2
Bow Brickhill LC (CCTV)	MD140-003-LNW(S)2
Brackmills	MD175-001-LNW(S)2
Brackmills LC (TMO)	MD175-001-LNW(S)2
Bradnocks Marsh HABD	MD301-004-LNW(S)2
Brandon HABD	MD301-001-LNW(S)2
Brent Sidings	MD101-005-LNW(S)2, MD135-001-LNW(S)2
Brereton Sidings SB	MD345-007-LNW(S)2
BRICKET WOOD	MD130-002-LNW(S)2
Bridge Street GF	MD175-002-LNW(S)2
Bridge Street Jn, former site of	MD175-003-LNW(S)2
Bridge Street LC (MCB)	MD175-002-LNW(S)2
Bridge Street SB	MD175-002-LNW(S)2
Brill Tunnel	MD701-008-LNW(S)2
Brinklow	MD101-024-LNW(S)2
British Steel Sidings, former	MD501-005-LNW(S)2
Bromford Bridge	MD501-004-LNW(S)2

Location	Table A - Module
Brookfield House LC (UWC)	MD401-002-LNW(S)2
Brownhills	MD350-001-LNW(S)2
Bucknells Farm LC (BW)	MD701-009-LNW(S)2
Burnham Bros LC (UWC)	MD415-001-LNW(S)2
Burton Dasset Kineton MOD	MD460-001-LNW(S)2
Burton Farm No.1 LC (UWC)	MD415-002-LNW(S)2
Burton Farm No.2 LC (UWC)	MD415-002-LNW(S)2
Bushbury (Oxley) Jn	MD320-010-LNW(S)2, MD805-001-LNW(S)2
Bushbury Jn	MD301-018-LNW(S)2, MD320-010-LNW(S)2
BUSHEY	MD101-009-LNW(S)2, MD120-008-LNW(S)2
BUTLERS LANE	MD340-003-LNW(S)2
Calor Gas Sidings GF	MD410-003-LNW(S)2
Calvert Jn	MD725-002-LNW(S)2
Calvert North GF	MD725-002-LNW(S)2
Calvert South GF	MD725-002-LNW(S)2
Camden Jn	MD101-003-LNW(S)2, MD120-001-LNW(S)2,
Camden Junction South	MD145-001-LNW(S)2
Canal Tunnel	MD101-003-LNW(S)2
Canley	MD305-002-LNW(S)2
CANLEY	MD301-003-LNW(S)2
CANNOCK	MD345-006-LNW(S)2
CARPENDERS PARK	MD120-007-LNW(S)2
Castle Bromwich Jn	MD501-003-LNW(S)2, MD565-001-LNW(S)2
Castlethorpe North (Wolverton) HABD	MD101-020-LNW(S)2
Castlethorpe Station, former site of	MD101-020-LNW(S)2
Charlemont Road LC (R/G)	MD320-006-LNW(S)2
CHEDDINGTON	MD101-015-LNW(S)2
Cheddington WheelChex	MD101-015-LNW(S)2
Cherrys No.4 LC (UWC)	MD401-002-LNW(S)2
CHESTER ROAD	MD340-001-LNW(S)2
Chiswells Farm LC (UWC)	MD401-001-LNW(S)2
Chunes LC (UWC)	MD810-002-LNW(S)2
Church Road Tunnel	MD305-003-LNW(S)2
Church Street LC (TMO)	MD101-019-LNW(S)2
CLAVERDON	MD415-001-LNW(S)2
Claydon L&NE Jn	MD725-002-LNW(S)2, MD735-002-LNW(S)2
Claydon L&NE Jn SB	MD735-002-LNW(S)2
Claydon LC (AOCL)	MD735-002-LNW(S)2
CODSALL	MD801-003-LNW(S)2
Codsall SB (CL)	MD801-003-LNW(S)2
Cofton	MD305-007-LNW(S)2
Corks Farm No.2 LC	MD340-004-LNW(S)2
COSELEY	MD301-016-LNW(S)2
COSFORD	MD801-003-LNW(S)2
Cosford SB	MD801-003-LNW(S)2
Coundon Road LC (MCB)	MD410-001-LNW(S)2
Coundon Road SB (CR)	MD410-001-LNW(S)2
COVENTRY	MD301-002-LNW(S)2, MD405-002-LNW(S)2
Coventry North Jn	MD301-002-LNW(S)2, MD410-001-LNW(S)2
Coventry PSB (CY)	MD301-002-LNW(S)2
Coventry South Jn	MD301-002-LNW(S)2, MD405-002-LNW(S)2
Coventry Yard	MD410-001-LNW(S)2
CRADLEY HEATH	MD435-006-LNW(S)2
Cradley Heath LC (CCTV)	MD435-006-LNW(S)2
Crick Tunnel	MD105-004-LNW(S)2
Curzon Street Jn	MD301-008-LNW(S)2, MD320-001-LNW(S)2
DANZEY	MD425-003-LNW(S)2

Location	Table A - Module
Darlston Jn	MD320-009-LNW(S)2, MD360-001-LNW(S)2
Daventry International Rail Freight Terminal (DIRFT)	MD105-004-LNW(S)2
Daventry North Jn	MD105-004-LNW(S)2
Daventry South Jn	MD105-004-LNW(S)2
Daw Mill Colliery	MD555-001-LNW(S)2
Daw Mill GF	MD555-001-LNW(S)2
Denbigh Hall North Jn	MD101-018-LNW(S)2
Denbigh Hall South Jn	MD101-017-LNW(S)2, MD735-001-LNW(S)2
DENHAM	MD701-005-LNW(S)2
DENHAM GOLF CLUB	MD701-005-LNW(S)2
Ditchburns Crossing LC	MD725-002-LNW(S)2
Dodds LC (UWC)	MD720-001-LNW(S)2
DORRIDGE	MD401-007-LNW(S)2
Double to Single Jn	MD140-006-LNW(S)2
DUDESTON	MD320-003-LNW(S)2
Duddeston Jn	MD501-007-LNW(S)2
DUDLEY PORT	MD301-014-LNW(S)2
Duston North Jn, former site of	MD175-003-LNW(S)2
EARLSWOOD	MD425-002-LNW(S)2
Edstone Hall No.1 LC (UWC)	MD415-001-LNW(S)2
Elmley Lovett GF	MD430-001-LNW(S)2
ERDINGTON	MD340-001-LNW(S)2
Esso Sidings	MD501-004-LNW(S)2
European Metals Recycling Sidings	MD501-008-LNW(S)2
EUSTON	MD101-001-LNW(S)2
Fenny Compton Jn	MD401-004-LNW(S)2, MD460-001-LNW(S)2
FENNY STRATFORD	MD140-003-LNW(S)2
Fenny Stratford LC (CCTV)	MD140-003-LNW(S)2
Fenny Stratford/Bletchley Flyover Jn	MD140-002-LNW(S)2, MD740-001-LNW(S)2
FIVE WAYS	MD305-002-LNW(S)2
Flyover Junction	MD735-001-LNW(S)2, MD740-001-LNW(S)2
Forders Sidings	MD140-005-LNW(S)2
Fosseway LC (AHB)	MD350-001-LNW(S)2
Four Ashes	MD301-019-LNW(S)2
FOUR OAKS	MD340-002-LNW(S)2
Galton Junction	MD301-013-LNW(S)2, MD440-001-LNW(S)2
Galton Tunnel	MD440-001-LNW(S)2
GARSTON	MD130-002-LNW(S)2
GERRARDS CROSS	MD701-005-LNW(S)2
Grand Jn	MD301-007-LNW(S)2, MD501-009-LNW(S)2, MD575-001-LNW(S)2
Granville Street Tunnel	MD305-002-LNW(S)2
GRAVELLY HILL	MD340-001-LNW(S)2
Great Central Way Jn	MD701-002-LNW(S)2
GREAT MISSENDEN	MD712-001-LNW(S)2
Green Lane LC (AHBC-X)	MD140-005-LNW(S)2
HADDENHAM AND THAME PARKWAY	MD701-008-LNW(S)2
Hademore Crossing LC	MD101-029-LNW(S)2
Hademore Crossing SB (HC)	MD101-029-LNW(S)2
HAGLEY	MD430-003-LNW(S)2
Halesowen Jn	MD305-006-LNW(S)2
HALL GREEN	MD425-001-LNW(S)2
Hampstead Tunnel	MD701-001-LNW(S)2
HAMPTON-IN-ARDEN	MD301-004-LNW(S)2
Hams Hall Control Centre (HH)	MD555-002-LNW(S)2
Hams Hall National Distribution Park	MD555-002-LNW(S)2
HAMSTEAD	MD320-006-LNW(S)2

Location	Table A - Module
Hamstead Tunnel	MD325-001-LNW(S)2
Hanslope North Junction	MD101-020-LNW(S)2, MD105-001-LNW(S)2
Hanslope South Junction	MD101-020-LNW(S)2
Harbury Tunnel	MD401-005-LNW(S)2
Hardingstone LC (FP)	MD175-001-LNW(S)2
HARLESDEN	MD120-004-LNW(S)2
Harlesden Jn	MD101-005-LNW(S)2, MD135-001-LNW(S)2, MD155-001-LNW(S)2
HARROW & WEALDSTONE	MD101-008-LNW(S)2, MD120-006-LNW(S)2
HARTLEBURY	MD430-001-LNW(S)2
Hartlebury LC (MCB)	MD430-001-LNW(S)2
Hartlebury SB (HY)	MD430-001-LNW(S)2
Hartshill - Tarmac Sidings	MD101-026-LNW(S)2
Hartshill North GF	MD101-026-LNW(S)2
Hartshill South GF	MD101-026-LNW(S)2
HATCH END	MD120-007-LNW(S)2
HATTON	MD401-007-LNW(S)2, MD415-001-LNW(S)2
Hatton North Jn.	MD401-007-LNW(S)2, MD420-001-LNW(S)2
Hatton Station Jn	MD401-007-LNW(S)2, MD415-001-LNW(S)2
Hatton West Jn	MD415-001-LNW(S)2, MD420-001-LNW(S)2
Hawkesbury Lane LC (MCB)	MD410-002-LNW(S)2
Hawkesbury Lane SB (HL)	MD410-002-LNW(S)2
HEADSTONE LANE	MD120-007-LNW(S)2
Heartlands Power Station Sidings (O.O.U.)	MD501-004-LNW(S)2
HEDNESFORD	MD345-007-LNW(S)2
Hednesford SB	MD345-007-LNW(S)2
HEMEL HEMPSTEAD	MD101-013-LNW(S)2
HENLEY-IN-ARDEN	MD425-003-LNW(S)2
Henley-in-Arden SB	MD425-003-LNW(S)2
HEYFORD	MD401-001-LNW(S)2
High Oaks	MD101-024-LNW(S)2
HIGH WYCOMBE	MD701-006-LNW(S)2
Hillmorton Junction	MD101-022-LNW(S)2, MD105-005-LNW(S)2
Hockley No. 1 Tunnel	MD435-003-LNW(S)2
Hockley No. 2 Tunnel	MD435-003-LNW(S)2
Hollands (Streehay) LC	MD340-004-LNW(S)2
Holliday Street Tunnel	MD305-001-LNW(S)2, MD305-002-LNW(S)2
HOW WOOD	MD130-002-LNW(S)2
Hunsbury Hill Tunnel	MD105-001-LNW(S)2
Ironbridge Power Station Sidings	MD810-002-LNW(S)2
Jaguar Cars Sidings	MD501-004-LNW(S)2
Jefferies LC (UWC)	MD401-004-LNW(S)2
JEWELLERY QUARTER	MD435-003-LNW(S)2
KEMPSTON HARDWICK	MD140-006-LNW(S)2
Kempston Hardwick LC (AHBC-X)	MD140-006-LNW(S)2
Kenilworth North Jn	MD405-001-LNW(S)2
Kenilworth South Jn	MD405-001-LNW(S)2
KENSAL GREEN	MD120-002-LNW(S)2
Kensal Green Jn	MD150-001-LNW(S)2, MD155-001-LNW(S)2
Kensal Green Tunnels	MD101-004-LNW(S)2, MD120-002-LNW(S)2
KENTON	MD120-006-LNW(S)2
KIDDERMINSTER	MD430-002-LNW(S)2
Kidderminster Jn SB (KJ)	MD430-002-LNW(S)2
KILBURN HIGH ROAD	MD120-001-LNW(S)2
Kilsby North HABD	MD101-021-LNW(S)2
Kilsby Tunnel	MD101-021-LNW(S)2
Kineton MOD Branch	MD460-001-LNW(S)2

Location	Table A - Module
KING'S LANGLEY	MD101-012-LNW(S)2
KING'S NORTON	MD305-005-LNW(S)2, MD570-003-LNW(S)2
King's Norton Jn	MD305-005-LNW(S)2, MD570-003-LNW(S)2
King's Norton Station Jn	MD305-004-LNW(S)2, MD570-003-LNW(S)2
King's Norton West GF	MD305-005-LNW(S)2
KINGS SUTTON	MD401-002-LNW(S)2
Kingsbury Branch Jn	MD501-002-LNW(S)2
Kingsbury Branch Sidings	MD501-002-LNW(S)2
Kingsbury Jn	MD501-002-LNW(S)2, MD545-001-LNW(S)2
Kingsbury SF (KY)	MD501-002-LNW(S)2
Kingswinford Jn South	MD450-001-LNW(S)2, MD455-001-LNW(S)2
Kingswinford Jn South SB (KJ)	MD450-001-LNW(S)2, MD455-001-LNW(S)2
Knaptons LC (UWC)	MD401-001-LNW(S)2
Landor Street Jn	MD501-008-LNW(S)2, MD570-001-LNW(S)2
LANDYWOOD	MD345-005-LNW(S)2
LANGLEY GREEN	MD435-004-LNW(S)2
Langley Green West LC (CCTV)	MD435-004-LNW(S)2
LAPWORTH	MD401-007-LNW(S)2
Launton LC (AOCL)	MD735-002-LNW(S)2
Lawley Street Freightliner Terminal	MD501-008-LNW(S)2
LEA HALL	MD301-006-LNW(S)2
LEAMINGTON SPA	MD401-006-LNW(S)2
Leamington Spa Jn	MD401-006-LNW(S)2, MD405-001-LNW(S)2
Leamington Spa PSB (LN, OL)	MD401-006-LNW(S)2
Ledburn Junction	MD101-015-LNW(S)2
LEIGHTON BUZZARD	MD101-016-LNW(S)2
LICHFIELD CITY	MD340-004-LNW(S)2, MD350-001-LNW(S)2
Lichfield City Jn	MD340-004-LNW(S)2, MD350-001-LNW(S)2
LICHFIELD TRENT VALLEY	MD101-029-LNW(S)2, MD340-004-LNW(S)2
Lichfield Trent Valley Junction SB (TV)	MD340-004-LNW(S)2, MD355-001-LNW(S)2
Lichfield Trent Valley SB (LD)	MD101-029-LNW(S)2, MD355-001-LNW(S)2
Lichfield TV Jn	MD340-004-LNW(S)2, MD355-001-LNW(S)2
Lichfield TV LC	MD340-004-LNW(S)2
LIDLINGTON	MD140-004-LNW(S)2
Lidlington LC (CCTV)	MD140-004-LNW(S)2
Lifford East HABD	MD570-003-LNW(S)2
Lifford East Junction	MD570-003-LNW(S)2, MD580-001-LNW(S)2
Lifford West Jn	MD305-004-LNW(S)2, MD580-001-LNW(S)2
Lightmoor Jn	MD810-002-LNW(S)2
Lightmoor Jn SB (LJ)	MD810-002-LNW(S)2
Linslade Tunnels	MD101-016-LNW(S)2
Little Bourton LC (UWC)	MD401-004-LNW(S)2
LITTLE KIMBLE	MD720-001-LNW(S)2
London Rd LC (TMO)	MD735-002-LNW(S)2
LONG BUCKBY	MD105-004-LNW(S)2
LONGBRIDGE	MD305-006-LNW(S)2
LYE	MD435-006-LNW(S)2
Madeley Jn	MD801-004-LNW(S)2, MD810-001-LNW(S)2
Madeley Jn SB (MJ)	MD801-004-LNW(S)2, MD810-001-LNW(S)2
Madeley South Jn	MD810-001-LNW(S)2
Manor Farm No.1 LC (UWC)	MD401-002-LNW(S)2
Marsh Lane LC (ABCL)	MD720-001-LNW(S)2
MARSTON GREEN	MD301-005-LNW(S)2
Marston LC (AHBC-X)	MD140-004-LNW(S)2
Marston Vale SCC	MD140-004-LNW(S)2
MARYLEBONE	MD701-001-LNW(S)2
Marylebone IECC (ME)	MD701-001-LNW(S)2

Location	Table A - Module
Metro-Cammell GF	MD501-006-LNW(S)2
Mid Cannock Colliery GF	MD345-006-LNW(S)2
Mill Lane Jn	MD105-003-LNW(S)2
MILLBROOK	MD140-004-LNW(S)2
Millbrook LC (CCTV)	MD140-004-LNW(S)2
Millburn Grange LC (UWC)	MD405-002-LNW(S)2
MILTON KEYNES CENTRAL	MD101-018-LNW(S)2
Milverton Jn	MD405-001-LNW(S)2
Mitre Bridge Jn	MD160-001-LNW(S)2, MD165-001-LNW(S)2
Mitre Bridge LC (CCTV)	MD165-001-LNW(S)2
Moat Lane No.1 LC (UWC)	MD720-001-LNW(S)2
MONKS RISBOROUGH	MD720-001-LNW(S)2
Monument Lane	MD301-011-LNW(S)2
Morse Gorse LC (UWC)	MD345-007-LNW(S)2
Moseley Tunnel	MD570-002-LNW(S)2
Neasden Jn	MD715-001-LNW(S)2
Neasden Jn SB (NJ)	MD715-001-LNW(S)2
Neasden South Jn	MD701-002-LNW(S)2, MD710-001-LNW(S)2, MD715-001-LNW(S)2
New Bilton (End of Line)	MD180-001-LNW(S)2
New Bilton East GF	MD180-001-LNW(S)2
New Bilton West GF	MD180-001-LNW(S)2
New Street North Tunnel	MD301-010-LNW(S)2, MD301-011-LNW(S)2
New Street South Tunnel	MD301-009-LNW(S)2
Newton Jn	MD320-006-LNW(S)2
NORTH WEMBLEY	MD120-005-LNW(S)2
North Wembley Jn	MD101-008-LNW(S)2
NORTHAMPTON	MD105-002-LNW(S)2
Northampton Kings Heath Traincare Depot	MD105-002-LNW(S)2
Northampton North Jn	MD105-002-LNW(S)2
Northampton South Jn	MD105-002-LNW(S)2, MD175-003-LNW(S)2
Northchurch HABD	MD101-014-LNW(S)2
Northchurch Tunnels	MD101-014-LNW(S)2
NORTHFIELD	MD305-006-LNW(S)2
Northolt Jn	MD701-004-LNW(S)2
NORTHOLT PARK	MD701-003-LNW(S)2
NUNEATON	MD101-025-LNW(S)2, MD101-026-LNW(S)2, MD232-001-LNW(S)2
Nuneaton North Jn	MD101-026-LNW(S)2, MD555-001-LNW(S)2
Nuneaton PSB (NN)	MD101-025-LNW(S)2, MD232-002-LNW(S)2
Nuneaton South Junction	MD101-025-LNW(S)2, MD232-002-LNW(S)2, MD410-003-LNW(S)2
OAKENGATES	MD801-005-LNW(S)2
Oakengates Tunnel	MD801-004-LNW(S)2
OLD HILL	MD435-005-LNW(S)2
Old Hill Tunnel	MD435-005-LNW(S)2
Old Oak Sidings	MD165-003-LNW(S)2
OLTON	MD401-008-LNW(S)2
Oxley SB (OY)	MD801-002-LNW(S)2
Oxley, Stafford Road Jn	MD801-001-LNW(S)2, MD805-001-LNW(S)2
Padge Hall Farm LC (UWC)	MD232-002-LNW(S)2
Park Farm No.1 LC (UWC)	MD415-001-LNW(S)2
Park Farm No.2 LC (UWC)	MD415-001-LNW(S)2
Park Jn	MD405-002-LNW(S)2
Park Lane Jn	MD560-001-LNW(S)2, MD565-001-LNW(S)2
PARK STREET	MD130-002-LNW(S)2
Park Street Tunnel (Walsall)	MD345-003-LNW(S)2

Location	Table A - Module
Park Street Tunnels (London)	MD101-002-LNW(S)2
Pensnett	MD455-001-LNW(S)2
PERRY BARR	MD320-005-LNW(S)2
Perry Barr North Jn	MD320-005-LNW(S)2, MD325-001-LNW(S)2
Perry Barr South Jn	MD320-005-LNW(S)2, MD335-001-LNW(S)2
Perry Barr West Jn	MD325-001-LNW(S)2, MD335-001-LNW(S)2
Pershore Road Tunnel	MD305-004-LNW(S)2
POLESWORTH	MD101-028-LNW(S)2
Portobello Jn	MD320-010-LNW(S)2, MD365-001-LNW(S)2
Portobello Jn LC (CCTV)	MD320-009-LNW(S)2
PRIMROSE HILL (closed), site of	MD145-001-LNW(S)2
Primrose Hill Jn	MD145-001-LNW(S)2
Primrose Hill Tunnels	MD101-003-LNW(S)2
PRINCES RISBOROUGH	MD701-007-LNW(S)2, MD720-001-LNW(S)2
Princes Risborough Junction	MD701-007-LNW(S)2
Prologis Park Siding	MD410-002-LNW(S)2
Proof House Jn	MD301-008-LNW(S)2, MD320-001-LNW(S)2, MD501-009-LNW(S)2
QUANTON ROAD	MD725-001-LNW(S)2
QUEEN'S PARK	MD101-004-LNW(S)2, MD120-002-LNW(S)2
Queens Park Jn	MD120-002-LNW(S)2
REDDITCH	MD310-001-LNW(S)2
RIDGMONT	MD140-004-LNW(S)2
Ridgmont LC (CCTV)	MD140-004-LNW(S)2
Road HADB	MD105-001-LNW(S)2
Rose Farm LC (UWC)	MD701-008-LNW(S)2
Round Oak Sidings	MD450-001-LNW(S)2
ROWLEY REGIS	MD435-005-LNW(S)2
RUGBY	MD101-022-LNW(S)2, MD101-023-LNW(S)2, MD105-005-LNW(S)2
Rugby North Junction	MD101-023-LNW(S)2
Rugby PSB (RY)	MD101-022-LNW(S)2, MD105-005-LNW(S)2
Rugby S.C.C. (WT, TK, KR, HN)	MD101-023-LNW(S)2
Rugby South Junction	MD101-022-LNW(S)2, MD105-005-LNW(S)2
RUGELEY TOWN	MD345-007-LNW(S)2
Ryecroft Junction	MD345-003-LNW(S)2, MD565-002-LNW(S)2
Saltley Loco Servicing Depot, former	MD501-008-LNW(S)2
Saltley PSB (SY)	MD501-008-LNW(S)2
SANDWELL AND DUDLEY	MD301-013-LNW(S)2
SAUNDERTON	MD701-006-LNW(S)2
Saunderton Tunnel	MD701-006-LNW(S)2
SEER GREEN & JORDANS	MD701-005-LNW(S)2
SELLY OAK	MD305-003-LNW(S)2
Shanks McEwan Private Siding	MD725-002-LNW(S)2
SHENSTONE	MD340-003-LNW(S)2
SHIFNAL	MD801-004-LNW(S)2
Shilton HADB	MD101-024-LNW(S)2
SHIRLEY	MD425-001-LNW(S)2
Shirley SB (SH)	MD425-001-LNW(S)2
Sillesbourne Farm LC (UWC)	MD425-003-LNW(S)2
Single & Double Jn	MD140-003-LNW(S)2
SMALL HEATH	MD401-009-LNW(S)2, MD435-001-LNW(S)2
Small Heath GF	MD435-001-LNW(S)2
Small Heath South Jn	MD401-009-LNW(S)2, MD435-001-LNW(S)2
SMETHWICK GALTON BRIDGE	MD301-013-LNW(S)2, MD435-004-LNW(S)2
Smethwick Jn	MD435-004-LNW(S)2, MD440-001-LNW(S)2
SMETHWICK ROLFE STREET	MD301-013-LNW(S)2

Location	Table A - Module
Snow Hill Tunnel	MD435-002-LNW(S)2
Soho East GF	MD325-001-LNW(S)2
Soho East Jn	MD325-001-LNW(S)2, MD330-001-LNW(S)2
Soho North Jn	MD301-012-LNW(S)2, MD330-001-LNW(S)2
Soho South Jn	MD301-012-LNW(S)2, MD325-001-LNW(S)2
Soho, Light Maintenance Depot	MD301-012-LNW(S)2
SOLIHULL	MD401-008-LNW(S)2
Somerton LC (UWC)	MD401-001-LNW(S)2
Songar Grange Farm LC (UWC)	MD415-001-LNW(S)2
SOUTH HAMPSTEAD	MD120-001-LNW(S)2
South Hampstead Tunnels	MD120-001-LNW(S)2, MD145-001-LNW(S)2
South Harrow Tunnel	MD701-003-LNW(S)2
SOUTH KENTON	MD120-005-LNW(S)2
SOUTH RUISLIP	MD701-004-LNW(S)2, MD705-001-LNW(S)2
SPRING ROAD	MD425-001-LNW(S)2
ST ALBANS ABBEY	MD130-002-LNW(S)2
St Andrew's Jn	MD570-001-LNW(S)2, MD575-001-LNW(S)2
St Johns Wood Tunnel	MD701-001-LNW(S)2
STECHFORD	MD301-006-LNW(S)2, MD315-001-LNW(S)2
Stechford North Jn	MD301-006-LNW(S)2, MD315-001-LNW(S)2
Stechford South Jn	MD301-006-LNW(S)2, MD315-001-LNW(S)2
STEWARTBY	MD140-005-LNW(S)2
Stewartby Brickworks LC (CCTV)	MD140-005-LNW(S)2
Stocking Farm LC (UWC)	MD801-003-LNW(S)2
Stoke Hammond HABD	MD101-016-LNW(S)2
STOKE MANDEVILLE	MD712-001-LNW(S)2
Stonebridge Jn	MD120-004-LNW(S)2
STONEBRIDGE PARK	MD120-004-LNW(S)2
Stonebridge Park Royal Mail Terminal (PRDC)	MD135-002-LNW(S)2
STOURBRIDGE JN	MD430-003-LNW(S)2, MD445-001-LNW(S)2
Stourbridge Jn GF	MD430-003-LNW(S)2
Stourbridge Jn SB (SJ)	MD430-003-LNW(S)2, MD445-001-LNW(S)2
Stourbridge Middle Jn	MD430-003-LNW(S)2
Stourbridge North Jn	MD430-003-LNW(S)2, MD435-006-LNW(S)2, MD450-001-LNW(S)2
STOURBRIDGE TOWN	MD445-001-LNW(S)2
Stowe Hill Tunnel	MD101-021-LNW(S)2
STRATFORD-UPON-AVON	MD415-002-LNW(S)2
Studleigh Farm No.2 LC (UWC)	MD401-002-LNW(S)2
Substation LC (UWC)	MD170-001-LNW(S)2
SUDBURY AND HARROW ROAD	MD701-003-LNW(S)2
SUDBURY HILL HARROW	MD701-003-LNW(S)2
Sudbury Junction	MD101-006-LNW(S)2
SUTTON COLDFIELD	MD340-002-LNW(S)2
Sutton Coldfield Tunnel	MD340-002-LNW(S)2
Sutton Park No 1 GF	MD565-001-LNW(S)2
TAME BRIDGE PARKWAY	MD320-006-LNW(S)2
TAMWORTH (HIGH LEVEL)	MD501-001-LNW(S)2
TAMWORTH (LOW LEVEL)	MD101-028-LNW(S)2
Tamworth Low Level HABD	MD101-029-LNW(S)2
Tamworth SB (TH)	MD101-028-LNW(S)2
TELFORD CENTRAL	MD801-004-LNW(S)2
THE HAWTHORNS	MD435-003-LNW(S)2
THE LAKES	MD425-002-LNW(S)2
Three Spires Junction SB (TS)	MD410-002-LNW(S)2
TILE HILL	MD301-003-LNW(S)2
TIPTON	MD301-015-LNW(S)2

Location	Table A - Module
Tipton, Owen St L.C. (CCTV)	MD301-015-LNW(S)2
Trent Valley Junction	MD101-023-LNW(S)2, MD180-001-LNW(S)2, MD301-001-LNW(S)2
TRING	MD101-014-LNW(S)2
Tring North Junction	MD101-015-LNW(S)2
Tring South Junction	MD101-014-LNW(S)2
TYSELEY	MD401-008-LNW(S)2
Tyseley No.1 SB (TY1)	MD401-008-LNW(S)2
Tyseley No.3 GF	MD401-008-LNW(S)2
Tyseley South Jn	MD401-008-LNW(S)2, MD425-001-LNW(S)2
UNIVERSITY	MD305-003-LNW(S)2
Vauxhall Junction	MD320-002-LNW(S)2
Vauxhall Sidings	MD320-002-LNW(S)2
WALSALL	MD345-003-LNW(S)2
Walsall North Jn	MD345-003-LNW(S)2
Walsall Pleck Jn	MD345-002-LNW(S)2, MD360-001-LNW(S)2
Walsall PSB (WL)	MD345-002-LNW(S)2
Walsall South Jn	MD345-003-LNW(S)2
WARWICK	MD401-006-LNW(S)2
Warwick GF	MD401-006-LNW(S)2
WARWICK PARKWAY	MD401-006-LNW(S)2
Washwood Heath Down Sidings	MD501-006-LNW(S)2
Washwood Heath East Jn	MD501-005-LNW(S)2
Washwood Heath No.1 SF	MD501-007-LNW(S)2
Washwood Heath R.M.C. Sidings	MD501-005-LNW(S)2
WATER ORTON	MD501-002-LNW(S)2, MD555-003-LNW(S)2
Water Orton East Jn	MD501-002-LNW(S)2, MD555-003-LNW(S)2
Water Orton West Jn	MD501-003-LNW(S)2, MD555-003-LNW(S)2, MD560-001-LNW(S)2
Watery Lane S.F. (WL)	MD301-015-LNW(S)2
WATFORD HIGH STREET	MD120-008-LNW(S)2
Watford Jn PSB (WJ)	MD101-009-LNW(S)2
WATFORD JUNCTION	MD101-010-LNW(S)2, MD120-009-LNW(S)2, MD130-001-LNW(S)2
Watford Lodge	MD105-004-LNW(S)2
Watford Lodge Tunnel	MD105-004-LNW(S)2
WATFORD NORTH	MD130-002-LNW(S)2
Watford North Jn	MD101-010-LNW(S)2
Watford North LC (ABCL)	MD130-002-LNW(S)2
Watford South Junction	MD101-009-LNW(S)2
Watford Tunnels	MD101-011-LNW(S)2
Watford Yard	MD130-001-LNW(S)2
Watford Yard GF	MD101-009-LNW(S)2, MD130-001-LNW(S)2
Wednesfield Heath Tunnel	MD320-010-LNW(S)2
Weedon	MD101-021-LNW(S)2
WELLINGTON	MD801-005-LNW(S)2
WEMBLEY CENTRAL	MD101-007-LNW(S)2, MD120-005-LNW(S)2
Wembley Central G.F.	MD120-005-LNW(S)2
Wembley Mainline SCC (WM, WS)	MD120-004-LNW(S)2, MD135-002-LNW(S)2
WEMBLEY STADIUM	MD701-002-LNW(S)2
Wembley Yard SB (WY)	MD135-002-LNW(S)2
Wembley Yard South Junction	MD101-006-LNW(S)2
WENDOVER	MD712-001-LNW(S)2
West London Jn	MD101-004-LNW(S)2, MD165-001-LNW(S)2
WEST RUISLIP	MD701-004-LNW(S)2
Whitacre GF	MD555-002-LNW(S)2
Whitacre Jn	MD545-001-LNW(S)2, MD555-002-LNW(S)2

Location	Table A - Module
Whitehouse Tunnel	MD701-006-LNW(S)2
Whites LC (UWC)	MD401-004-LNW(S)2
WHITLOCKS END	MD425-002-LNW(S)2
WIDNEY MANOR	MD401-008-LNW(S)2
Willesden Carriage Shed North SB (CN)	MD101-007-LNW(S)2
Willesden Carriage Shed South SB (CS)	MD135-002-LNW(S)2
Willesden Euro Terminal	MD101-004-LNW(S)2, MD165-002-LNW(S)2
Willesden High Level Jn	MD160-001-LNW(S)2
Willesden Jn	MD101-005-LNW(S)2, MD170-001-LNW(S)2
WILLESDEN JUNCTION LOW LEVEL	MD120-003-LNW(S)2
Willesden North Jn	MD101-005-LNW(S)2
Willesden Suburban Jn	MD120-003-LNW(S)2, MD150-001-LNW(S)2
Willesden TMD	MD101-004-LNW(S)2, MD120-003-LNW(S)2
WILMCOTE	MD415-002-LNW(S)2
WILNECOTE	MD501-001-LNW(S)2
Windridge LC (UWC)	MD555-001-LNW(S)2
WITTON	MD320-004-LNW(S)2
WOBURN SANDS	MD140-003-LNW(S)2
Woburn Sands LC (CCTV)	MD140-003-LNW(S)2
WOLVERHAMPTON	MD301-017-LNW(S)2
Wolverhampton Crane Street Jn	MD365-001-LNW(S)2
Wolverhampton Crane Street Junction	MD301-017-LNW(S)2
Wolverhampton North Jn	MD301-018-LNW(S)2, MD801-001-LNW(S)2
Wolverhampton PSB (WN)	MD301-017-LNW(S)2
Wolverhampton Steel Terminal	MD301-016-LNW(S)2
WOLVERTON	MD101-019-LNW(S)2
Wolverton Centre GF	MD101-019-LNW(S)2
Wolverton HABD	MD101-019-LNW(S)2
Wolverton South GF	MD101-019-LNW(S)2
Wolverton Works Siding	MD101-019-LNW(S)2
WOOD END	MD425-002-LNW(S)2
Wood End Tunnel	MD425-002-LNW(S)2
Wootton Broadmead LC (CCTV)	MD140-006-LNW(S)2
WOOTTON WAWEN	MD425-003-LNW(S)2
Wormleighton LC (UWC)	MD401-004-LNW(S)2
WYLDE GREEN	MD340-001-LNW(S)2
WYTHALL	MD425-002-LNW(S)2
YARDLEY WOOD	MD425-001-LNW(S)2
Yew Tree Farm LC (UWC)	MD415-002-LNW(S)2

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List Of Routes

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MD120	Camden Junction to Watford Junction (DC Lines)	LNW(S)2	57
MD130	Watford Yard Ground Frame to St. Albans Abbey	LNW(S)2	66
MD135	Harlesden Junction to Willesden Carriage Shed South	LNW(S)2	68
MD140	Bletchley to Bedford St Johns (Inclusive)	LNW(S)2	70
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MD305	Birmingham New Street to Blackwell	LNW(S)2	110
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MD325	Soho South Jn to Perry Barr North Jn (Soho Lines)	LNW(S)2	129
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<u>Table A</u> <u>Diagram</u>	<u>Line Of Route</u>	<u>Module</u>	<u>Page</u>
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