

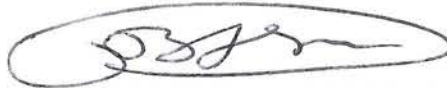
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Guidance Note

Index of Network Rail Documents Relating to Signalling & Communications Equipment

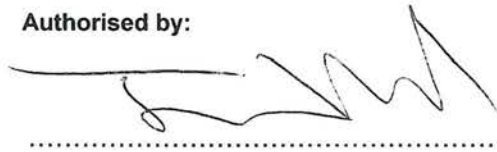
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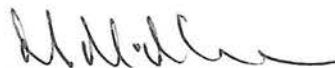
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Accepted for issue by:



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Issue record

Issue	Date	Comments
1	October 1997	New catalogue.
2	June 1999	Fully updated and reformatted.
3	August 1999	New and revised drawings in Route Relay Interlocking Typical Circuits and Lineside/On track Equipment Typical Circuits.
4	February 2000	New and revised drawings in ABCL and AOCL Typical Circuits and some minor amendments.
5	April 2000	Expanded to incorporate Issue V, dated January 1997, of the ex-BR Western Region E10,000 interlocking circuits.
6	June 2000	Minor amendments.
7	August 2000	New Drawings in Train Protection And Warning System (TPWS) Signalling Circuits.
8	October 2000	Minor Amendments to TPWS Standard Circuits.
9	February 2001	New and amended drawing in Train Protection and Warning System (TPWS) Signalling Circuits.
10	April 2001	New and amended drawing in Train Protection and Warning System (TPWS) Signalling Circuits and Free Wired Interlocking Circuits.
11	June 2001	New and amended drawing in Train Protection and Warning System (TPWS) Signalling Circuits.
12	December 2001	Amended drawing in Train Protection and Warning System (TPWS) Signalling Circuits.
13	February 2002	Amended drawing in Train Protection and Warning System (TPWS) Signalling Circuits.
14	April 2002	A CAD redrawing exercise has been undertaken, covering only those E10k drawings applicable to WR Route Setting (NX "Turn-Push") Panels.
15	June 2002	New and amended drawing in Train Protection and Warning System (TPWS) Signalling Circuits.
16	October 2002	New and amended drawing in Train Protection and Warning System (TPWS) Signalling Circuits.
17	December 2002	New and amended drawing in Train Protection and Warning System (TPWS) Signalling Circuits.
18	April 2003	New and amended drawings in Train Protection and Warning System (TPWS) and HPSS Signalling Circuits.
19	June 2003	New and amended drawings in Train Protection and Warning System (TPWS) and MCB and MCB-CCTV LC Circuits.
20	August 2003	DWL controls amended in AOCL Circuits.
21	February 2004	TPWS-RETB sheets added and TPWS sheets revised.
22	August 2004	TPWS, AHBC, ABCL and AOCL sheets revised.
23	December 2004	BRS-SW67 series drawings completely re-drawn

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		on CAD. Various sheets withdrawn as now covered by R or T series.
24	April 2005	All typical MCB and CCTV Level Crossing drawings revised. Signal Box CCTV Control Unit construction details added.
25	June 2005	Various AWS related sheets revised. General Notes revised.
26	August 2005	Revisions to BRS-SW67 and T series point circuits.
27	October 2005	Certain E10,000 drawings superseded. All E10000 drawings re-issued, some at the same version, and new drawings added.
28	December 2005	Addition of typical circuits for Rail Clamp Point Lock & SO Supplementary Back Drive System.
29	February 2006	Various T Series drawings revised due to missing CAD files.
30	April 2006	Addition of Typical Circuits for Dorman LED signals.
31	April 2007	Addition of LED Miniature Tunnel Signal circuits and updates to other signal circuits to remove double cutting contacts. Updates to Manual Controlled Barrier (MCB) Level Crossing Circuits
32	December 2007	Corrections to T series signal circuits.
33	September 2008	Addition of circuits for Flashing LED signals, LED Banner Repeaters, and Ansaldo ACC Typical Circuits. A new series of miscellaneous level crossing circuits added for LED Light Units and Magnetic Wicket Gate Locks.
34	December 2008	Addition of circuits for Hydrive points system and AHBC added
35	March 2009	Corrections to T series signal circuits.
36	September 2009	New/amended circuits issued, indea sheets withdrawn
37	December 2009	Alterations undertaken to the MCB Typical Circuits
38	March 2010	'R' & 'T' circuits updated
39	Sept 2010	New/amended circuits issued
40	Dec 2010	Five new circuits for Plug Coupler applications issued.
41	March 2011	Train Detection Interrupters & symbol issued
42	June 2011	X42260 reissued
43	Sept 2011	Addition of MCB-OD circuits
44	Dec 2011	Addition/Update of MCB-OD circuits
45	March 2012	New/reissued typical circuits
46	June 2012	Three sheets reissued, cross references corrected
47	June 2014	New/reissued typical circuits
48	March 2015	AOCL+B and R25031 added

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49 September 2015 Withdrawal of MCB-OD typical Circuits

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1 Purpose

The purpose of this standard is to provide signal engineers a standardised approach to signalling design. This prevents additional costs being incurred when a design solution already exists and assists maintainers when fault finding.

The standard includes a listing of typical circuits for signalling and level crossing applications.

2 Scope

The standard provides best practice and should be applied to all new works and alterations to existing installations. This is not a mandatory standard and users should check compliance to current Railway Group and Company standards before implementing the design.

Any deviation from typical circuits should be justified and documented by the relevant signal designer. There is no need to follow the established variation process.

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Drawing No.	Title	Discrepancies	Issue	Date
Western Region E10,000 Interlocking Circuits (Original) (Historical Records - For Information Only)				
E10,000/INDEX/1	-	Withdrawn 05/09/2009	X	06/04/2002
E10,000/INDEX/2	-	Withdrawn 05/09/2009	X	06/04/2002
E10,000/INDEX/3	-	Withdrawn 05/09/2009	Y	July-2005
E10,000/INDEX/4	-	Withdrawn 05/09/2009	X	06/04/2002
E10,000/INDEX/5	-	Withdrawn 05/09/2009	Y	July-2005
E10,000/INDEX/6	-	Withdrawn 05/09/2009	X	06/04/2002
E10,000/INTRO/1	Introduction (1)	Superseded by E10000/NEWINT/01	-	Oct-92
E10,000/INTRO/2B	Introduction (2)	Superseded by E10000/NEWINT/02	-	Oct-92
E10,000/INTRO/3	Introduction (3)	Superseded by E10000/NEWINT/03	-	Oct-92
E10,000/INTRO/4	Introduction (4)	Superseded by E10000/NEWINT/04	-	Oct-92
E10,000/INTRO/5	Introduction (5)	Superseded by E10000/NEWINT/05	-	Oct-92
E10,000/INTRO/6	Introduction (6)	Superseded by E10000/NEWINT/06	-	Oct-92
E10,000/0/2	General Notes (1)		7	26/07/1990
E10,000/0/2 ^A	General Notes (2)		2	15/11/1990
E10,000/0/2 ^B	General Notes (3)		2	15/11/1990
E10,000/0/2 ^C	General Notes (4)		2	15/11/1990
E10,000/0/2 ^D	General Notes (5)		1	23/04/1990
E10,000/0/2 ^E	General Notes (6)		2	20/12/1990
E10,000/0/2F	Cascade Timing		B	17/02/1994
E10,000/0/3A	Capacitor Time Delay (1)		A	28/10/1992
E10,000/0/3B	Capacitor Time Delay (2)		A	28/10/1992
E10,000/1/1	Signal Control Circuits - Signal Control Relays	Superseded by E10001/05	C	-
E10,000/1/2	Signal Control Circuits - Signal Control Relays	Superseded by E10001/10	B	02/09/1992
E10,000/1/3	Signal Control Circuits - Main & Subsidiary Control Relays	Superseded by E10001/15	C	-
E10,000/1/4	Signal Control Circuits - Main & Subsidiary Control Relays	Superseded by E10001/20	B	-
E10,000/1/5	Signal Control Circuits - Aspect Sequence (1)	Superseded by E10001/11	B	10/10/1980
E10,000/1/6	Signal Control Circuits - Aspect Sequence (2)		B	21/03/1980
E10,000/1/7	Signal Control Circuits - Aspect Sequence (3)		C	15/03/1980
E10,000/1/8	Signal Control Circuits - ULSRs & JULSRs	Superseded by E10001/25	B	Dec-90
E10,000/1/9	Signal Control Circuits - Ground Position Light Signal Circuits	Superseded by E10001/30	B	Dec-81
E10,000/1/10	Signal Control Circuits - G.P.L. Control & Repeat Relays	Superseded by E10001/35	C	-
E10,000/1/11	Signal Control Circuits - Facing Position Light Signals (1)	Superseded by E10001/40	E	Feb-82
E10,000/1/12	Signal Control Circuits - Facing Position Light Signals (2)	Superseded by E10001/45	D	Feb-82
E10,000/1/13	Signal Control Circuits - Aspect Replacement (1)	Superseded by E10001/31	B	Jan-82
E10,000/1/14	Signal Control Circuits - Aspect Replacement (2)	Superseded by E10001/31	B	Jan-82
E10,000/1/15	Signal Control Circuits - Track Circuit Override Button Controls		B	Oct-80
E10,000/1/16	Signal Control Circuits - Emergency Replacement of Auto Signals	Superseded by E10001/50	D	Jul-81



Drawing No.	Title	Discrepancies	Issue	Date
E10,000/1/17	Signal Control Circuits - Signal Post Replacement Switches		D	20/03/1980
E10,000/1/18	Signal Control Circuits - Disconnection and Approach Release Links		B	19/03/1980
E10,000/1/19	Signal Control Circuits - Delayed Yellow		A	25/01/1993
E10,000/1/20	Signal Control Circuits - Delayed Yellow Notes		A	25/01/1993
E10,000/1/21	Signal Control Circuits - Delayed Yellow Typical Examples (1)		A	07/03/1980
E10,000/1/22	Signal Control Circuits - Delayed Yellow Typical Examples (2)		A	07/03/1980
E10,000/2/1	Block Circuits - Standard Type and Block Bell GWR		B	10/03/1980
E10,000/2/2	Block Circuits - One Acceptance Type (Welwyn Control)		A	10/03/1980
E10,000/2/3	Block Circuits - Compulsory Train on Line Type		A	10/03/1980
E10,000/2/4	Block Circuits - Emergency Alarm on Physical Lines (In Trad. Signal Box)		D	09/02/1993
E10,000/2/5	Block Circuits - Emergency Alarm SSI (Also Using H.Williams Panel)		D	20/08/1993
E10,000/2/6	Block Circuits - Block Bells Wiring Options		D	25/01/1993
E10,000/2/7	Block Circuits - WR Style Block Bell Units (1)		C	24/06/1993
E10,000/2/8	Block Circuits - WR Style Block Bell Units (2)		C	24/06/1993
E10,000/2/9	Block Circuits - 'BR930' Block Bell Unit PC138		C	24/06/1993
E10,000/3/1	Signal Controls in Semaphore Area - Block Release of Section Signals		A	10/03/1980
E10,000/3/2	Signal Controls in Semaphore Area - Electrical Sequential Locking		C	11/03/1980
E10,000/3/3	Signal Controls in Semaphore Area - Power Operated Points - Detection Arrangements		A	13/05/1993
E10,000/3/4	Signal Controls in Semaphore Area - Electric Locks on FPLs/Points Reciprocal Controls		B	11/03/1980
E10,000/3/5	Signal Controls in Semaphore Area - LZR Circuit for Reverse Lever Locks		D	26/03/1980
E10,000/3/6	Signal Controls in Semaphore Area - 2 Aspect Colour Light Distant Wiring		D	16/11/1979
E10,000/3/7	Signal Controls in Semaphore Area - Combined Starting and Distant Signal Wiring		D	15/11/1979
E10,000/3/8	Signal Controls in Semaphore Area - 'Greenfield' Colour Lights		D	12/09/1991
E10,000/3/9	Signal Controls in Semaphore Area - Ground Position Light in Semaphore		E	Sep-91
E10,000/3/10	Signal Controls in Semaphore Area - Colour Light Distant in BRB Locs Signal & Controls		D	12/09/1991
E10,000/3/11	Signal Controls in Semaphore Area - Colour Light in BRB Locs and Maintenance Free Cells		D	12/09/1991
E10,000/3/12	Signal Controls in Semaphore Area - Colour Light in BRB Locs Layouts		E	12/09/1991
E10,000/3/13	Signal Controls in Semaphore Area - Extra Circuits for 4 Aspect Signal with Junction Indicator etc		E	12/09/1991
E10,000/3/14	Signal Controls in Semaphore Area - Repeating & Controls for 4 Aspect Signal with Junction Indicator etc		C	09/03/1992
E10,000/3/15	Signal Controls in Semaphore Area - Fibre Optic Banner in Mechanical		A	-
E10,000/3/16	Signal Controls in Semaphore Area - Fibre Optic Banner in Mechanical		A	-

Drawing No.	Title	Discrepancies	Issue	Date
E10,000/3/17	Signal Controls in Semaphore Area - Fibre Optic Banner in Mechanical		B	-
E10,000/4/1	Approach Locking - Comprehensive Approach Locking	Superseded by E10004/05	C	Feb-82
E10,000/4/2	Approach Locking - 'When Operated' Approach Locking	Superseded by E10004/10	C	Feb-82
E10,000/4/3	Approach Locking - Special Features	Superseded by E10004/15	A	13/05/1993
E10,000/4/4	Approach Locking - Mechanical Signalling Area		D	30/10/1987
E10,000/4/5	Approach Locking - Mechanical Signalling 12 Volt Relays		C	13/05/1993
E10,000/5/1	Semaphore Signals - Repeaters		A	12/03/1980
E10,000/5/2	Semaphore Signals - Repeaters		A	12/03/1980
E10,000/5/3	Semaphore Signals - Electric Lighting (Historical)		A	14/03/1980
E10,000/6/1	Signals - A.C. Operated Head Wiring		E	28/07/1991
E10,000/6/2	Signals - D.C. Operated Head Wiring		A	15/11/1979
E10,000/6/3	Signals - Junction Indicators, Stencil Indicators, LOS & Position Lights		D	15/11/1979
E10,000/6/4	Signals - Signal Head Feeds	Superseded by E10006/10	A	10/12/1990
E10,000/6/5	Signals - G.P.L., LOS and Stencil Feeds		C	02/09/1992
E10,000/6/6	Signals - Junction Indicator, Position Light & Fibre Optic Indicator Feeds		D	Dec-83
E10,000/6/7	Signals - G(M) ESR	Superseded by E10006/05	D	Aug-91
E10,000/6/8	Signals - Electric Lamps for Railway Signalling		D	16/11/1979
E10,000/6/9	Signals - 'Emergency Stop' Indicator with Filament Cold Proving Typical Arrangement		B	25/01/1993
E10,000/7/1	Signal Control Circuits - Non-vital Route Calling UR & ZNPR	Superseded by E10007/05	A	Mar-93
E10,000/7/2	Signal Control Circuits - Non-vital Route Cascade USR	Superseded by E10007/10	B	Jan-93
E10,000/7/3	Signal Control Circuits - Non-vital Miscellaneous Repeat Relays	Superseded by E10007/15	A	Mar-93
E10,000/7/4	Signal Control Circuits - Non-vital Through Circuits from Panel to	Superseded by E10007/20	A	Jan-93
E10,000/7/5	Signal Control Circuits - Main & Subsidiary Signals - Panel Indications	Superseded by E10007/25	C	Jan-93
E10,000/7/6	Signal Control Circuits - LOS & GPL Panel Indications	Superseded by E10007/30	B	Jan-93
E10,000/7/7	Signal Control Circuits - Misc Indications	Superseded by E10007/35	A	Mar-93
E10,000/7/8	Signal Control Circuits - Simple UKE & TKE Circuits and General Notes	Superseded by E10007/40 & 45	A	Jan-93
E10,000/7/9	Signal Control Circuits - UKE & TKE Circuits on Points	Superseded by E10007/45	A	Mar-93
E10,000/7/10	Signal Control Circuits - UKE & TKE Circuits on Switch Diamonds	Superseded by E10007/50	A	Mar-93
E10,000/7/11	Signal Control Circuits - Double Compound Indications WR Ind on HW (WR) Panels Historical	Superseded by E10007/55	A	Mar-93
E10,000/7/12	Signal Control Circuits - Double Compound Indications Revised WR Ind on HW (WR) Panel	Superseded by E10007/60	A	Mar-93
E10,000/7/13	Signal Control Circuits - Push-Push Panel Push Buttons in One Ring		A	Mar-93
E10,000/7/14	Signal Control Circuits - Push-Push Panel Push Buttons in Two Rings		A	Mar-93
E10,000/7/15	Signal Control Circuits - Push-Push Panel Indication Circuits & Reference		A	Mar-93
E10,000/7/16	Signal Control Circuits - Push-Push Panel Indication Circuits and Auto Button Controls		A	Mar-93
E10,000/7/17	Signal Control Circuits - Typical BX24 Power Wiring	Superseded by E10007/65	C	28/03/1994

Drawing No.	Title	Discrepancies	Issue	Date
E10,000/7/18	Signal Control Circuits - TD Feeds	Superseded by E10007/70	A	Mar-93
E10,000/8/1	MES Panels - Panel Face		A	24/06/1993
E10,000/8/2	MES Panels - Circuits (1)		A	24/06/1993
E10,000/8/3	MES Panels - Circuits (2)		A	24/06/1993
E10,000/11/1	Track Circuits - Steady D.C. (Non-Immune)		D	Aug-91
E10,000/11/2	Track Circuits - Existing Low Voltage Type Modified for Detecting Lightweight Vehicles (Non-Immune)		C	Aug-91
E10,000/11/3	Track Circuits - Steady D.C. (A.C. Immune)		E	Aug-91
E10,000/11/4	Track Circuits - Misc Types		C	Aug-91
E10,000/11/5	Track Circuits - Overlay Track Circuits General Wiring		A	Apr-82
E10,000/11/6	Track Circuits - Catch Points in Track Circuit		B	May-80
E10,000/11/7	Track Circuits - Repeating Arrangements in M.A.S. Areas		D	15/05/1980
E10,000/11/8	Track Circuits - Relationship of Audio Frequency Track Circuit Equipment to Signals and other Track Types		D	-
E10,000/11/9	Aster Track Circuits - Typical Configurations (1)		B	Apr-82
E10,000/11/10	Aster Track Circuits - Typical Configurations (2)		A	Aug-91
E10,000/11/11	'ML' Type 'TI21' Track Circuits - Configurations All Frequencies		C	Apr-82
E10,000/11/12	Track Circuits - Reed Impulse Etc		B	Apr-91
E10,000/11/13	Track Circuits - DC Style Track Circuits Insulated Rail Joints & Bonding Constraints		C	-
E10,000/11/14	Track Circuits - Multiple Track Relays		A	Apr-93
E10,000/11/15	Track Circuits - Typical Bondings with Multiple Track Relays		B	Apr-93
E10,000/11/16	Track Circuits - General Arrangements for the Preferred Position of Insulated Rail Joints		B	26/06/1992
E10,000/11/17	Track Circuits - Use of Dis Boxes		F	Feb-92
E10,000/11/18	Track Circuits - Position of Dis Boxes eg Feed End, with TFR		A	Apr-93
E10,000/11/19	Track Circuits - Track Circuit Immunisation in Connection with Point Heating or Shore Heating or Overhead Powerlines		D	Mar-92
E10,000/11/20	Track Circuits - Use of Treadles e.g. for Level Crossings		D	27/08/1993
E10,000/11/21	Track Circuits - Treadle Backup in T.C.B. Area 2 Dis. Box Arrangement		A	Sep-94
E10,000/12/1	Axle Counter - A Evaluator Relays & Indications Top System		A	Oct-91
E10,000/12/2	Axle Counter - B Evaluator Relays & Indications Bottom System		A	Oct-91
E10,000/12/3	Axle Counter - Evaluator Strapping		A	Oct-91
E10,000/12/4	Axle Counter - Incoming Cables		A	Oct-91
E10,000/12/5	Axle Counter - Evaluator Rack Layout		A	Oct-91
E10,000/12/6	Axle Counter - Rack Component Strip		A	Oct-91
E10,000/12/7	Axle Counter - Layout for Single Detection Point		C	Oct-91
E10,000/12/8	Axle Counter - Layout for Single Detection Point with Special Dis Box		C	Oct-91
E10,000/12/9	Axle Counter - Single Detection Point Operating Two Axle Counters (Double Utilisation) with Special Dis Box		B	Oct-91

Drawing No.	Title	Discrepancies	Issue	Date
E10,000/12/10	Axle Counter - Single Detection Point Operating Two Axle Counters (Double Utilisation)		B	Oct-91
E10,000/12/11	Axle Counter - Main Power Supply		C	29/04/1993
E10,000/12/12	Axle Counter - Local Power Supply for Feeding One or Two Detection		B	Oct-91
E10,000/14/1	Reed Remote Control Systems - Simplex System Schematic		C	16/11/1979
E10,000/14/2	Reed Remote Control Systems - Details of Equipment		C	06/03/1980
E10,000/14/3	Reed Remote Control Systems - Miscellaneous Data		C	06/03/1980
E10,000/14/4	Reed Remote Control Systems - Power Supply		C	06/03/1980
E10,000/14/5	Reed Remote Control Systems - Frequency Range		C	06/03/1980
E10,000/14/6	Reed Remote Control Systems - Minimum Information to Systems Group for Consultancy on Proposed System		A	06/03/1980
E10,000/15/1	Lightning Protection - Equipment and Application		C	May-80
E10,000/15/2	Lightning Protection - TDM Systems eg Multi-Site (1)		A	Feb-94
E10,000/15/3	Lightning Protection - TDM Systems eg Multi-Site (2)		A	Feb-94
E10,000/16/1	Point Machines - Point Control Circuits (Route Relay Interlocking Panels) Clamp Lock Machines	Superseded by E10016/05	F	Oct-90
E10,000/16/2	Point Machines - Point Machine Drive Circuits for New Installations or where Conversion Made from Clamp Lock	Superseded by E10016/10	G	Oct-90
E10,000/16/3	Point Machines - Point Machine Drive Circuits <u>Former</u> Standard		F	Oct-90
E10,000/16/4	Point Machines - Point Control Circuits (Mechanical Lever Frames)		C	Oct-90
E10,000/16/5	Point Machines - Electrical Detection Standard WR Applications (Including Clamp Locks)	Superseded by E10016/15	D	06/01/1997
E10,000/16/6	Point Machines - Schematic Wiring Arrangements Style 63 Point Machine		B	Feb-80
E10,000/16/7	Point Machines - Circuit Diagram Style 63 Point Machine		A	Feb-80
E10,000/16/8	Point Machines - Schematic Wiring Arrangements HW Point Machine		C	Feb-80
E10,000/16/9	Point Machines - Circuit Diagram HW Point Machine		B	Feb-80
E10,000/16/10	Point Machines - Schematic Diagram for Electro-Hydraulic Equipment Clamp Lock Machines		A	Feb-80
E10,000/16/11	Point Machines - Detector Mechanism Clamp Lock Machines		A	Feb-80
E10,000/16/12	Point Machines / Clamp Lock Heaters	Superseded by E10016/20	E	Feb-80
E10,000/16/13	Point Machines - Historical Information for GEC/GRS5A Point Machines Showing Point Drive Only		A	09/03/1993
E10,000/17/1	Point Detection - General		B	05/11/1992
E10,000/17/2	Point Detection - L.H.N.C. Single Lead Clamp Lock Operated		A	05/11/1992
E10,000/17/3	Point Detection - R.H.N.C. Single Lead Clamp Lock Operated		A	05/11/1992
E10,000/17/4	Point Detection - L.H.N.C. 1 or 2 Supplementaries		B	05/11/1992
E10,000/17/5	Point Detection - R.H.N.C. 1 or 2 Supplementaries		B	05/11/1992
E10,000/17/6	Point Detection - L.H.N.C. with Swing Nose (Swing Nose Only)		B	05/11/1992
E10,000/17/7	Point Detection - R.H.N.C. with Swing Nose (Swing Nose Only)		B	05/11/1992
E10,000/17/8	Point Detection - L.H.N.C. Operated by Style 63 Machine as Example		A	05/11/1992
E10,000/17/9	Point Detection - R.H.N.C. Operated by Style 63 Machine as Example		A	05/11/1992

Drawing No.	Title	Discrepancies	Issue	Date
E10,000/17/10	Point Detection - Typical Summation Circuits		A	05/11/1992
E10,000/17/11	Point Detection - Positions of Electrical Equipment for Various Types of Point Switches		A	17/02/1994
E10,000/18/1	Typical Circuits - Points WZR	Superseded by E10018/05	C	Oct-90
E10,000/18/2	Typical Circuits - Points WZR-Self Restored Points	Superseded by E10018/10	D	06/01/1997
E10,000/18/3	Typical Circuits - Points LR	Superseded by E10018/15	A	Oct-90
E10,000/18/4	Typical Circuits - Points. Points Relay Repeats Vital Interlocking Circuits	Superseded by E10018/20	B	24/03/1994
E10,000/18/5	Typical Circuits - Points. Route Locking of Points where Point to Point Locking Exists	Superseded by E10018/25	A	Oct-90
E10,000/18/6	Typical Circuits - Points. Delayed Yellow Condition with Double Junction in Full Overlap	Superseded by E10018/30	A	12/12/1990
E10,000/19/1	Electric Point Heating - Panel Areas		E	06/12/1979
E10,000/19/2	Electric Point Heating - Mechanical Signalling Areas		A	24/03/1983
E10,000/20/1	Registration of Signalling Numbers (1)	Superseded by E10000/NEWINT/07	D	06/01/1997
E10,000/20/2	Registration of Signalling Numbers (2)	Superseded by E10000/NEWINT/07	A	-
E10,000/21/1	Shunter's Acceptance Circuitry		A	24/06/1993
E10,000/70/1	Token Instrument - Terminal Instrument		E	Jun-90
E10,000/70/2	Electric Token Working - Terminal & Intermediate Instruments		D	13/06/1990
E10,000/70/3	Intermediate/Auxiliary Instruments Internal Wiring			
E10,000/70/3	Token Instrument - Wiring Arrangement for 'No Signalman' Modification		D	03/09/1992
E10,000/70/4	Token Instrument - Internal Wiring of Terminal Instrument		A	13/06/1990
E10,000/70/5	'No Signalman' Token with Remote Crossing Loops (N.S.T.R.) Token Instrument Internal Wiring		A	24/01/1986
E10,000/70/6	Token Working - 'No Signalman' Token with Remote Crossing Loops (N.S.T.R.) Token Instruments and Associated Wiring		A	20/01/1986
E10,000/70/7	Token Working - 'No Signalman' Token with Remote Crossing Loops (N.S.T.R.) Reed Transmission and Associated Circuits, Power Supply		A	20/01/1986
E10,000/70/8	Token System - with Remote Release and/or within MAS Area		B	30/07/1992
E10,000/70/9	Token Working - Starting Signal Release Options		C	30/07/1992
E10,000/70/10	Token Working - Interlinking of Signals		A	27/08/1993
E10,000/75/1	Barrow Crossing - (Warning Arrangements) Typical Controls		C	12/03/1980
E10,000/75/2	Barrow Crossing - Warning Arrangements Indicator Circuits		C	Oct-81
E10,000/83/1	A.W.S. Inductors - Connection Diagram for Electro Inductors and operating Values		H	-
E10,000/83/2	A.W.S. Inductors - M.A.S. Areas	Superseded by E10083/05	G	14/03/1980
E10,000/83/3	A.W.S. Inductors - Permissive Working in Platform Areas	Part Superseded by E10083/10	D	06/04/2002
E10,000/83/4	A.W.S. Inductors - Mechanical Signalling Areas Double Line Working		B	14/03/1980
E10,000/83/5	A.W.S. Inductors - Mechanical Signalling Areas Double Line. Inner Distant Control and Calling-On Circuits		A	14/03/1980

Drawing No.	Title	Discrepancies	Issue	Date
E10,000/83/6	A.W.S. Inductors - Mechanical Signalling Areas Tokenless Block Areas (1)		B	14/03/1980
E10,000/83/7	A.W.S. Inductors - Mechanical Signalling Areas Tokenless Block Areas (2)		A	17/03/1980
E10,000/83/8	A.W.S. Inductors - Mechanical Signalling Areas Single Line Fixed Distant		C	17/03/1980
E10,000/83/9	A.W.S. Inductors - Mechanical Signalling Areas		A	17/03/1980
E10,000/83/10	A.W.S. Inductors - Mechanical Signalling Areas when Power Supply (Mains) not Available		C	17/03/1980
E10,000/83/11	A.W.S. Inductors - Inductors Associated with Signal Reading through Unfitted Route to Fitted Route	Superseded by E10083/15	D	17/03/1980
E10,000/83/12	A.W.S. Inductors - Special Suppression when Opposing Regular Moves are Un-Signalled	Superseded by E10083/20	B	Oct-91
E10,000/83/13	A.W.S. Inductors - Control of Inductors to Rear of Junctions		B	17/03/1980
E10,000/83/14	A.W.S. Inductors - Layouts for Control Table	Superseded by E10161/24	B	18/03/1980
E10,000/83/15	A.W.S. Inductors - Control Table WR Style	Superseded by E10161/25	B	18/03/1980
E10,000/83/16	A.W.S. Inductors - Position of Inductors in Relation to Associated Signal		B	Oct-80
E10,000/84/1	Plug-In Miniature Relays - Relay Types and Plugboard Registration Codes (24 Volt)		A	Feb-92
E10,000/84/2	Plug-In Miniature Relays - Relay Types and Plugboard Registration Codes (50 V & Miscellaneous)		B	Feb-92
E10,000/84/3	Plug-In Miniature Relays - Contact Arrangements		A	Feb-92
E10,000/85 ^A	Relay Set Plug In 5P.O. 3000 Type Relays Type A	Superseded by E10085/05	A	Oct-91
E10,000/86 ^A	Relay Set Plug In 5P.O. 3000 Type Relays Type B	Superseded by E10085/10	A	Oct-91
E10,000/87 ^A	Relay Set Plug In 5P.O. 3000 Type Relays Type C	Superseded by E10085/15	A	Oct-91
E10,000/88	Relay Set Plug In 5P.O. 3000 Type Relays Type D	Superseded by E10085/20	A	Oct-91
E10,000/94/1	Power Supply - Notes		B	03/12/1992
E10,000/94/2	Power Supply - Castle Cary Int 650V & 110V Distribution (1)		B	Jul-84
E10,000/94/3	Power Supply - Castle Cary Int 650V & 110V Distribution (2)		C	Jul-84
E10,000/94/4	Power Supply - Castle Cary Int Power Supply (B/N50)		A	Jul-84
E10,000/94/5	Power Supply - Castle Cary Int Earthing Arrangement		D	03/12/1992
E10,000/94/6	Power Supply - Castle Cary Int Power Supply Layout (External)		A	Jul-84
E10,000/94/7	Power Supply - Castle Cary Int Power Supply Layout (Internal)		A	Jul-84
E10,000/94/8	Power Supply - Castle Cary Int Bus Bar Rack Layout		A	Jul-84
E10,000/94/9	Power Supply - Castle Cary Int Earth Leakage Detector Circuit	Superseded by E10094/05	C	Jun-84
E10,000/94/10	Power Supply - Somerton REB Power Supply (B/NX110)		B	Sep-84
E10,000/94/11	Power Supply - Somerton REB Power Supply (B/N120)		D	Sep-84
E10,000/94/12	Power Supply - Somerton REB Power Supply (B/N50)		A	Oct-84
E10,000/94/13	Power Supply - Somerton REB Cubicle Layout		A	Sep-84
E10,000/94/14	Power Supply - Somerton REB Power Supply Layout		A	Sep-84

Drawing No.	Title	Discrepancies	Issue	Date
E10,000/94/15	Power Supply - Somerton REB Busbar Fuse Allocation Sheet Nos. Typical		B	Oct-84
E10,000/94/16	Power Supply - 240V UPS System Power Cubicle Layout		B	03/12/1992
E10,000/94/17	Power Supply - 240V UPS System Power Cubicle Wiring (1)		B	03/12/1992
E10,000/94/18	Power Supply - 240V UPS System Power Cubicle Wiring (2)		A	03/12/1992
E10,000/94/19	Power Supply - Castle Cary Int Typical Loc Non-Preferred Arrangement		A	17/11/1983
E10,000/94/20	Power Supply - Castle Cary Int Typical Loc 'Through Power' Non-Preferred Arrangement		D	17/11/1983
E10,000/94/21	Power Supply - Castle Cary Int Typical Loc 'End of Spur' Non-Preferred Arrangement		E	16/11/1983
E10,000/94/22	Power Supply - Castle Cary Int Typical Loc Radial Distribution Preferred Arrangement (1)		B	17/11/1983
E10,000/94/23	Power Supply - Castle Cary Int Typical Loc Radial Distribution Preferred Arrangement (2)		D	04/12/1992
E10,000/94/24	Power Supply - Castle Cary Int Typical Loc Ring Main Distribution Preferred Arrangement (1)		B	16/11/1983
E10,000/94/25	Power Supply - Castle Cary Int Typical Loc Ring Main Distribution Preferred Arrangement (2)		D	04/12/1992
E10,000/94/26	Power Supply - Voltmeter		B	03/12/1992
E10,000/94/27	Power Supply - Castle Cary 650V Supply Schematic (1)		A	Nov-84
E10,000/94/28	Power Supply - Castle Cary 650V Supply Schematic (2)		A	Nov-84
E10,000/94/29	Power Supply - Castle Cary 650V Supply Schematic (3)		A	Nov-84
E10,000/94/30	Power Supply - Castle Cary 650V Supply Schematic (4)		A	Nov-84
E10,000/94/31	Power Supply - Power Supply Schematic Paddington No.2 Feeder		A	03/12/1992
E10,000/94/32	Power Supply - Power Supply Schematic Portobello No.2 Feeder		A	03/12/1992
E10,000/94/33	Power Supply - Power Supply Schematic Paddington No.1 Feeder		A	03/12/1992
E10,000/94/34	Power Supply - Power Supply Schematic Acton No.1/No.3 Feeders		A	03/12/1992
E10,000/94/35	Power Supply Indication Circuits	Superseded by E10094/10	D	20/03/1980
E10,000/94/36	Power Supply - Small UPS System e.g. AOCL		D	09/12/1992
E10,000/94/37	Power Supply - Small UPS System (240/110V) 500 or 1000VA - Active Standby with Auto Switching Cabinet		B	24/03/1994
E10,000/96/1	Overrides - Types, Applications, Ancillary Circuits	Superseded by E10096/05	A	Oct-80
E10,000/96/2	Overrides - Through Routes Indications	Superseded by E10096/10	A	Oct-80
E10,000/96/3	Overrides - Through Routes Panel / Interlocking	Superseded by E10096/15	A	Oct-80
E10,000/96/4	Overrides - Through Routes SCSRs	Superseded by E10096/20	A	Oct-80
E10,000/96/5 ¹	Overrides - Through Routes Interlocking Overrides (1)	Superseded by E10096/25	A	Oct-80
E10,000/96/5 ²	Overrides - Through Routes Interlocking Overrides (2)	Superseded by E10096/30	A	Oct-80
E10,000/96/6	Overrides - Total Failure Switch and Associated Circuits	Superseded by E10096/35	A	Jun-82
E10,000/96/7	Overrides - Through Routes Geographical JC. Single Route Selective (1)	Superseded by E10096/40	A	Oct-80
E10,000/96/8	Overrides - Through Routes Geographical JC. Single Route Selective (2)		A	Oct-80

Drawing No.	Title	Discrepancies	Issue	Date
E10,000/96/9	Overrides - Through Routes Geographical JC. Single Route Selective (3)	Superseded by E10096/45	A	Oct-80
E10,000/96/10	Overrides - Through Routes Geographical JC. Single Route Selective with Thro' Route Facilities on Selected Routes (1)		A	Oct-80
E10,000/96/11	Overrides - Through Routes Geographical JC. Single Route Selective with Thro' Route Facilities on Selected Routes (2)		A	Oct-80
E10,000/96/12	Overrides - Through Routes Geographical JC. Single Route Selective with Thro' Route Facilities on Selected Routes (3)		A	Oct-80
E10,000/96/13 ¹	Overrides - Through Routes Geographical JC. Multi-Route Selective (1)		A	Oct-80
E10,000/96/13 ²	Overrides - Through Routes Geographical JC. Multi-Route Selective (2)		A	Jun-93
E10,000/96/14	Overrides - Through Routes Geographical JC. Multi-Route Selective (3)		A	Oct-80
E10,000/96/15	Overrides - Through Routes Geographical JC. Multi-Route Selective (4)		A	Oct-80
E10,000/96/16	Overrides - Through Routes Geographical JC. Multi-Route Selective with Auto Facility on Selected Routes (1)		A	Oct-80
E10,000/96/17	Overrides - Through Routes Geographical JC. Multi-Route Selective with Auto Facility on Selected Routes (2)		A	Oct-80
E10,000/96/18	Overrides - Through Routes Geographical JC. Multi-Route Selective with Auto Facility on Selected Routes (3)		A	Oct-80
E10,000/100/1	Tokenless Block		B	-
E10,000/100/2	Tokenless Block - W.R. Standard Arrangements e.g. Salisbury - Exeter		B	21/05/1980
E10,000/100/3	Tokenless Block - W.R. Standard Arrangements with 'Switching Out'		B	02/05/1980
E10,000/100/4	Tokenless Block - W.R. Standard Arrangements Ground Frame with Shut-In Facilities		B	02/05/1980
E10,000/101/1	Reversible Signalling - One Line (On One Panel) Int 'B' (Former WR Variant)		A	Jan-76
E10,000/101/2	Reversible Signalling - One Line (On One Panel) Through Circuits (Former WR Variant)		A	Jan-76
E10,000/101/3	Reversible Signalling - One Line (On One Panel) Int 'A' (Former WR Variant)		A	Jan-76
E10,000/101/4	Reversible Signalling - One Line (On One Panel) Panel End (Former WR Variant)		A	Jan-76
E10,000/101/5	Reversible Signalling - One Line (Between Two Panels) Int 'B' (Former WR Variant)		A	Jan-76
E10,000/101/6	Reversible Signalling - One Line (Between Two Panels) Through Circuits (Former WR Variant) (1)		A	Jan-76
E10,000/101/7	Reversible Signalling - One Line (Between Two Panels) Through Circuits (Former WR Variant) (2)		A	Jan-76
E10,000/101/8	Reversible Signalling - One Line (Between Two Panels) Int 'A' (Former WR Variant)		A	Jan-76
E10,000/101/9	Reversible Signalling - On One Line (Between Two Panels) Panel Circuits (Former WR Variant)		A	Jan-76
E10,000/101/10	Reversible Signalling - On One Line External Circuits (Former WR Variant)		A	Jan-76

Drawing No.	Title	Discrepancies	Issue	Date
E10,000/123/1	Time Relays - Typical Applications (TJR Control) A.C. Motor Timers QMT 2		B	Oct-81
E10,000/123/2	Time Relays - Use of Thermal Relay to BR Spec 937A		B	20/03/1980
E10,000/123/3	Time Relays - A.C. Motor Relay QMT1		A	21/03/1980
E10,000/129/1	Ground Frame Controls (Mechanically Operated) - Inside Interlocking Areas (Non-Route Setting) NX Panels	Superseded by E10129/05	A	21/03/1980
E10,000/129/2	Ground Frame Controls (Mechanically Operated) - Inside Interlocking Areas (Non-Route Setting)		B	24/03/1980
E10,000/129/3	Ground Frame Controls (Mechanically Operated) - Inside Interlocking Areas (Route Setting) NX Panels	Superseded by E10129/10	A	01/08/1991
E10,000/129/4	Ground Frame Controls (Mechanically Operated) - Inside Interlocking Areas (Route Setting) (1)	Superseded by E10129/15	A	01/08/1991
E10,000/129/5	Ground Frame Controls (Mechanically Operated) - Inside Interlocking Areas (Route Setting) (2)	Superseded by E10129/20	A	01/08/1991
E10,000/129/6	Ground Frame Controls (Mechanically Operated) - Inside Interlocking Areas (Route Setting) Push-Push Panels		A	01/08/1991
E10,000/129/7	Ground Frame Controls (Mechanically Operated) - Inside Interlocking Areas Use of Lever Lock I/L/O Key Release Instrument	Superseded by E10129/25	A	06/08/1991
E10,000/130/1	Ground Frame Controls (Power Operated) - Inside Interlocking Areas (Non-Route Setting) (1)		A	Aug-91
E10,000/130/2	Ground Frame Controls (Power Operated) - Inside Interlocking Areas (Non-Route Setting) (2)		A	01/08/1991
E10,000/130/3	Ground Frame Controls (Power Operated) - Inside Interlocking Areas (Route Setting) (1)		A	01/08/1991
E10,000/130/4	Ground Frame Controls (Power Operated) - Inside Interlocking Areas (Route Setting) (2)		A	01/08/1991
E10,000/131/1	Ground Frame - In a non-MAS Area (1)		B	02/10/1963
E10,000/131/2	Ground Frame - In a non-MAS Area (2)		B	02/10/1963
E10,000/132/1	Ground Frame Controls Outside Interlocking Areas - Outside Overlap Protected by Semi-Automatic Signals Layouts & Controls		A	24/03/1980
E10,000/132/2	Ground Frame Controls Outside Interlocking Areas - Outside Overlap Protected by Semi-Automatic Signals Wiring		B	25/03/1980
E10,000/136	Signalling Power Supply - Mechanical Signal Box		A	26/03/1980
E10,000/160/1	Hot Box Detectors - Panel Domino Unit and Notes		A	31/03/1980
E10,000/160/2	Hot Box Detectors - Panel Circuits		A	31/03/1980
E10,000/160/3	Hot Box Detectors - Power and Transmission Circuits at Site		B	31/03/1980
E10,000/160/4	Hot Box Detectors - Layout for One Servo using Compton Building		A	31/03/1980
E10,000/160/5	Hot Box Detectors - Layout for Two Servos using Compton Building		A	31/03/1980
E10,000/160/6	Hot Box Detectors - Layout for Hawker Siddeley using Compton Building		A	31/03/1980
E10,000/161/1	W.R. Control Table - Notes	Superseded by E10161/05	A	Nov-93
E10,000/161/2	W.R. Control Table - See SSP 80 Route and Signal	Superseded by E10161/10	A	Nov-93
E10,000/161/3	W.R. Control Table - Route and Signal (Examples)	Superseded by E10161/15	A	Nov-93

Drawing No.	Title	Discrepancies	Issue	Date
E10,000/161/4	W.R. Control Table - See SSP19 Approach Locking	Superseded by E10161/20	A	Nov-93
E10,000/161/5	W.R. Control Table - A.W.S. Inductors / Suppressors	Superseded by E10161/25	A	Nov-93
E10,000/161/6	W.R. Control Table - See SSP 81 Points	Superseded by E10161/30	A	Nov-93
E10,000/161/7	W.R. Control Table - See SSP 81 Ground Frame Releases	Superseded by E10161/35	A	Nov-93
E10,000/161/8	W.R. Control Table - See SSP 80/81 Ground Frame Points and Functions	Superseded by E10161/40	A	Nov-93
E10,000/161/9	W.R. Control Table - Example of G.F. Controls & Releases	Superseded by E10161/45	A	Nov-93
E10,000/161/10	W.R. Control Table - See SSP 80/81 Counter Conditions	Superseded by E10161/50	A	Nov-93
E10,000/161/11	W.R. Control Table - Route Counter Condition	Superseded by E10161/55	A	Nov-93
E10,000/161/12	W.R. Control Table - Points Counter Condition (1)	Superseded by E10161/60	A	Nov-93
E10,000/161/13	W.R. Control Table - Points Counter Condition (2)	Superseded by E10161/65	A	Nov-93
E10,000/161/14	W.R. Control Table - Track Counter Condition	Superseded by E10161/70	A	Nov-93
E10,000/162	Trackside Warning System (with Fixed Position Audible Devices)		A	Apr-81
E10,000/163/1	Technician's Fault Monitoring Equipment - Line Arrangements		B	23/03/1983
E10,000/163/2	Technician's Fault Monitoring Equipment - P.S.B. Arrangements		A	25/08/1982
E10,000/164	Intruder Alarm - Typical Application		C	May-82
E10,000/2000	LC Standard Drawings - Index		C	26/08/1993
E10,000/2000/2	LC Standard Drawings - AHB Indication Circuits to Supervisory Point		B	26/08/1993
E10,000/2000/3	LC Standard Drawings - Manned Barriers WR Barrier Packs (LOWER) SR		A	26/08/1993
E10,000/2000/4	LC Standard Drawings - Manned Barriers WR Barrier Packs BARRIER (UP) & (DN) Rs		A	26/08/1993
E10,000/2000/5	LC Standard Drawings - Manned Barriers WR Barrier Packs Motor Relays		A	26/08/1993
E10,000/2000/6	LC Standard Drawings - Manned Barriers WR Barrier Packs Valves		A	26/08/1993
E10,000/2000/7	LC Standard Drawings - A.H.B. Indications via Emergency Tele System (1)		A	17/02/1994
E10,000/2000/8	LC Standard Drawings - A.H.B. Indications via Emergency Tele System (2)		A	17/02/1994
E10,000/2000/9	LC Standard Drawings - 'Fishguard' Control Application Notes		A	17/08/1994
E10,000/2000/10	LC Standard Drawings - 'Fishguard' Control Track Circuit Controls (Part) Crossing Control Location		A	11/08/1994

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Drawing No.	Title	Discrepancies	Issue	Date
Western Region E10000 Interlocking Circuits (Redrawn) (For Alterations to Existing Interlockings)				
E10000/NEWINDEX/01	Index (1)	Withdrawn 05/09/2009	3	Sep-2004
E10000/NEWINDEX/02	Index (2)	Withdrawn 05/09/2009	2	Sep-2004
E10000/NEWINDEX/03	Index (3)	Withdrawn 05/09/2009	3	Sep-2004
E10000/NEWINDEX/04	Index (4)	Withdrawn 05/09/2009	2	Sep-2004
E10000/NEWINDEX/05	Index (5)	Withdrawn 05/09/2009	2	Sep-2004
E10000/NEWINT/01	Introduction Notes	Redrawn from E10,000/INTRO/1 & Revised	1	Sep-2004
E10000/NEWINT/02	Introduction Notes	Redrawn from E10,000/INTRO/2B & Revised	1	Sep-2004
E10000/NEWINT/03	Introduction Notes	Redrawn from E10,000/INTRO/3 & Revised	1	Sep-2004
E10000/NEWINT/04	Introduction Notes	Redrawn from E10,000/INTRO/4 & Revised	1	Sep-2004
E10000/NEWINT/05	Introduction Notes	Redrawn from E10,000/INTRO/5 & Revised	1	Sep-2004
E10000/NEWINT/06	Introduction Notes	Redrawn from E10,000/INTRO/6 & Revised	1	Sep-2004
E10000/NEWINT/07	Drawing Number Allocation (i.e. Use of Stroke Numbers)	Redrawn from E10,000/20/1 & 2 & Revised	2	Sep-2004
E10001/05	Signal Control Circuits - Signal Control Relays 1	Redrawn from E10,000/1/1 & Revised	2	Sep-2004
E10001/10	Signal Control Circuits - Signal Control Relays 2	Redrawn from E10,000/1/2 & Revised	2	Sep-2004
E10001/11	Signal Control Circuits - Aspect Sequence (Full Climbing Aspect)	Redrawn from E10,000/1/5 & Revised	1	Sep-2004
E10001/15	Signal Control Circuits - Main & Subsidiary Control Relays	Redrawn from E10,000/1/3 & Revised	2	Sep-2004
E10001/20	Signal Control Circuits - Main & Subsidiary Repeat Relays	Redrawn from E10,000/1/4 & Revised	2	Sep-2004
E10001/25	Signal Control Circuits - ULSRs	Redrawn from E10,000/1/8 & Revised	2	Sep-2004
E10001/26	Signal Control Circuits - JULSRs	Redrawn from E10,000/1/8 & Revised	1	Sep-2004
E10001/30	Signal Control Circuits - Ground Position Light Signal Circuits	Redrawn from E10,000/1/9 & Revised	2	Sep-2004
E10001/31	Signal Control Circuits - Aspect Replacement	Redrawn from E10,000/1/13 & 14 & Revised	1	Sep-2004
E10001/35	Signal Control Circuits - Ground Position Light Control & Repeat Relays	Redrawn from E10,000/1/10 & Revised	2	Sep-2004
E10001/40	Signal Control Circuits - Facing Position Light Signals 1 (Preset Shunts)	Redrawn from E10,000/1/11 & Revised	1	Sep-2004
E10001/45	Signal Control Circuits - Facing Position Light Signals 2 (Preset Shunts)	Redrawn from E10,000/1/12 & Revised	1	Sep-2004
E10001/50	Signal Control Circuits - Replacement of Auto Signals	Redrawn from E10,000/1/16 & Revised	1	Sep-2004

Drawing No.	Title	Discrepancies	Issue	Date
E10001/60	Simple Flank Track Protection (SPAD Detection)		1	Sep-2004
E10001/65	GK/RT0044 Controls 5.3.1, 5.3.2 & 5.3.3.		1	Sep-2004
E10004/05	Approach Locking - Comprehensive Approach Locking (BR947 Timer	Redrawn from E10,000/4/1 & Revised	2	Sep-2004
E10004/10	Approach Locking - 'When Operated' Approach Locking (ST16 Timer	Redrawn from E10,000/4/2 & Revised	2	Sep-2004
E10004/15	Approach Locking - Special Features	Redrawn from E10,000/4/3	1	Sep-2004
E10006/05	Signals – Main Filament Monitoring – G(M)ESR	Redrawn from E10,000/6/7	1	Sep-2004
E10006/10	Signals - Signal Head Feeds	Redrawn from E10,000/6/4	1	Sep-2004
E10007/05	Signal Control Circuits - Non-vital Route Calling UR & ZNPR	Redrawn from E10,000/7/1 & Revised	2	Sep-2004
E10007/06	Preferred and Non-Preferred URs using Signalling Relays for Delay		1	Sep-2004
E10007/10	Signal Control Circuits - Non-vital Route Cascade USR	Redrawn from E10,000/7/2 & Revised	1	Sep-2004
E10007/15	Signal Control Circuits - Non-vital Miscellaneous Repeat Relays	Redrawn from E10,000/7/3 & Revised	2	Sep-2004
E10007/20	Signal Control Circuits - Non-vital Through Circuits from Panel to	Redrawn from E10,000/7/4 & Revised	2	Sep-2004
E10007/25	Signal Control Circuits – Non-vital Main & Subsidiary Signals Panel	Redrawn from E10,000/7/5 & Revised	2	Sep-2004
E10007/30	Signal Control Circuits – Non-vital LOS & GPL Panel Indications	Redrawn from E10,000/7/6	1	Sep-2004
E10007/35	Signal Control Circuits – Non-vital Point & Miscellaneous Indications	Redrawn from E10,000/7/7 & Revised	2	Sep-2004
E10007/40	Signal Control Circuits – Non-vital Simple UKE & TKE Circuits and General Notes	Redrawn from E10,000/7/8 & Revised	1	Sep-2004
E10007/45	Signal Control Circuits – Non-vital UKE & TKE Circuits on Points	Redrawn from E10,000/7/8 & 9 & Revised	2	Sep-2004
E10007/50	Signal Control Circuits – Non-vital UKE & TKE Circuits on Switch	Redrawn from E10,000/7/10	1	Sep-2004
E10007/55	Signal Control Circuits – Non-vital Double Slip Indications WR Ind. on HW (WR) Panel	Redrawn from E10,000/7/11	1	Sep-2004
E10007/60	Signal Control Circuits – Non-vital Double Slip Indications Revised WR Ind. on HW (WR) Panel	Redrawn from E10,000/7/12	1	Sep-2004
E10007/65	Signal Control Circuits – Non-vital Typical BX24 Power Wiring	Redrawn from E10,000/7/17	1	Sep-2004
E10007/70	Signal Control Circuits – Non-vital TD Feeds	Redrawn from E10,000/7/18	1	Sep-2004
E10016/05	Point Machines - Point Control Circuits (Route Relay Interlocking Panels) Clamp Lock Machines	Redrawn from E10,000/16/1 & Revised	2	Sep-2004
E10016/10	Point Machines - Drive Circuits for New Installations or where Conversion made from Clamp Lock	Redrawn from E10,000/16/2 & Revised	2	Sep-2004
E10016/15	Point Machines - Electrical Detection Standard WR Applications (Including Clamp Locks)	Redrawn from E10,000/16/5 & Revised	3	Sep-2004
E10016/20	Point Machines / Clamp Lock Heaters	Redrawn from E10,000/16/12	1	Sep-2004
E10018/05	Point Circuits – Points WZR	Redrawn from E10,000/18/1 & Revised	2	Sep-2004
E10018/10	Point Circuits - WZR-Self Restored Points	Redrawn from E10,000/18/2 & Revised	2	Sep-2004
E10018/15	Point Circuits – Points LR	Redrawn from E10,000/18/3 & Revised	2	Sep-2004
E10018/20	Point Circuits - Points Relay Repeats Vital Interlocking Circuits	Redrawn from E10,000/18/4 & Revised	2	Sep-2004
E10018/25	Point Circuits - Route Locking of Points where Point to Point Locking Exists	Redrawn from E10,000/18/5	1	Sep-2004
E10018/30	Point Circuits - Delayed Yellow Condition with Double Junction in Full	Redrawn from E10,000/18/6 & Revised	1	Sep-2004
E10083/05	A.W.S. Inductors - M.A.S. Areas	Redrawn from E10,000/83/2 & Revised	2	Sep-2004

Drawing No.	Title	Discrepancies	Issue	Date
E10083/10	A.W.S. Inductors – Permissive Working in Platform Areas	Part Redrawn from E10,000/83/3 &	2	Sep-2004
E10083/15	A.W.S. Inductors - Inductor Associated with Signal Reading through Unfitted Route to Fitted Route	Redrawn from E10,000/83/11 & Revised	1	Sep-2004
E10083/20	A.W.S. Inductors - Special Suppression when Opposing Regular Moves are Un-Signalled	Redrawn from E10,000/83/12 & Revised	1	Sep-2004
E10085/05	“Post Office 3000 Type” Relay Sets Type A	Redrawn from E10,000/85	1	Sep-2004
E10085/10	“Post Office 3000 Type” Relay Sets Type B	Redrawn from E10,000/86	1	Sep-2004
E10085/15	“Post Office 3000 Type” Relay Sets Type C	Redrawn from E10,000/87	1	Sep-2004
E10085/20	“Post Office 3000 Type” Relay Sets Type D	Redrawn from E10,000/88	1	Sep-2004
E10094/05	Power Supply - Earth Fault Detector Circuit	Redrawn from E10,000/94/9	1	Sep-2004
E10094/10	Power Supply - Indication Circuits	Redrawn from E10,000/94/35 & Revised	1	Sep-2004
E10096/05	Overrides - Types, Applications, Signal Control Circuits	Redrawn from E10,000/96/1 & Revised	1	Sep-2004
E10096/10	Overrides - Through Routes General Indications	Redrawn from E10,000/96/2 & Revised	2	Sep-2004
E10096/15	Overrides - Through Routes Panel / Interlocking	Redrawn from E10,000/96/3	1	Sep-2004
E10096/20	Overrides - Through Routes SCSRs	Redrawn from E10,000/96/4	1	Sep-2004
E10096/25	Overrides - Through Routes Interlocking Overrides (1)	Redrawn from E10,000/96/5 ¹	1	Sep-2004
E10096/30	Overrides - Through Routes Interlocking Overrides (2)	Redrawn from E10,000/96/5 ²	1	Sep-2004
E10096/35	Overrides - Total Failure Switch and Associated Circuits (Local Control)	Redrawn from E10,000/96/6 & Revised	2	Sep-2004
E10096/40	Overrides - Through Routes Geographical Jcn. Single Route Selective	Redrawn from E10,000/96/7 & Revised	2	Sep-2004
E10096/45	Overrides - Through Routes Geographical Jcn. Single Route Selective	Redrawn from E10,000/96/9 & Revised	1	Sep-2004
E10129/05	Ground Frame Controls - (Mechanically Operated) - Inside Interlocking Areas (Non-Route Setting) NX Panels	Redrawn from E10,000/129/1	1	Sep-2004
E10129/10	Ground Frame Controls - (Mechanically Operated) - Inside Interlocking Areas (Route Setting) NX Panels	Redrawn from E10,000/129/3	1	Sep-2004
E10129/15	Ground Frame Controls - (Mechanically Operated) - Inside Interlocking Areas (Route Setting) NX Panels	Redrawn from E10,000/129/4	1	Sep-2004
E10129/20	Ground Frame Controls - (Mechanically Operated) - Inside Interlocking Areas (Route Setting) NX Panels	Redrawn from E10,000/129/5	1	Sep-2004
E10129/25	Ground Frame Controls - (Mechanically Operated) - Inside Interlocking Areas Use of Lever Lock I/L/O Key Release Instrument	Redrawn from E10,000/129/7	1	Sep-2004
E10161/05	W.R. Control Table – Notes	Redrawn from E10,000/161/1 & Revised	2	Sep-2004
E10161/10	W.R. Control Table - Route and Signal	Redrawn from E10,000/161/2 & Revised	2	Sep-2004
E10161/15	W.R. Control Table - Route and Signal (Examples)	Redrawn from E10,000/161/3	1	Sep-2004
E10161/20	W.R. Control Table - Approach Locking	Redrawn from E10,000/161/4 & Revised	1	Sep-2004
E10161/24	W.R. Control Table – Example A.W.S. Inductor Layouts	Redrawn from E10,000/83/14 & Revised	1	Sep-2004
E10161/25	W.R. Control Table - A.W.S. Inductors / Suppressor	Redrawn from E10,000/83/15 & 161/5 & Revised	1	Sep-2004

Drawing No.	Title	Discrepancies	Issue	Date
E10161/30	W.R. Control Table - Points	Redrawn from E10,000/161/6 & Revised	2	Sep-2004
E10161/35	W.R. Control Table - Ground Frame Releases	Redrawn from E10,000/161/7 & Revised	1	Sep-2004
E10161/40	W.R. Control Table - Ground Frame Points and Functions	Redrawn from E10,000/161/8	1	Sep-2004
E10161/45	W.R. Control Table - Example of Ground Frame Controls & Releases	Redrawn from E10,000/161/9	1	Sep-2004
E10161/50	W.R. Control Table - Counter Conditions	Redrawn from E10,000/161/10	1	Sep-2004
E10161/55	W.R. Control Table - Route Counter Condition	Redrawn from E10,000/161/11	1	Sep-2004
E10161/60	W.R. Control Table - Points Counter Condition (Simple)	Redrawn from E10,000/161/12	1	Sep-2004
E10161/65	W.R. Control Table - Points Counter Condition (Complex)	Redrawn from E10,000/161/13 & Revised	2	Sep-2004
E10161/70	W.R. Control Table - Track Circuit Counter Condition	Redrawn from E10,000/161/14 & Revised	2	Sep-2004
E10161/75	W.R. Control Table - Route and Flank Protection (Examples)		1	Sep-2004
E10161/80	W.R. Control Table - Route and Signal GK/RT0044 Permissive		1	Sep-2004
E10161/85	W.R. Control Table - Special Point Call (Soft Call)		1	Sep-2004
E10161/90	W.R. Control Table - Over-Rides		1	Sep-2004
E10161/95	W.R. Control Table - Track Circuit Summations		1	Sep-2004
E10161/100	W.R. Control Table - Point Summations		1	Sep-2004

Document Title: W.R. Control Table - Points

Drawing No.	Title	Discrepancies	Issue	Date
Route Relay Interlocking Typical Circuits (BRS-SW67)				
FREE WIRED INTERLOCKING CIRCUITS				
BRS-SW67- INDEX-	Index (1)	Withdrawn 05/09/2009	2	06/08/2005
BRS-SW67- INDEX-	Index (2)	Withdrawn 05/09/2009	1	04/12/2004
BRS-SW67- INDEX-	Index (3)	Withdrawn 05/09/2009	1	04/12/2004
BRS-SW67- INDEX-	Index (4)	Withdrawn 05/09/2009	1	04/12/2004
BRS-SW67- INDEX-	Index (5)	Withdrawn 05/09/2009	1	04/12/2004
BRS-SW67-3	Panel Indications		7	03/03/2012
BRS-SW67-4	Diagram for Sheets 5, 6 & 16		6	03/03/2012
BRS-SW67-5	Push Button Ring and Associated Circuits		10	03/03/2012
BRS-SW67-6	Route Setting - Route Relays and Route Sticks		8	04/12/2004
BRS-SW67-7	Route Setting - Preferred Routes		7	04/12/2004
BRS-SW67-8	Route Setting - Auto Signal Section with Bi-Directional Working		4	03/03/2012
BRS-SW67-9	Route Setting - Simplified Bi-Directional Signalling		2	04/12/2004
BRS-SW67-9A	Route Setting - Simplified Bi-Directional Signalling with Intermediate Signal to Split Section		2	04/12/2004
BRS-SW67-10	Route Setting - Patrolman's Lockout Device with One Control Point		2	04/12/2004
BRS-SW67-10A	Route Setting - Patrolman's Lockout Device with Two Control Points		3	04/12/2004
BRS-SW67-11	Push Buttons in Two PBI Rings - Ring Split at Signal Post		6	04/12/2004
BRS-SW67-12	Push Buttons in Two PBI Rings - Ring Split Through Points		6	04/12/2004
BRS-SW67-13	Point Lock Relays (Direct & Indirect Fed)	Withdrawn 03/03/2012	8	06/08/2005
BRS-SW67-16	Route Cancelling - Route Releasing		10	04/12/2004
BRS-SW67-17	Route Cancelling - Route Releasing on Shunt Signals		8	04/12/2004
BRS-SW67-18	Aspects - Diagram for Sheets 19 to 21		6	04/12/2004
BRS-SW67-19	Aspects - Running Signals GR (Non-Stepping Up)		9	04/12/2004
BRS-SW67-20	Aspects - Stepping Up of Class of Route		8	04/12/2004
BRS-SW67-21	Aspects - Shunt Signals GR		8	04/12/2004
BRS-SW67-29	Shunt Signals - Pre-Set Shunts		8	04/12/2004
BRS-SW67-30	Shunt Signals - Pre-Set Shunts Method of Operation		4	04/12/2004
BRS-SW67-31	Shunt Signals - Track Override & Shunter's Acceptance Circuits		6	04/12/2004
BRS-SW67-32	Flashing Aspects - Controls 1	Withdrawn 05/09/2009	4	04/12/2004
BRS-SW67-32A	Flashing Aspects - Controls 2	Withdrawn 05/09/2009	1	04/12/2004
BRS-SW67-33	Flashing Aspects - Controls 3	Withdrawn 05/09/2009	3	04/12/2004
BRS-SW67-39	Swinging Overlaps - Simple Case		7	04/12/2004
BRS-SW67-40	Swinging Overlaps - Complicated Case: Diagram for Circuits		5	04/12/2004
BRS-SW67-41	Swinging Overlaps - Complicated Case: Route Relays & Overlap		7	04/12/2004
BRS-SW67-42	Swinging Overlaps - Complicated Case: Point Calling		7	04/12/2004
BRS-SW67-42A	Swinging Overlaps - Complicated Case: Point Anti-Pre-Selection Circuits		2	04/12/2004
BRS-SW67-42B	Swinging Overlaps - Complicated Case: Point Anti-Pre-Selection Circuits		2	04/12/2004
BRS-SW67-43	Swinging Overlaps - Complicated Case: Point Lock Relays		7	04/12/2004

Drawing No.	Title	Discrepancies	Issue	Date
BRS-SW67-44	Swinging Overlaps - Complicated Case: Route Sticks		7	04/12/2004
BRS-SW67-45	Swinging Overlaps - Complicated Case: Special Aspect Controls. Also Route Lights		8	04/12/2004
BRS-SW67-49	Miscellaneous - Opposing Locking Omitted		4	04/12/2004
BRS-SW67-50	Miscellaneous - Automatic Normalisation of Points		8	04/12/2004
BRS-SW67-52	Single Line One Train Working Control Circuits		3	04/12/2004
BRS-SW67-56	Relay Room Panels - Test Panel		7	04/12/2004
BRS-SW67-57	Relay Room Panels - Technician's Monitor Panel		6	04/12/2004
BRS-SW67- A	Appendix A - Train Operated Route Release (TORR)		3	04/12/2004
BRS-SW67- A1	TORR - Standard Terminal Platform - Platform Starter: First Signal After Auto Signal		6	04/12/2004
BRS-SW67- A2	TORR - When Signal in Rear is Controlled Signal		6	04/12/2004
BRS-SW67- B	Appendix B - Overrides		2	04/12/2004
BRS-SW67- B1	Overrides - Signalbox to Interlocking Link		2	04/12/2004
BRS-SW67- B2	Overrides - Interlocking Circuits		2	04/12/2004
BRS-SW67- B3	Overrides - Alternative Routing (1)		2	04/12/2004
BRS-SW67- B4	Overrides - Alternative Routing (2)		2	04/12/2004
BRS-SW67- B5	Overrides - Alternative Routing with TORR		2	04/12/2004
BRS-SW67- B6	Overrides - Alternative Routing with Preselection of Conflicting Routes		2	04/12/2004
BRS-SW67- B7	Overrides - Remote Control Failure Indications		2	04/12/2004
BRS-SW67- C	Appendix C - Ground Frames		3	04/12/2004
BRS-SW67- C1	Ground Frames - "Traffic" Type Within Controlled Signals Signalbox & Relay Room Circuits		4	04/12/2004
BRS-SW67- C2	Ground Frames - "Traffic" Type Within Controlled Signals Ground Frame Circuits		3	04/12/2004
BRS-SW67- C3	Ground Frames - "Traffic" Type Protected by Semi-Auto Signal(s) Signalbox & Relay Room Circuits		3	04/12/2004
BRS-SW67- C4	Ground Frames - "Traffic" Type Protected by Semi-Auto Signal(s) Ground Frame Circuits (1)		3	04/12/2004
BRS-SW67- C4A	Ground Frames - "Traffic" Type Protected by Semi-Auto Signal(s) Ground Frame Circuits (Variants)		3	04/12/2004
BRS-SW67- C5	Ground Frames - "Traffic" Type Protected by Semi-Auto Signal(s) Ground Frame Circuits (2)		5	04/12/2004
BRS-SW67- C6	Ground Frames - Emergency / Engineer's Type		4	04/12/2004
BRS-SW67- C7	Ground Frames - Power Operated Points: Control Case Layout		3	04/12/2004
BRS-SW67- C8	Ground Frames - Power Operated Points: Circuits		4	04/12/2004
BRS-SW67- F	Appendix F - Train Operated Warning System		2	04/12/2004