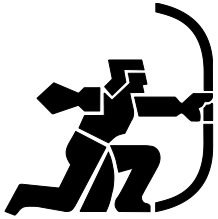
Northern Line



SIGNAL POST TELEPHONE LIST

and

REMOTE ROUTE SECURING

02/07a

Northern Line Signal Post Telephone list and Remote Route Securing

This book shows the location of all the signal post telephones (commonly referred to as signal phones) on the Northern Line. There is a description of where the signal is located, plus other information about the signal / signal phone that may be of use. Remote route securing information is at the front of the book.

All semi-automatic signals and FNX signals are listed. Any automatic signals that have a signal phone are also listed. Many of these used to be 'X' signals and are described as such. The controlled areas are listed alphabetically, with the FNX and miscellaneous signals listed at the back of the book. Unless stated otherwise, all signal phones listed on a page go to the panel on that station.

Many controlled areas have a direct line on the platform to the Senior Signalman and / or Service Controller. This may be at the headwall / tailwall as appropriate or near the signal phone panel.

Approach controlled station starters are identified where possible:
- automatic signals: will normally clear only when the track circuit has been occupied for X seconds.
- semi-automatic signals: as the normal aspect of a semi is red anyway, in this book a semi starter has been defined as approach-controlled if the driver would normally see it at red when entering the platform. Many of these can be overridden by the Signalman working in manual mode and can then show green in advance.

The notes next to the signal location are for guidance only. Although a signal may clear at a certain point, a danger signal should always be approached as if it was going to remain at danger and the driver be prepared to stop.

Key: '1' = home signal: '3' = generally the first signal after the starter. (P) - approximate position of signal panel.
The diagrams are not to scale and are for guidance only. All points are shown in their normal position.
Operations room information supplied by local supervisors

This information is correct at 15 February 07

I/Op Roger Mather
Train Operations Managers Office
Morden

Identifying and using the signal phone

On the Northern Line, signal phones normally go to the station in advance and are answered by the Station Supervisor or DMT.

Signal phone locations and identification
Nearly all signal phones are located before or just after the signal and would be inaccessible in the event of an overrun in a tunnel section.
Most signal phones are accessible from track level. They can be on the same side as the signal or on the opposite side of the tunnel. Some are accessible from the cab, at drivers height, but may be too high to reach if standing on the track. Some signal phones are on the same side as the positive rail. Although the shape varies, most signal phone boxes are marked with either yellow and black or white and black stripes, and are usually labelled with the name of the station where the signal phone goes to. A “squashed D” may be present to show that a phone is near by.

Using the signal phone
The signal phone handset must be used vertically and after use must be returned to the correct position and the phone box door latched closed.
Unless the signal phone panel is in the DMT/Supervisor’s office, when the signal phone is used, a bell will ring on the platform. At some locations the bell is repeated in the Supervisors office, although the Supervisor would have to go to the platform to answer the phone. Depending on the location, it may take a while for somebody to answer.

If the driver is unable to contact the Line Controller via the train radio and cannot contact the Supervisor using the signal phone (where provided), then the tunnel telephone wires can be used as another means of communication if necessary. (Traction current will be discharged as a result of clipping the handset on, but the Line Controller can easily arrange its recharge). Tell the person who answers Who you are, Where you are and Why you have contacted them. Ensure the handset is removed immediately after use.
When the handset is clipped on to the tunnel telephone wires on the running line or the headwall tunnel telephone is used, the Line Controller will answer. When the handset is clipped on to the tunnel telephone wires in the siding, the Supervisor at that station will answer. The bell for the sidings tunnel telephone wire operation is not repeated in the Supervisors office.

Remote Route Securing

Route secured signs are provided at the following locations:

Camden Town / Mornington Crescent

Southbound	*Northbound*
E32b E34	E2 E4 (R1 & R2)
E37(R1 & R2)	E6 E9b
E39	E11b (R1 & R2)
E41 (R1 & R2)	

Kennington

Southbound	*Northbound*
B3 (R1 & R2)	B31a (R1 & R2)
B8	B31/1b B33 B36b

Stockwell

Southbound	*Northbound*
U1b	U10

Tooting Broadway

Southbound	*Northbound*
W2a	W12b

Morden

Southbound	*Northbound*
Y2 (R1)	Y27

The signals that have an associated route secured sign are shown on the line diagram as below:

RS — There is only one route available from this signal - e.g. Y27

RS1 — There is more than one route available from this signal, but only the route shown can be proved secured - e.g. Y2

RS1 / RS2 — There is a choice of two routes from this signal. The route that is proved secured will be illuminated - e.g. E4

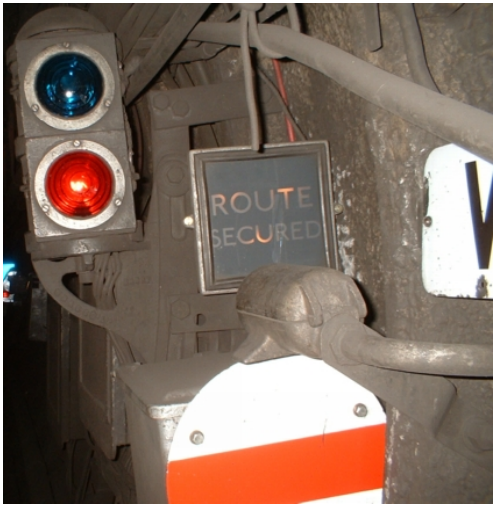
Where the route secured sign is at a junction signal, the route number is displayed as well. Route 1 is first from the left, route 2 is second from the left. For example, B31a at Kennington will show “ROUTE (1) SECURED” for the Charing Cross branch, and “ROUTE (2) SECURED” for the City branch.

The signs are illuminated by the Signalman. They can only be illuminated when the train is in the vicinity of the signal and when the points have been proved fully locked in position. Because the points have been proved secure, they do not need to be manually secured using a scotch and clip when a train has to pass that signal at danger. This saves time and avoids excessive delay during a signal failure.

The Route Secured signs cannot be illuminated if a Protection Key Switch is operated. If the Route Secured sign is already illuminated, operation of the Protection Key Switch will extinguish it.
Once a Route Secured sign is illuminated, the Signalman cannot take a release and the route must be accepted by the train.

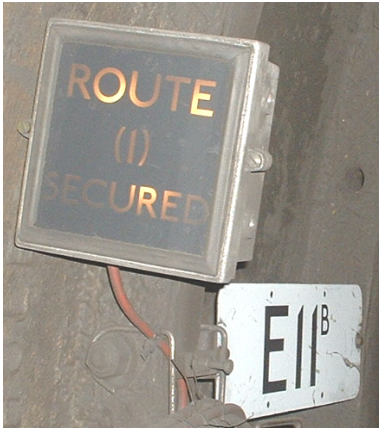
An illuminated Route Secured sign DOES NOT give the driver permission to pass that signal at danger, it just lets the driver know that the points have been proved secured and that there is no need for them to have been secured with a scotch and clip. Permission to pass the signal at danger must be given in the normal way. The Route Secured sign only applies to that signal. The process will have to be repeated at any other signals as necessary.

Examples of Route Secured signs



Route Secured at W2a

Route 1 Secured at E11b



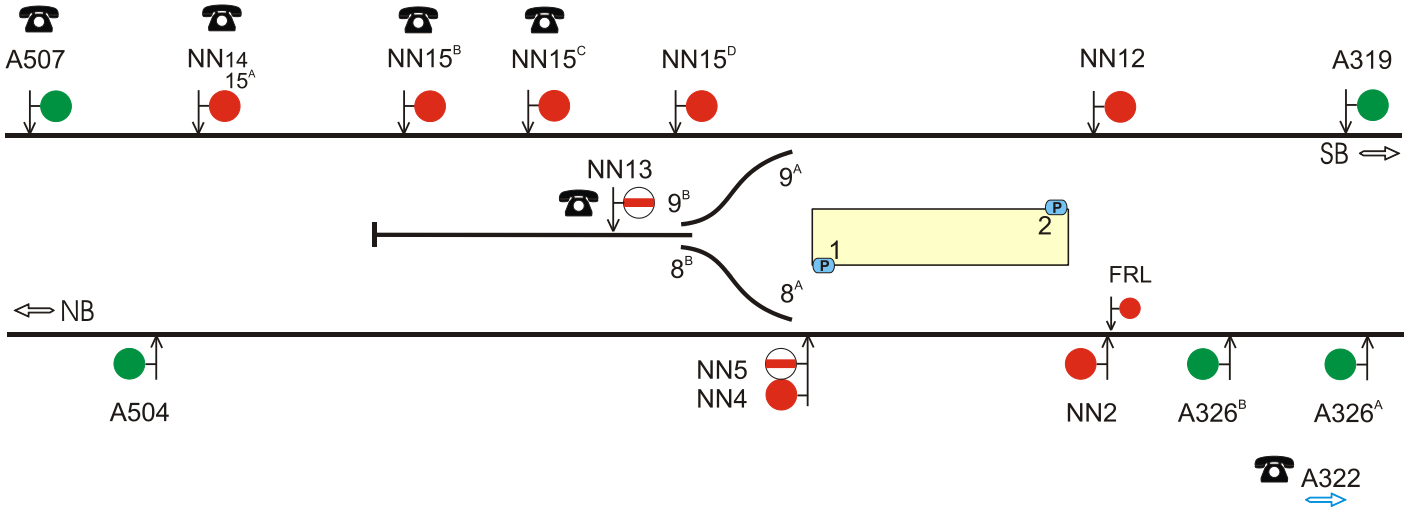
ARCHWAY

Signal phone panel locations: NB signals - NB headwall; SB signals - near SB headwall
Bell repeated in Ops room/SSUP office: **YES** Panel extended to Ops room/SSUP office: **YES**
No bell repeater to Ops room/SSUP office if the tunnel telephone wires are operated in the siding

Signal	Phone	Signal location	additional information
NN2	no	NB ‘1’ Archway	
NN4	no	NB Starter; approach controlled	
NN5	no	NB Shunt signal to siding	
NN12	no	SB Starter	
NN13	yes	SB Shunt signal from siding	located in cross passage
NN14/15a	yes	SB ‘1’ Archway; speed controlled (25); protects crossover; if 9 points are reversed, the signal will not clear until the train has almost stopped at it (NN14) (Position Detector)	
NN15b	yes	SB ‘1’ Archway; protects platform; repeater RNN15b shows permanent yellow	
NN15c	yes	SB ‘1’ Archway	
NN15d	no	SB ‘1’ Archway; last signal before crossover	
A322	yes	NB Tufnell Park - Archway; was X	
A507	yes	SB Highgate - Archway: speed controlled; was X	

If NN14/15a is spadded, the nearest accessible signal phone is at NN15b

ARCHWAY


A507
NN14
15A
NN15B
NN15C
NN15D
NN12
A319
SB
NN13
9B
9A
8B
8A
1
2
P
P
FRL
NB
A504
NN5
NN4
NN2
A326B
A326A
A322

CAMDEN TOWN

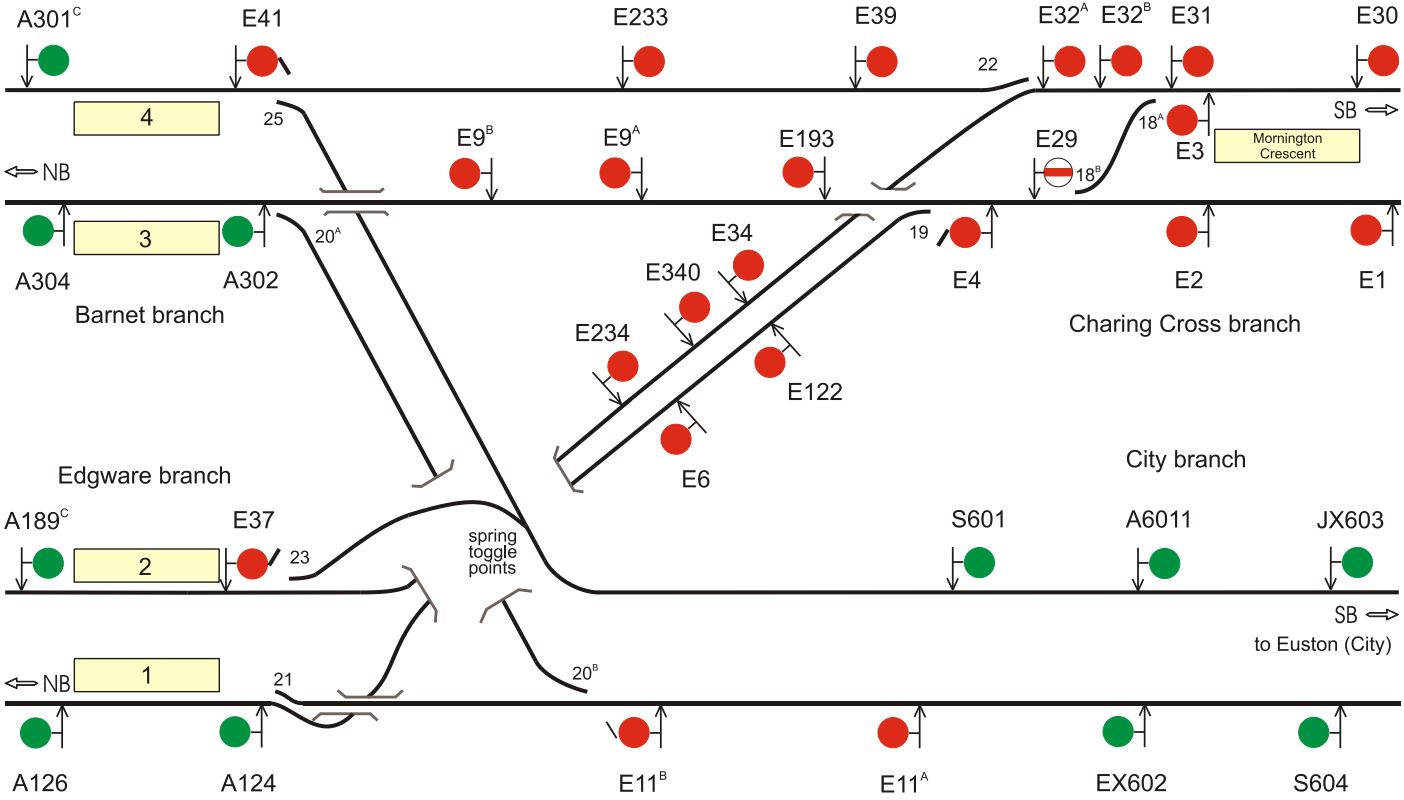
For convenience, the signals in the Camden Town / Mornington Crescent area have been divided up into three separate diagrams:
Camden Town Northbound - from E4 / EX602 to the platforms
Camden Town Southbound - from Camden Town platforms to E32b/City
Mornington Crescent - from A100 to E4; E32a to Mornington Crescent platform
Details of the diagrams where the signals are found are shown below:

E1	Mornington Crescent	E37	Camden Town Southbound
E2	Mornington Crescent	E39	Camden Town Southbound
E3	Mornington Crescent	E41	Camden Town Southbound
E4	Camden Town Northbound + Mornington Crescent	E122	Camden Town Northbound
E6	Camden Town Northbound	E193	Camden Town Northbound
E9a	Camden Town Northbound	E233	Camden Town Southbound
E9b	Camden Town Northbound	E234	Camden Town Southbound
E11a	Camden Town Northbound	E340	Camden Town Southbound
E11b	Camden Town Northbound	EX602	Camden Town Northbound
E29	Mornington Crescent	A100	Mornington Crescent
E30	Mornington Crescent	A189c	Camden Town Southbound
E31	Mornington Crescent	Gap 432	Mornington Crescent
E32a	Mornington Crescent	IMR	Mornington Crescent
E32b	Mornington Crescent	IMR	Camden Town Northbound
E34	Camden Town Southbound	IMR	Camden Town Southbound

All signal phones go to the panel in the Camden Town Supervisor's office

Permission to pass any signal at danger can now be given over the signal phone in the normal way

CAMDEN TOWN



A126 and A304 can be held at danger the spring toggle points normally lay in the middle, not set from either direction

CAMDEN TOWN NORTHBOUND

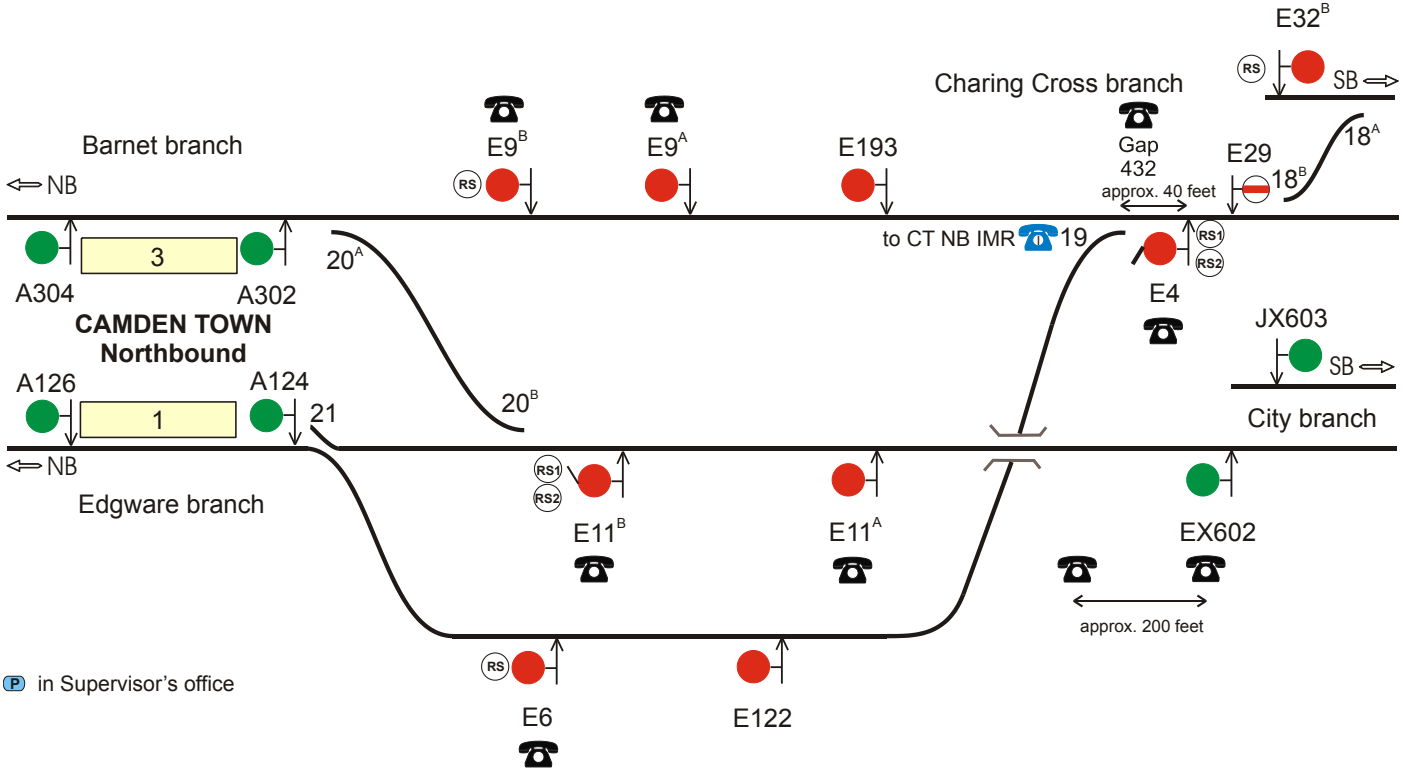
Signal phone panel locations: all signals - Supervisor's office
Bell repeated in Ops room/SSUP office: -- Panel extended to Ops room/SSUP office: --

Signal	Phone	Signal location	additional information
E4	yes	NB '3' Mornington Crescent; junction signal for CT1/CT3	
		Wrong route can be accepted after 2 minutes if no contact with Line Controller	
E6	yes	NB '1' C Town 1 (CX); last signal before junction	
E9a	yes	NB '1' C Town 3 (CX)	
E9b	yes	NB '1' C Town 3 (CX); last signal before junction	
E11a	yes	NB '1' C Town (City)	
E11b	yes	NB '1' C Town (City); junction signal for CT1/CT3;	
		Wrong route can be accepted after 2 minutes if no contact with Line Controller	
E122	no	NB '1' Camden Town 1 (CX); draw-up if E6 red	
E193	no	NB '1' Camden Town 3 (CX); draw-up if E9 red	
EX602	yes	NB Euston City - Camden Town; + overrun phone	both phones are on same panel key
Gap 432	yes	NB approx. 40 feet north of E4; overrun phone for E4	
IMR phone		NB At junction of Edgware/Barnet tunnels north of E4 (19 points) on junction wall - magneto phone labelled "Telephone to Camden Town northbound IMR only"	

The IMR phones are not used unless instructed - IMR normally unoccupied.

If EX602 is spadded, permission to proceed to the next signal can be given over the overrun signal phone.

CAMDEN TOWN NORTHBOUND



CAMDEN TOWN SOUTHBOUND

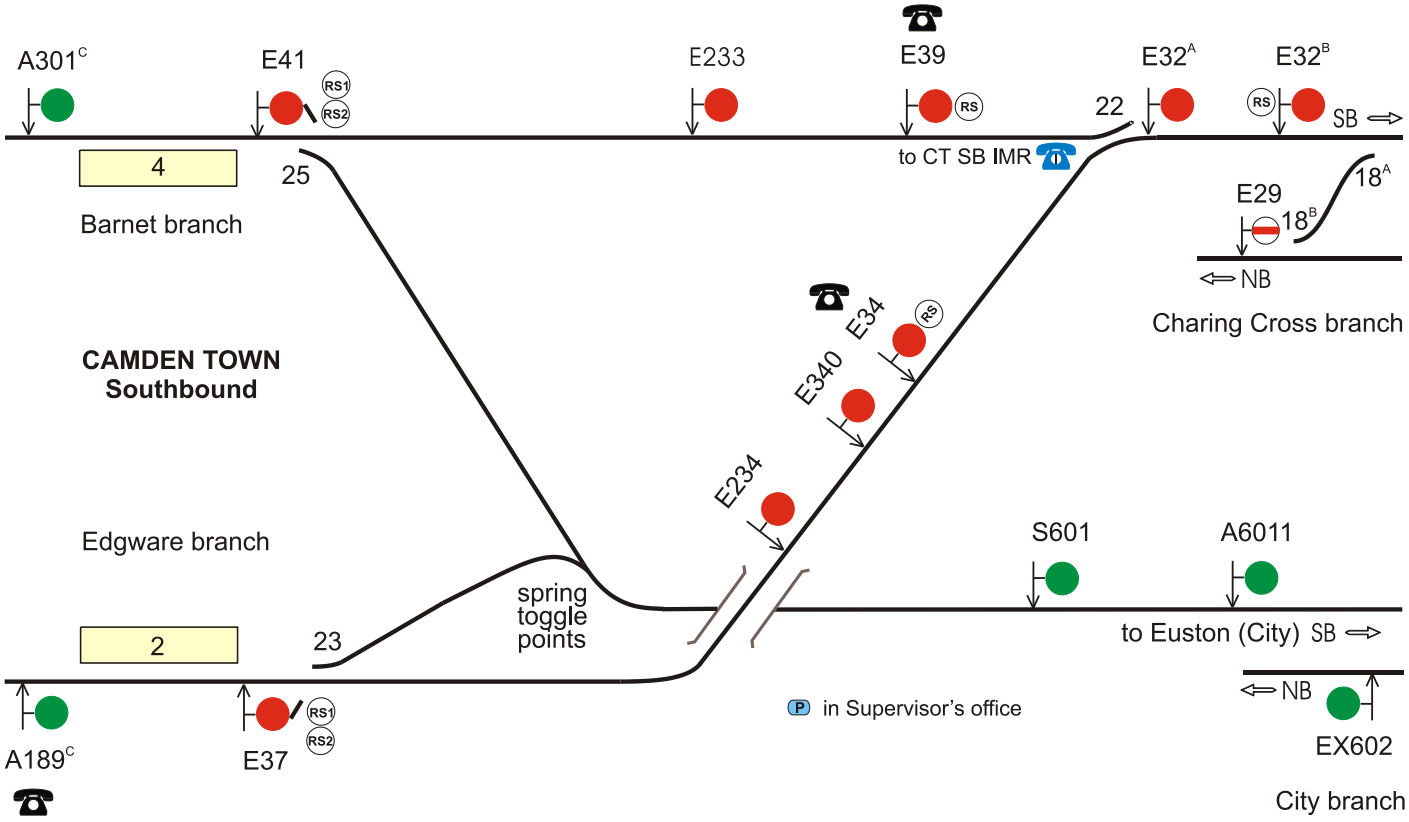
Signal phone panel locations: all signals - Supervisor's office
Bell repeated in Ops room/SSUP office: -- Panel extended to Ops room/SSUP office: --

Signal	Phone	Signal location	additional information
E34	yes	SB	CT2 - Mornington Crescent; last signal before SB CX junction
E37	no	SB	Camden Town 2 starter; junction signal
E39	yes	SB	CT4 - Mornington Crescent; last signal before SB CX junction
E41	no	SB	Camden Town 4 starter; junction signal
E233	no	SB	'3' Camden Town 4 (CX); draw-up if E39 red
E234	no	SB	'3' Camden Town 2 (CX); draw-up if E34 red
E340	no	SB	CT2 - Mornington Crescent); draw-up if E34 red
A189c	yes	SB	'1' Camden Town; Edgware branch
IMR phone		SB	At junction of SB CX branch tunnels (22 points) on junction wall - magneto phone labelled "Telephone to Camden Town southbound IMR only"

The IMR phones are not used unless instructed - IMR normally unoccupied.

If E34 or E39 is spadded, there are no signal phones between E34/E39 and Mornington Crescent station.

CAMDEN TOWN SOUTHBOUND

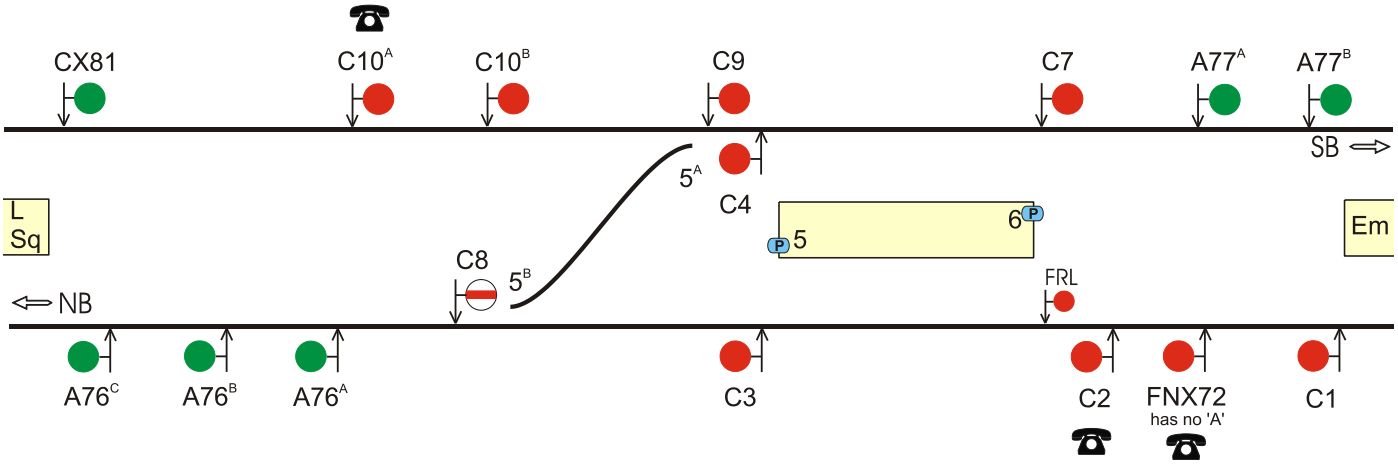


CHARING CROSS

Signal phone panel locations: NB signals - NB headwall unit; SB signals - SB headwall unit
Bell repeated in Ops room/SSUP office: **NO** Panel extended to Ops room/SSUP office: **NO**

Signal	Phone	Signal location	additional information
C1	no	NB	Embankment starter
C2	yes	NB	‘1’ Charing Cross
C3	no	NB	Starter; approach controlled
C4	no	NB	SB platform wrong road starter; SB-NB
C7	no	SB	Starter: approach controlled
C8	no	SB	Shunt signal from emergency crossover; NB-SB
C9	no	SB	‘1’ Charing Cross; between crossover and platform
C10a	yes	SB	‘1’ Charing Cross; protects the crossover
C10b	no	SB	‘1’ Charing Cross; last signal before crossover; protects the platform
CX81	no	SB	Leicester Sq. starter
FNX72	yes	NB	‘3’ Embankment / ‘1’ Charing Cross; has no illuminated ‘A’; protects the platform

CHARING CROSS

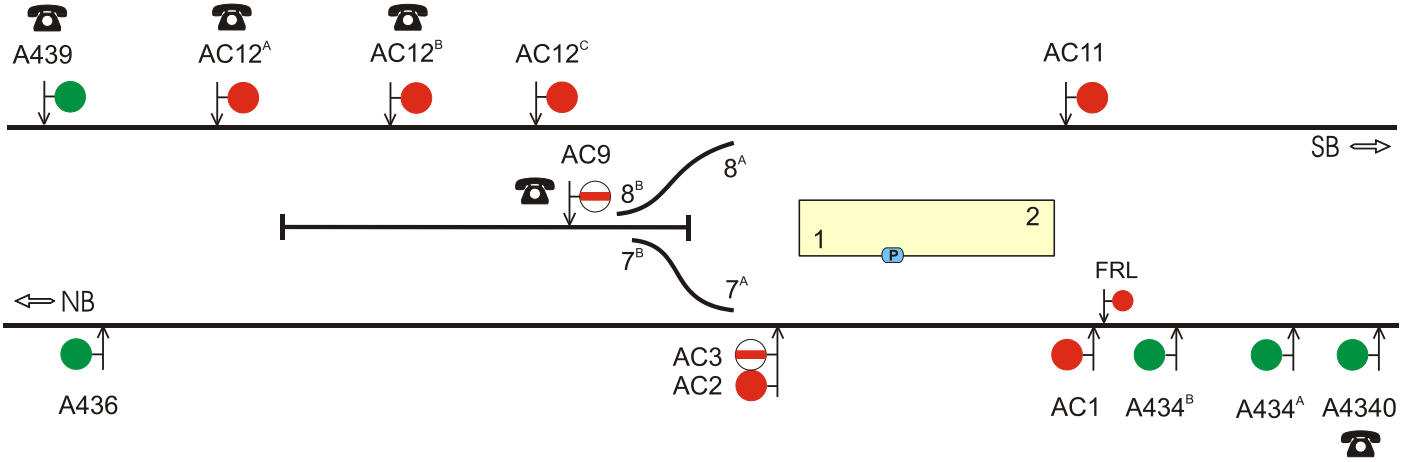


COLINDALE

Signal phone panel locations: all signals - wall adjacent to kiosk on NB platform
Bell repeated in Ops room/SSUP office: **NO** Panel extended to Ops room/SSUP office: **NO**

Signal	Phone	Signal location	additional information
AC1	no	NB ‘1’ Colindale; in platform	
AC2	no	NB Starter	
AC3	no	NB Shunt signal to siding	
AC9	yes	SB Shunt signal from siding	
AC11	no	SB Starter	
AC12a	yes	SB ‘1’ Colindale; protects crossover and platform	
AC12b	yes	SB ‘1’ Colindale	
AC12c	no	SB ‘1’ Colindale	use phone in siding?
A439	yes	SB Burnt Oak - Colindale; was X	
A4340	yes	NB Approaching Colindale; draw-up; normal aspect red; was X	

COLINDALE



A4340, A434A, A434B
normal aspect = red

EAST FINCHLEY

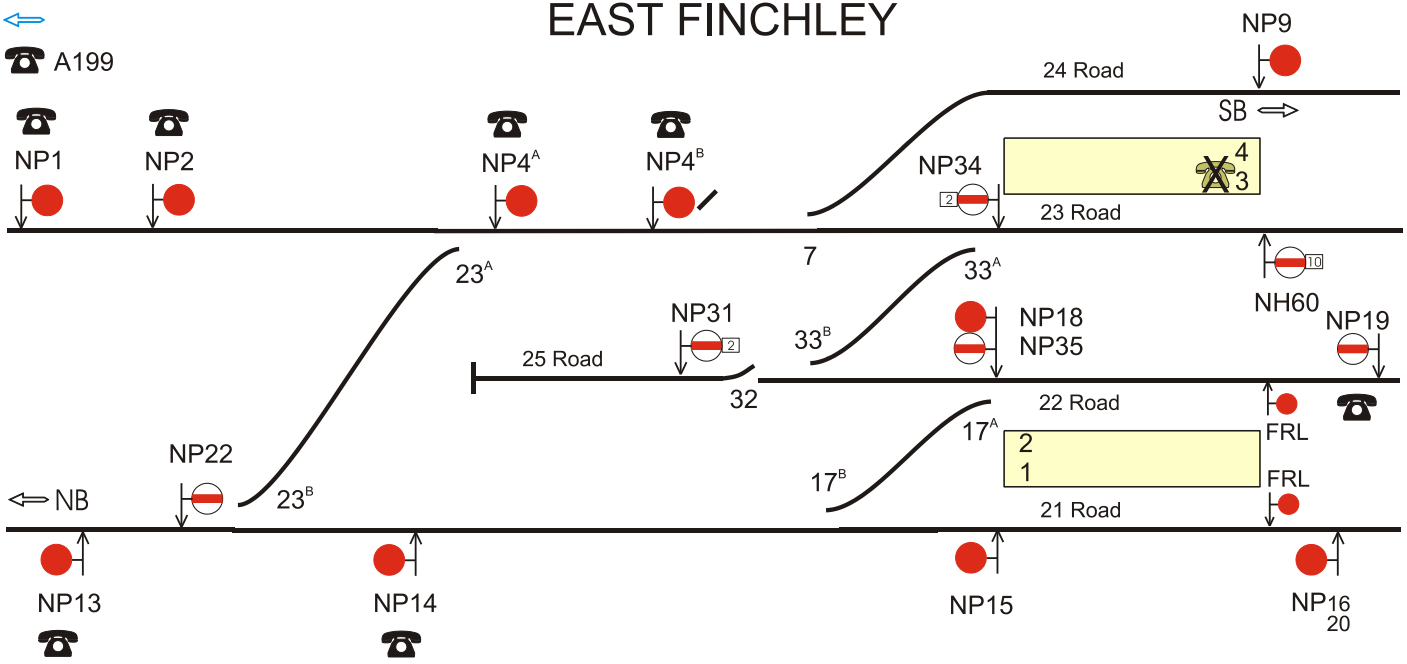
Signal phone panel locations: all signals - DMT office
Bell repeated in Ops room/SSUP office: **NO** Panel extended to Ops room/SSUP office: **NO**

Signal	Phone	Signal location	additional information
NP1	yes	SB Finchley Central - East Finchley; protects 23 crossover	
NP2	yes	SB Finchley Central - East Finchley; protects siding if 7 points normal	
NP4a	yes	SB '1' East Finchley; protects the platform	
NP4b	yes	SB '1' East Finchley	located between SB main and siding *Wrong route can be accepted after 2 minutes if no contact with Line Controller*
NP9	no	SB Platform 4; starter	
NP13	yes	NB East Finchley - Finchley Central	
NP14	yes	NB '3' East Finchley; protects crossover	
NP15	no	NB Platform 1; starter	
NP16/20	no	NB '1' East Finchley; protects 17 crossover; If 17 points are reversed, the signal will not clear until the train has almost stopped at it (NP20) (Position Detector)	
NP18	no	NB Platform 2; starter	
NP19	yes	NB '1' East Finchley; Highgate depot outlet shunt	
NP22	no	SB Shunt signal from emergency crossover NB-SB	
NP31	no	SB Shunt signal ex siding	
NP34	no	NB Platform 3; shunt signal to siding/emergency crossover	SB-NB
NP35	no	NB Platform 2; shunt signal to siding	
A199	yes	SB Finchley Central - East Finchley; was X	
A522	yes	NB '1' East Finchley; was X	
NH60	yes	SB Shunt signal to Highgate depot; direct line to DMT	not in use

HIGHGATE DEPOT

There are direct lines to the DMT office situated at the four corners of the shed. Auto phones are also provided either side at the north end of the shed.

EAST FINCHLEY



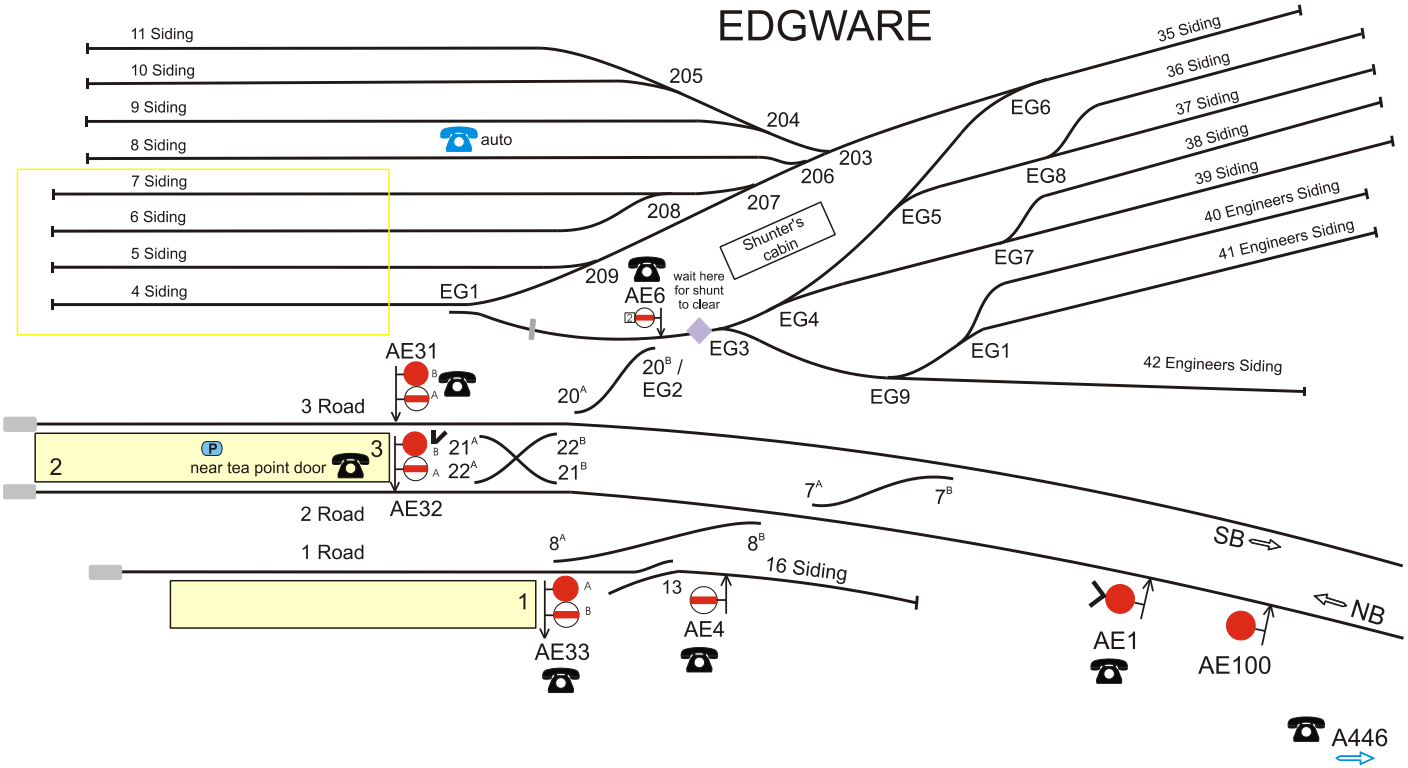
7 points are shown in the normal position.
However they will remain in their last set position and not revert to normal after the passage of a train.

(P) in DMTs office

EDGWARE

Signal phone panel locations: all signals - kiosk on platform 2/3
Bell repeated in Ops room/SSUP office: **YES** Panel extended to Ops room/SSUP office: **NO**

Signal	Phone	Signal location	additional information
AE1	yes	NB '1' Edgware; junction signal	
AE4	yes	NB Shunt signal from 16 siding	
AE6	yes	NB Shunt signal from depot	
AE31a	yes	SB Platform 3; shunt signal to depot	
AE31b	yes	SB Platform 3; starter	
AE32a	yes	SB Platform 2; shunt signal to depot	labelled "station supervisor" - to SS office
AE32b	yes	SB Platform 2; starter	labelled "station supervisor" - to SS office
AE33a	yes	SB Platform 1; starter	
AE33b	yes	SB Platform 1; shunt signal to 16 siding	
AE100	no	NB '1' Edgware; draw-up	
A446	yes	NB Burnt Oak - Edgware; was X	
AUTO		Edgware depot 7/8 roads on shed side of walkway	



all EG..... and 2XX points are handworked
20[B] / EG2 are the same points and are power operated
there are two sets of points shown as EG1 in the depot

EUSTON CITY

Signal phone panel locations: all Euston area signals - SB headwall platform 6
Bell repeated in Ops room/SSUP office: **YES** Panel extended to Ops room/SSUP office: **NO**

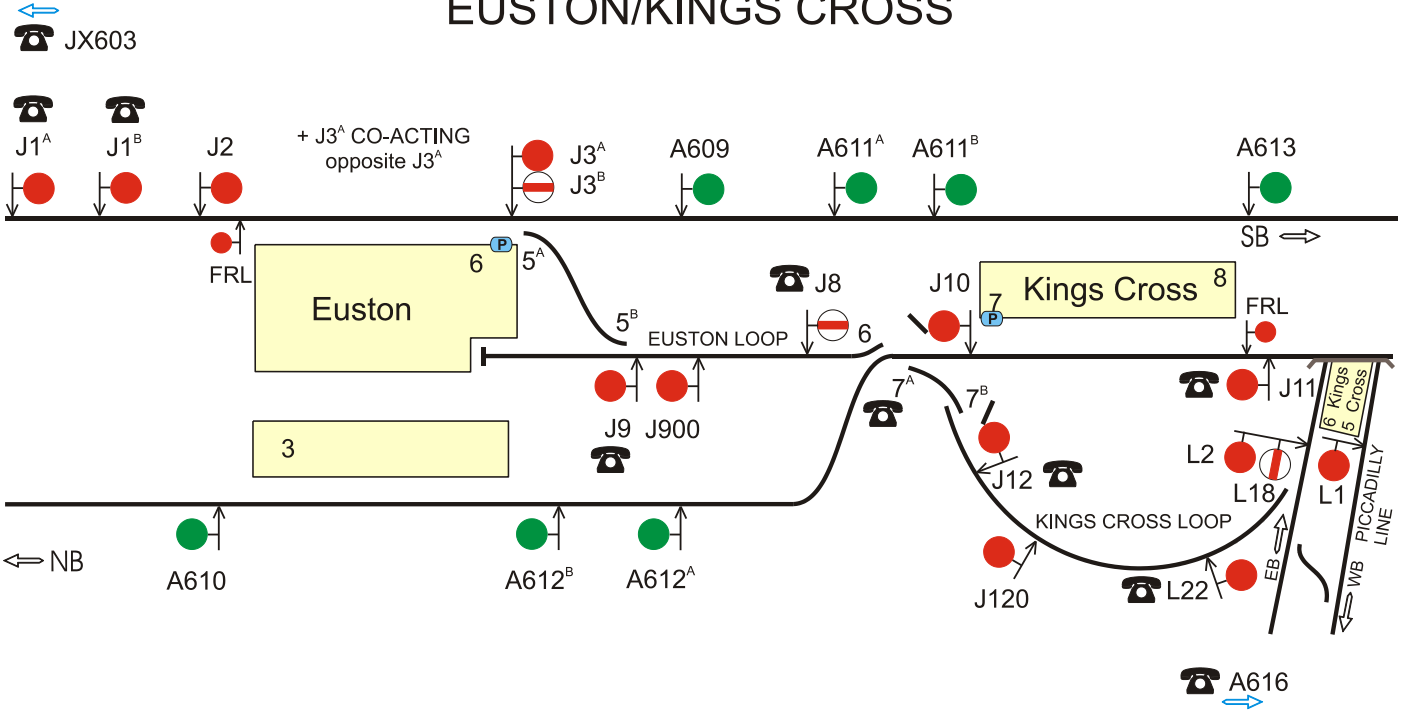
Signal	Phone	Signal location	additional information
J1a	yes	SB '1' Euston City; protects NB move ex Euston loop	
J1b	yes	SB '1' Euston City; protects the platform	
J2	no	SB '1' Euston City	
J3a	no	SB Euston City starter; also has J3a co-acting signal	
J3b	no	SB Shunt signal Euston City - Euston loop	
J8	yes	SB Shunt signal Euston loop - KX loop	
J9	yes	NB Euston loop; colour signal to Euston City SB platform	not accessible from track level
J900	no	NB Euston loop; draw-up	
JX603	yes	SB Camden Town - Euston City	

KINGS CROSS

Signal phone panel locations: all Kings Cross area signals - NB headwall platform 7
Bell repeated in Ops room/SSUP office: **NO** Panel extended to Ops room/SSUP office: **NO**

Signal	Phone	Signal location	additional information
J10	no	NB Kings Cross starter; junction signal; app. controlled; a train can be signalled to exit the Euston or KX loop if a train is detected stopped at J10	
J11	yes	NB '1' Kings Cross; held at danger if route set from Euston or KX loop (J8/J12)	
J12	yes	NB Kings Cross loop; exit to Northern Line; junction signal for NB main / Euston loop	
J120	no	NB Kings Cross loop; draw-up	
A616	yes	NB Angel - Kings Cross	
7A points	yes	NB Near KX loop entrance	
L22	yes	EB Kings Cross loop; exit to Piccadilly Line	goes to panel on EB Piccadilly platform

EUSTON/KINGS CROSS



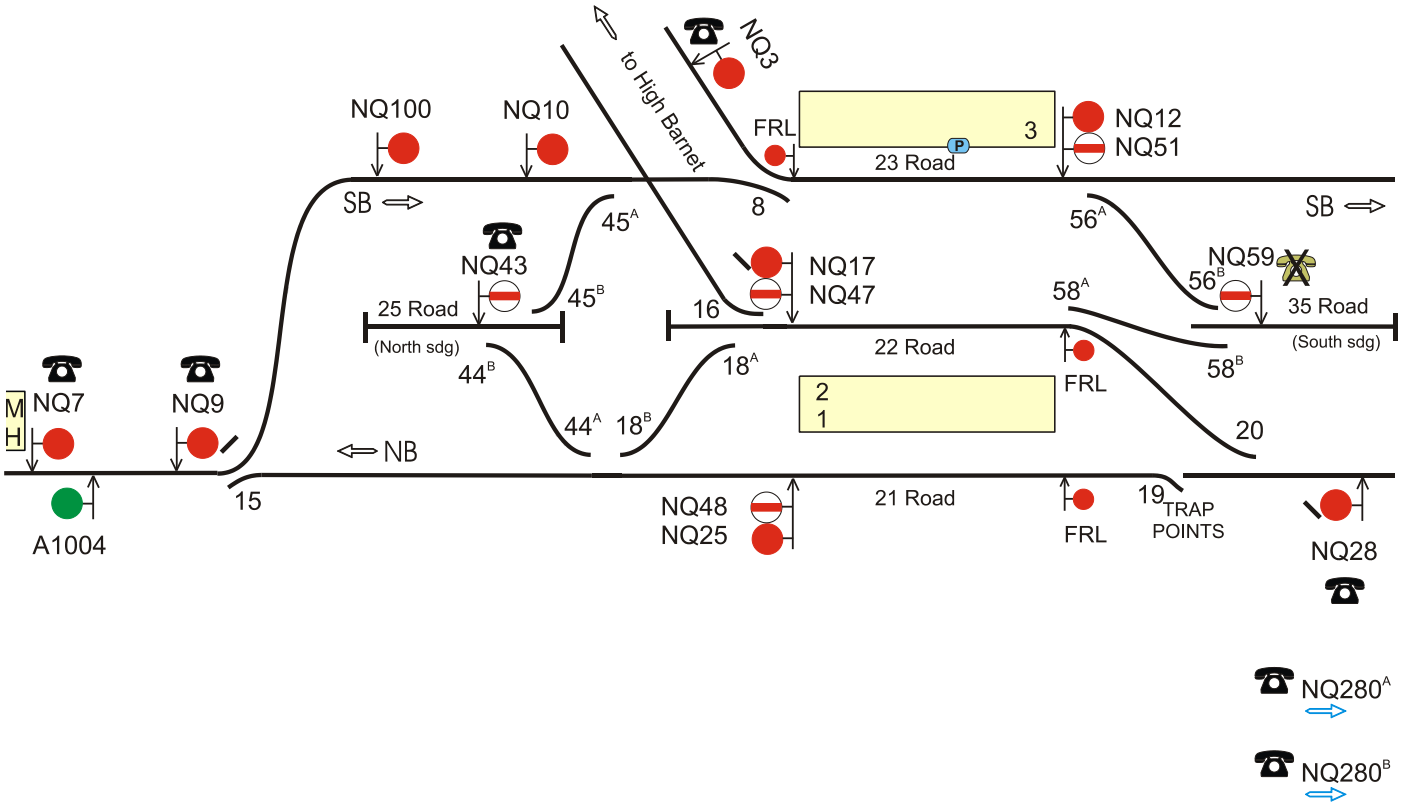
all J signals are worked via the Euston IMR

FINCHLEY CENTRAL / MILL HILL EAST

Signal phone panel locations: all signals - on wall adjacent to Supervisor's office, platform 3 Finchley Central
Bell repeated in Ops room/SSUP office: **NO** Panel extended to Ops room/SSUP office: **NO**

Signal	Phone	Signal location	additional information
NQ3	yes	SB '1' Finchley Central ex High Barnet; last signal before crossover; protects the crossover	
NQ7	yes	SB Mill Hill East starter	
NQ9	yes	SB Junction signal ex Mill Hill for FC1/FC3	
NQ10	no	SB '1' Finchley Central ex Mill Hill; last signal before crossover use phone in siding?	
NQ12	no	SB Platform 3; starter	
NQ17	no	NB Platform 2; starter; junction signal for Mill Hill/High Barnet; approach controlled	
NQ25	no	NB Platform 1; starter	
NQ28	yes	NB '1' Finchley Central; junction signal for FC1/FC2 *Wrong route can be accepted after 2 minutes if no contact with Line Controller*	
NQ43	yes	SB Shunt signal ex north siding	
NQ47	no	NB Platform 2; shunt signal to north siding	
NQ48	no	NB Platform 1; shunt signal to north siding	
NQ51	no	SB Platform 3; shunt signal to south siding	
NQ59	yes	NB Shunt signal from south siding	currently decommissioned
NQ100	no	SB '1' Finchley Central ex Mill Hill; draw-up	
NQ280a	yes	NB '1' Finchley Central; draw-up	280a and 280b are on same panel key
NQ280b	yes	NB '1' Finchley Central; draw-up	280a and 280b are on same panel key
NQ300	no	SB '1' Finchley Central ex High Barnet	
NQX201	no	SB West Finchley starter	

FINCHLEY CENTRAL



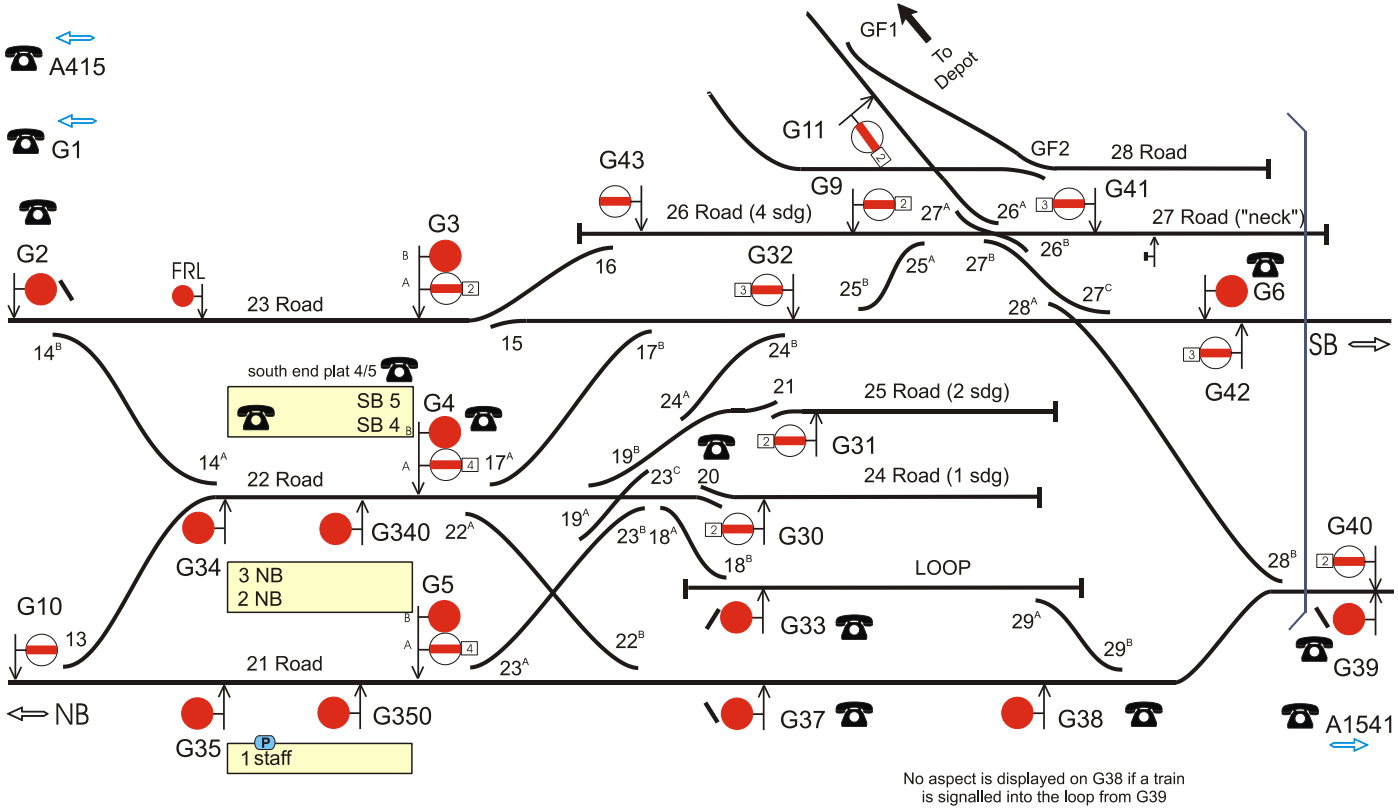
GOLDERS GREEN

Signal phone panel locations: all signals - on wall adjacent to DMTs office
Bell repeated in Ops room/SSUP office: **NO** Panel extended to Ops room/SSUP office: **NO**

Signal	Phone	Signal location	additional information
G1	yes	SB '1' Golders Green	
G2	yes	SB '1' Golders Green; junction signal for GG4/GG5; protects platform	
G3a	no	SB Platform 5; shunt signal	use phone at G4a or direct line to DMT
G3b	no	SB Platform 5; starter	use phone at G4a or direct line to DMT
G4a	yes	SB Platform 3/4; shunt signal	
G4b	yes	SB Platform 3/4; starter	
G5a	no	SB Platform 1/2; shunt signal	
G5b	no	SB Platform 1/2; starter	
G6	yes	SB '3' G Green; last signal before tunnel	G6 and G42 share the same phone
G9	no	SB Shunt signal from 26 Rd (4 siding)	
G10	no	SB Shunt signal from emergency crossover NB-SB	
G11	no	SB Shunt signal; depot outlet	
G30	yes	NB Shunt signal from 24 Rd (1 siding)	phone is north of walkboards - for 24/25
G31	yes	NB Shunt signal from 25 Rd (2 siding)	phone is north of walkboards - for 24/25
G32	no	NB Shunt signal; NB from SB main to platform 2-5	use 24/25 road phone?
G33	yes	NB Junction signal from loop to GG2 or GG3	
G34	no	NB Platform 3; starter	use direct line to DMT - north end of GG4
G35	no	NB Platform 2; starter	
G37	yes	NB Junction signal from main to platforms 1/2 or 3/4	
G38	yes	NB '1' NB main; no aspect if train signalled into loop; protects 23 crossover	
G39	yes	NB Junction signal to main or loop; last signal in tunnel	G39/G40 share the same phone
G40	yes	NB Shunt signal in tunnel to 26 Rd or depot	G39/G40 share the same phone

continued

GOLDERS GREEN

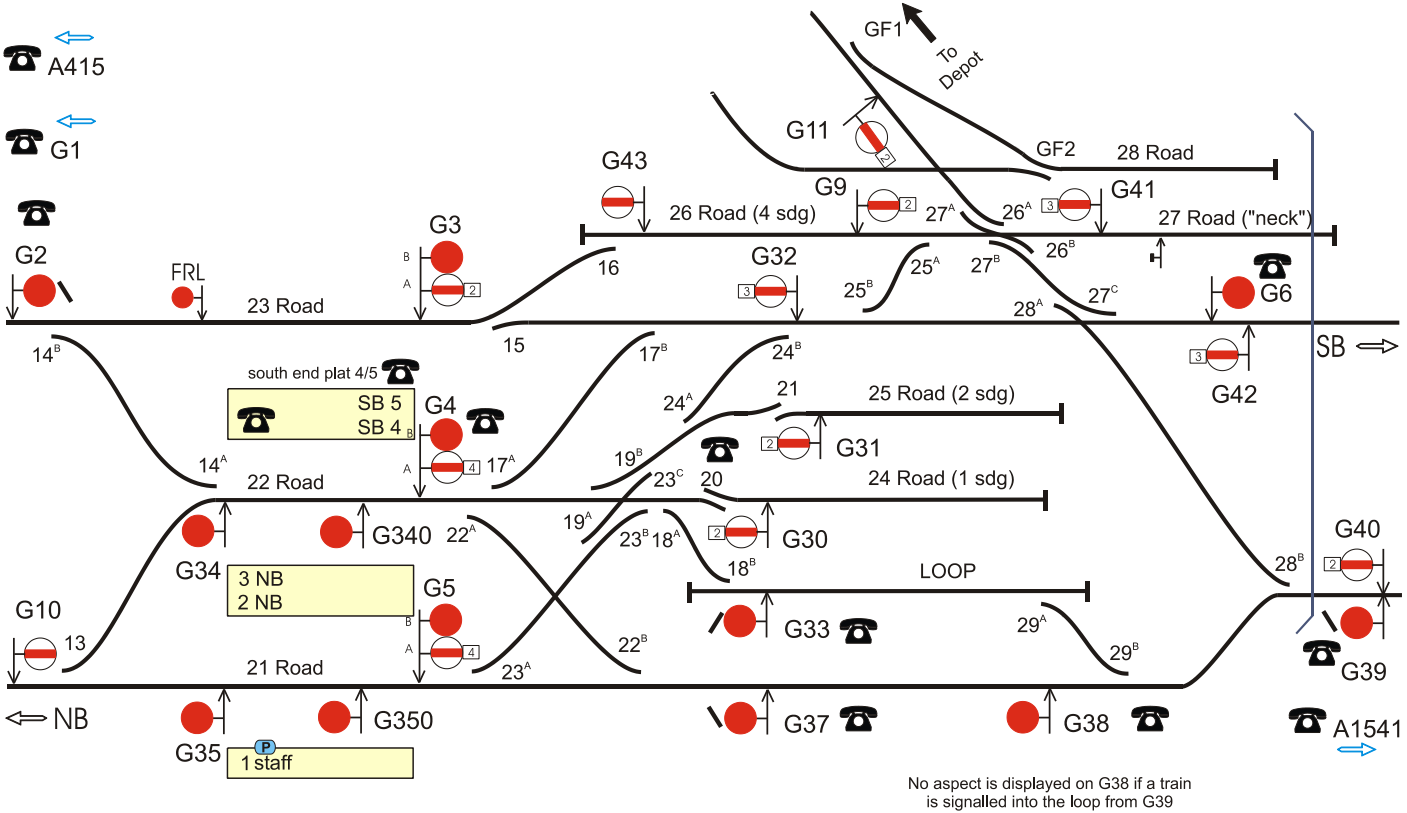


GOLDERS GREEN continued

Signal phone panel locations: all signals - on wall adjacent to DMTs office
Bell repeated in Ops room/SSUP office: **NO** Panel extended to Ops room/SSUP office: **NO**

Signal	Phone	Signal location	additional information
G41	no	NB Shunt signal from 27 Rd (shunting neck)	
G42	yes	NB Shunt signal on NB main opposite G6; SB-NB	G6 and G42 share the same phone
G43	no	NB Shunt signal from 26 Rd (4 siding) to platform 5	
G200	no	SB ‘1 Golders Green; draw-up	
G340	no	NB In platforms 3/4; draw-up	
G350	no	NB In platforms 1/2; draw-up	
A415	yes	SB Brent Cross - Golders Green; was X	
A1541	yes	NB Bull and Bush station; was X	
DMT		SB Direct line to DMT at south end of platforms 4/5	

GOLDERS GREEN

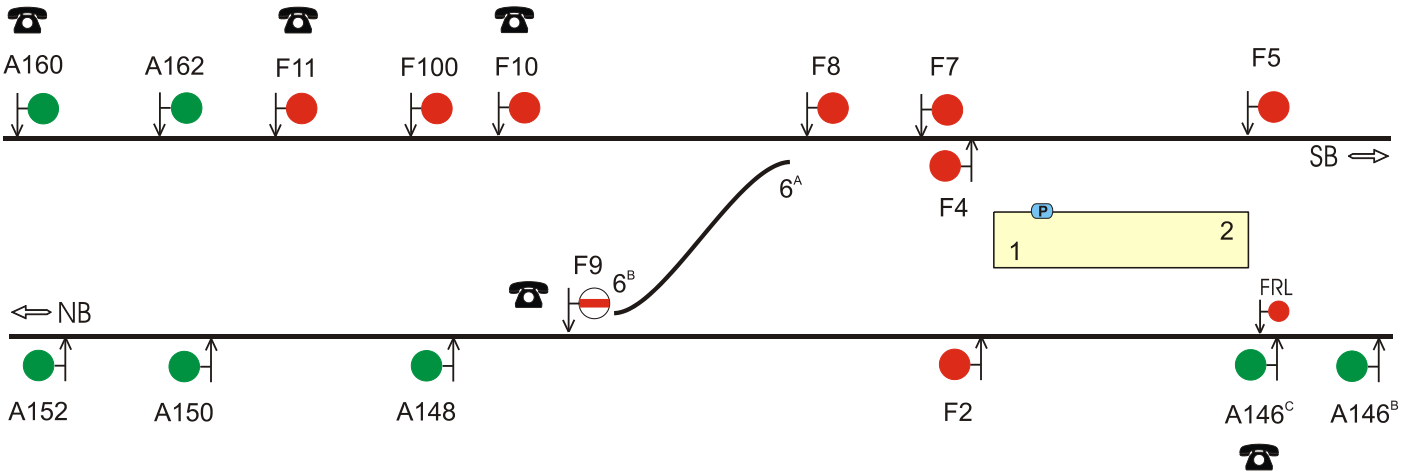


HAMPSTEAD

Signal phone panel locations: all signals - kiosk north end SB platform
Bell repeated in Ops room/SSUP office: YES Panel extended to Ops room/SSUP office: **NO**

Signal	Phone	Signal location	additional information
F2	no	NB Starter; approach controlled	
F4	no	NB SB platform wrong road starter; SB-NB	
F5	no	SB Starter; approach controlled	
F7	no	SB '1' Hampstead; between crossover and platform	
F8	no	SB '1' Hampstead; between crossover and platform	
F9	yes	SB Shunt signal from emergency crossover; NB-SB	F9 and F10 are on same panel key
F10	yes	SB '1' Hampstead; last signal before crossover; protects platform	F9 and F10 are on same panel key
F11	yes	SB Bull and Bush - Hampstead; protects crossover	
F100	no	SB '1' Hampstead; draw-up	
A146c	yes	NB '1' Hampstead; was X	
A160	yes	SB Bull and Bush starter; was X	

HAMPSTEAD

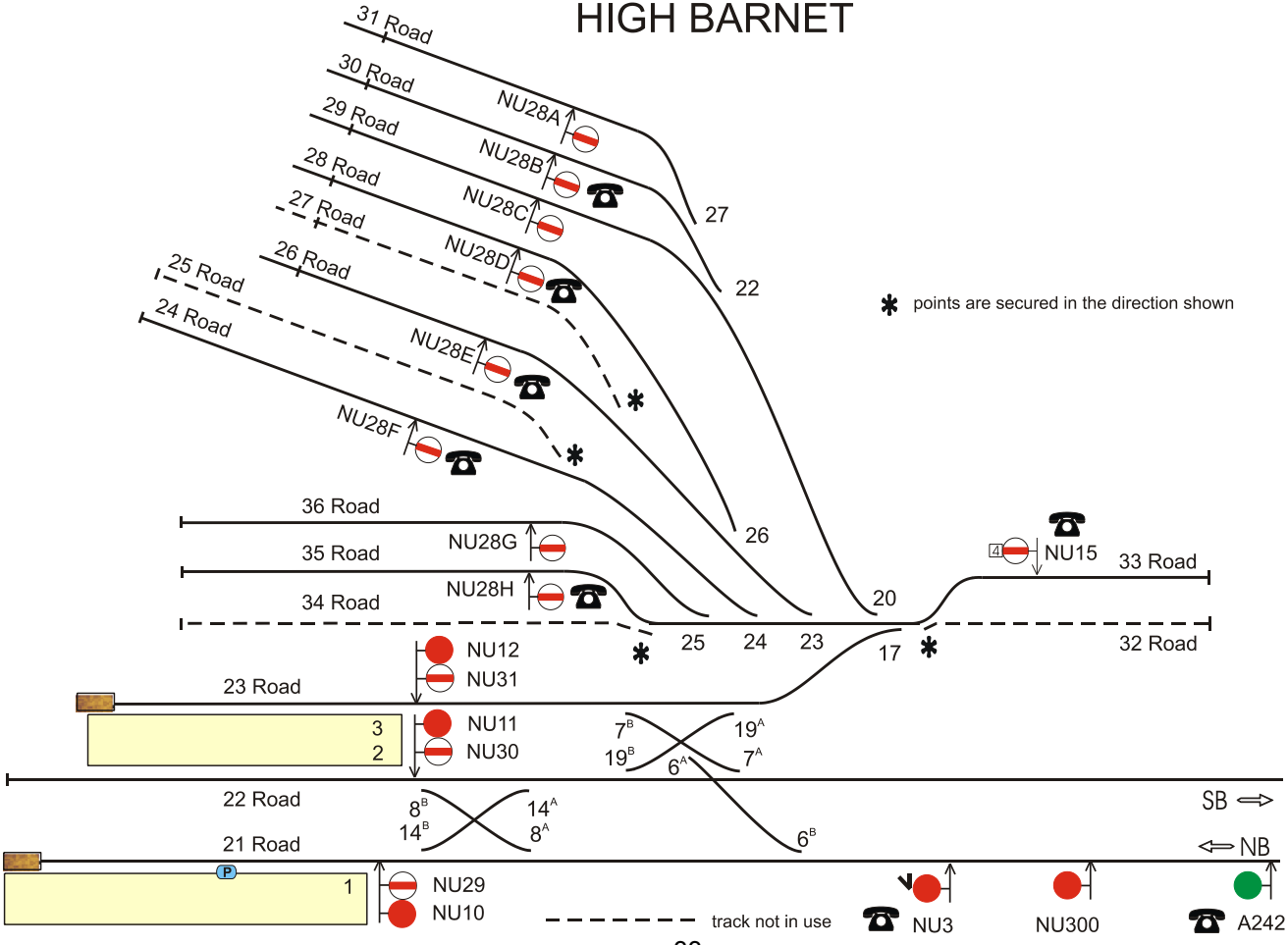

A160
A162
F11
F100
F10
F8
F7
F5
SB
F4
6A
P
1
2
F9
6B
FRL
NB
A152
A150
A148
F2
A146C
A146B

HIGH BARNET

Signal phone panel locations: all signals - kiosk on platform 1
Bell repeated in Ops room/SSUP office: **NO** Panel extended to Ops room/SSUP office: **NO**

Signal	Phone	Signal location	additional information
NU3	yes	NB '1' High Barnet; junction signal	
NU10	no	SB Platform 1 starter	
NU11	no	SB Platform 2 starter	
NU12	no	SB Platform 3 starter	
NU15	yes	NB Shunt signal from 33 road (shunting neck)	
NU28a-b	yes	SB Shunt signal in depot - 30-31 roads	sidings phones are located at NU28b, d,
NU28c-d	yes	SB Shunt signal in depot - 28-29 roads	e, f, h. These are labelled on the panel as:
NU28e	yes	SB Shunt signal in depot - 26 road	28AB, 28C, 28 DE, 28F, 28GH.
NU28f	yes	SB Shunt signal in depot - 24 road	(the original labelling prior to the
NU28g-h	yes	SB Shunt signal in depot - 35-36 roads	expansion of the depot)
NU29	no	SB Platform 1; shunt signal to depot	
NU30	no	SB Platform 2; shunt signal to depot	
NU31	no	SB Platform 3; shunt signal to depot	
NU300	no	NB '1' High Barnet; draw-up	
A242	yes	NB Totteridge - High Barnet; was X	

HIGH BARNET


31 Road
30 Road
29 Road
28 Road
27 Road
26 Road
25 Road
24 Road
NU28A
NU28B
NU28C
NU28D
NU28E
NU28F
27
22
26
20
36 Road
35 Road
34 Road
NU28G
NU28H
25
24
23
17
NU15
33 Road
32 Road
NU12
NU31
23 Road
3
2
NU11
NU30
7B
19A
19B
7A
6A
22 Road
8B
14A
14B
8A
6B
SB
21 Road
NB
P
1
NU29
NU10
track not in use
NU3
NU300
A242
points are secured in the direction shown

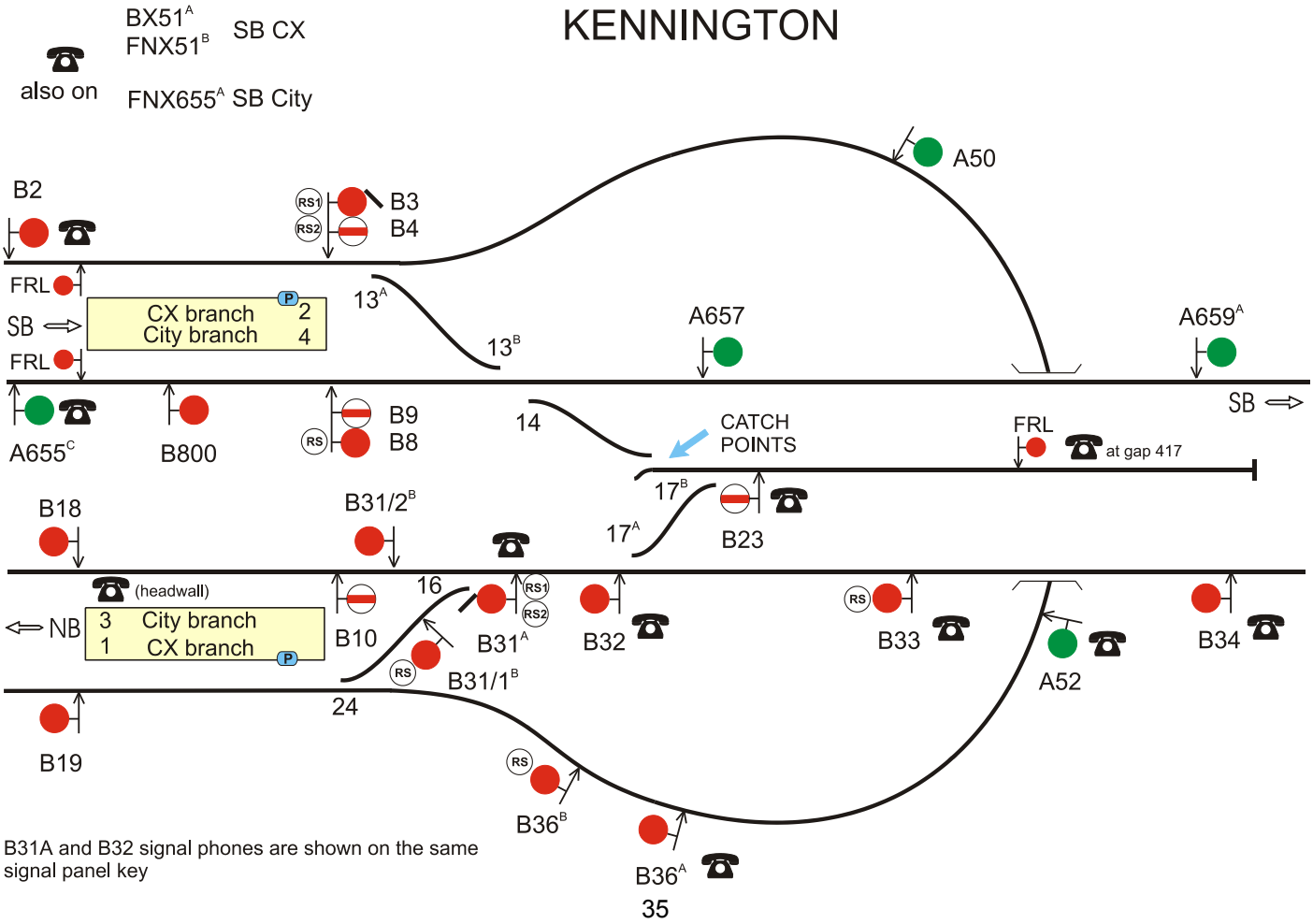
KENNINGTON

Signal phone panel locations: all NB signals - NB tailwall area KN1; all SB signals - SB headwall area KN2
Bell repeated in Ops room/SSUP office: **NO** Panel extended to Ops room/SSUP office: **NO**
No bell repeater to Ops room/SSUP office if the tunnel telephone wires are operated in the siding

Signal	Phone	Signal location	additional information
B2	yes	SB '1' Kennington 2 (CX); inner home	in horizontal box with white stripes on top on opposite tunnel wall
B3	no	SB Platform 2 (CX) starter; junction signal for loop/main; approach controlled	
B4	no	SB Platform 2 (CX) ; shunt signal to siding; approach controlled	
B8	no	SB Platform 4 (City) starter	
B9	no	SB Platform 4 (City); shunt signal to siding	
B10	no	SB Platform 3 (City); shunt signal to siding	
B18	yes	NB Platform 3 (City) starter; approach controlled	direct line to Station Supervisor
B19	no	NB Platform 1 (CX) starter	
B23	yes	NB Shunt signal from siding	B23 / gap 417 are on the same panel key
		B23 also has a direct line telephone to the Station Supervisor	
B31a	yes	NB '1' Kennington; junction signal for KN1/KN3	B31a and B32 are on the same panel key
		Wrong route can be accepted after 2 minutes if no contact with Line Controller	
B31/1b	no	NB '1' Kennington 1 (CX); between junction of NB main and loop	
B31/2b	no	NB '1' Kennington 3 (City)	
B32	yes	NB '1' Kennington; first signal after crossover; outer home for KN1 and KN3; protects platform	B31a and B32 are on the same panel key
B33	yes	NB Oval - Kennington; last signal before siding crossover	
B34	yes	NB '3' Oval; protects the siding	
B36a	yes	NB Kennington loop: Outer home for KN1; protects the crossover and platform	
B36b	no	NB Kennington loop outlet; last signal before crossover	
B800	no	SB Kennington 4 (City); draw-up in platform	

continued

KENNINGTON



B31A and B32 signal phones are shown on the same signal panel key

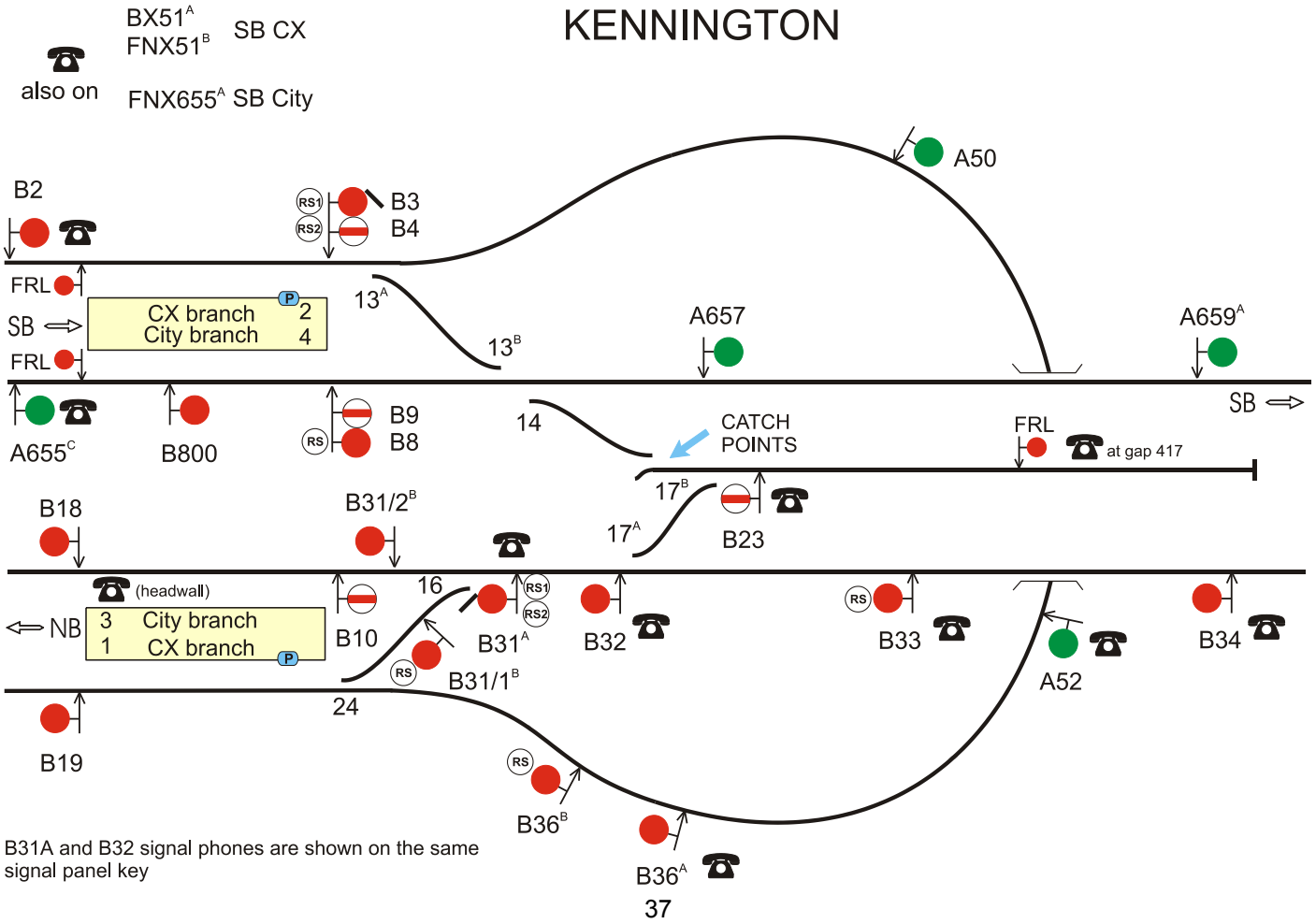
KENNINGTON continued

Signal phone panel locations: all NB signals - NB tailwall area KN1; all SB signals - SB headwall area KN2
Bell repeated in Ops room/SSUP office: **NO** Panel extended to Ops room/SSUP office: **NO**
No bell repeater to Ops room/SSUP office if tunnel telephone wires operated in siding

Signal	Phone	Signal location	additional information
BX51a	yes	SB '1' Kennington 2 (CX)	
BX660	no	NB Oval starter	
FNX51b	yes	SB '1' Kennington 2 (CX)	currently out of use (flood only?)
FNX655a	yes	SB '1' Kennington 4 (City)	goes to separate box near panel
FNX655b	no	SB '1' Kennington 4 (City)	
A52	yes	NB Kennington Loop; was X	
A655c	yes	SB '1' Kennington 4 (City)	
at gap 417	yes	Mid way in siding - at original location of B24/B25	B23 / gap 417 are on the same panel key

B2 signal phone

KENNINGTON



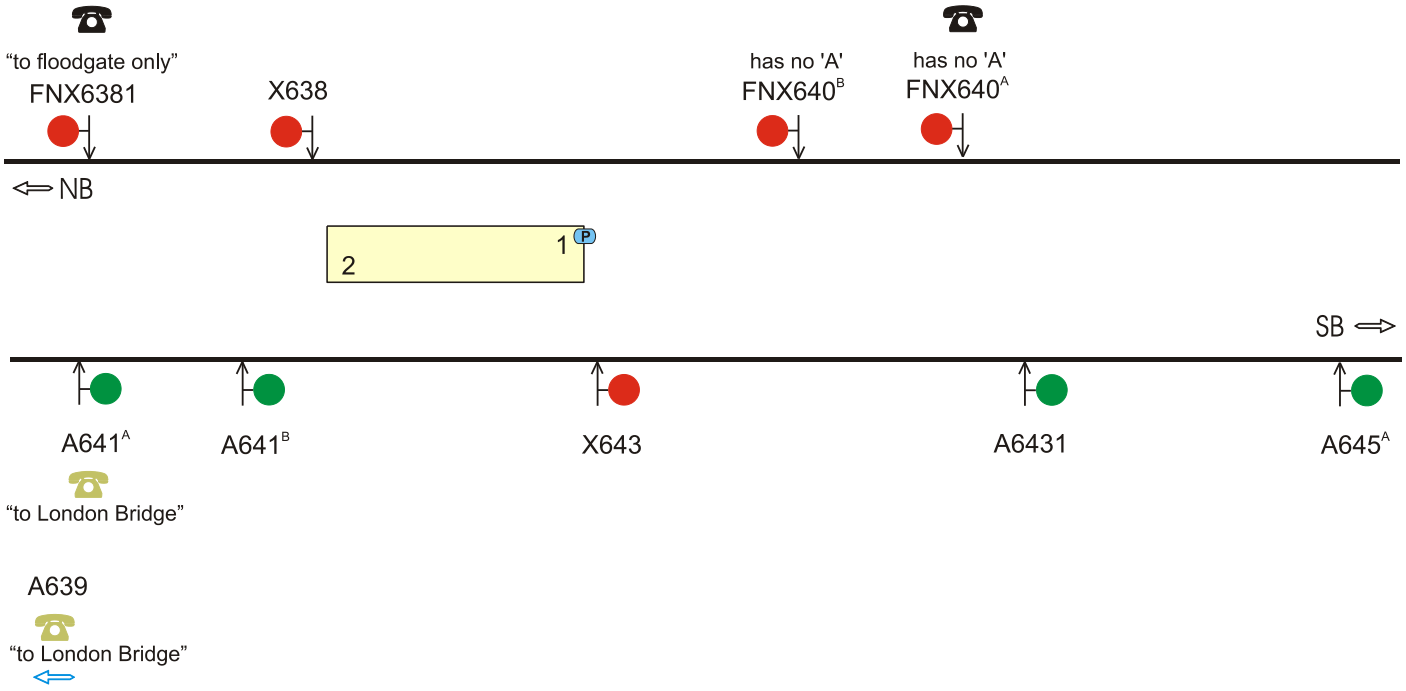
B31A and B32 signal phones are shown on the same signal panel key

LONDON BRIDGE

Signal phone panel locations: FNX640a - NB tailwall
Bell repeated in Ops room/SSUP office: **NO** Panel extended to Ops room/SSUP office: **NO**

Signal	Phone	Signal location	additional information
FNX640a	yes	NB '1' London Bridge; has no illuminated 'A'	labelled "to London Bridge"; key on panel
FNX6381	yes	NB '3' London Bridge	labelled "to floodgate only"
X638	no	NB Starter; can be held at danger	
X643	no	SB Starter; can be held at danger	
A639	yes	SB Bank-London Bridge; was FNX	"D"; labelled "to London Bridge"
		no known connection at London Bridge - redundant?	
A641a	yes	SB Bank-London Bridge; was FNX	"D"; labelled "to London Bridge"
		no known connection at London Bridge - redundant?	

LONDON BRIDGE



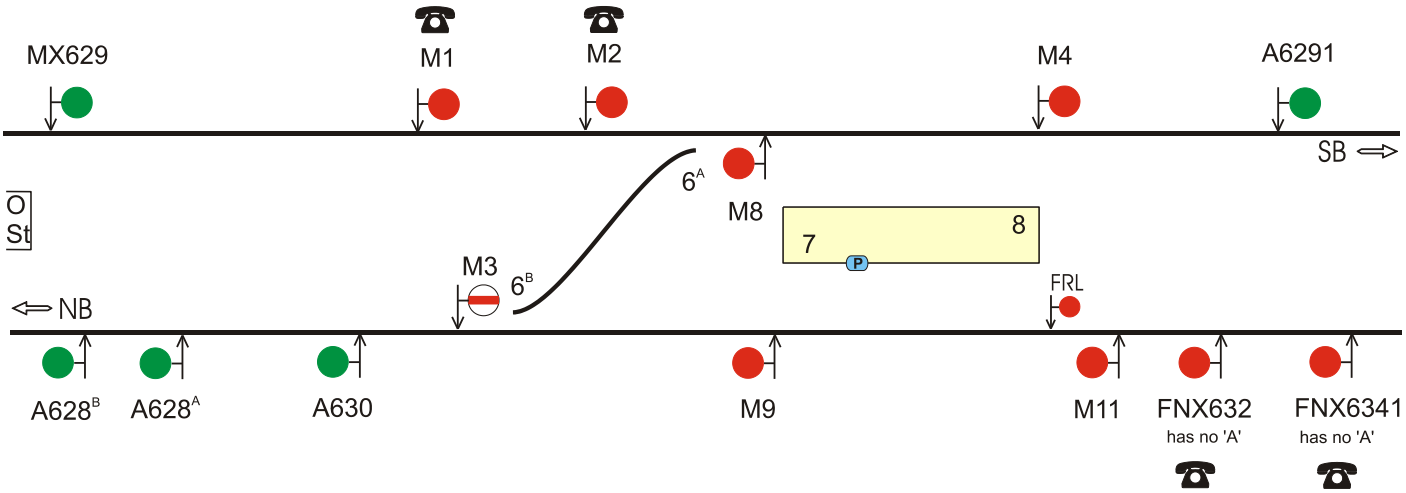
Note:
This diagram is shown according to the physical layout of the track, with the tracks swapped over.
The NB track is at the top of the diagram, the SB track is at the bottom.

MOORGATE

Signal phone panel locations: all signals - kiosk wall on NB platform
Bell repeated in Ops room/SSUP office: **YES** Panel extended to Ops room/SSUP office: **NO**

Signal	Phone	Signal location	additional information
M1	yes	SB ‘1’ Moorgate; protects crossover and platform	
M2	yes	SB ‘1’ Moorgate; last signal before crossover	
M3	no	SB Shunt signal from emergency crossover; NB-SB	
M4	no	SB Starter	
M8	no	NB SB platform wrong road starter; SB-NB - may not clear if train not fully berthed at south stopping mark (Position Detector)	
M9	no	NB Starter	
M11	no	NB ‘1’ Moorgate	
MX629	no	SB Old Street starter	
FNX632	yes	NB ‘1’ Moorgate - has no illuminated ‘A’	labelled “to Moorgate”; on MG panel
FNX6341	yes	NB Bank - Moorgate - has no illuminated ‘A’	labelled “to Moorgate”; on MG panel

MOORGATE

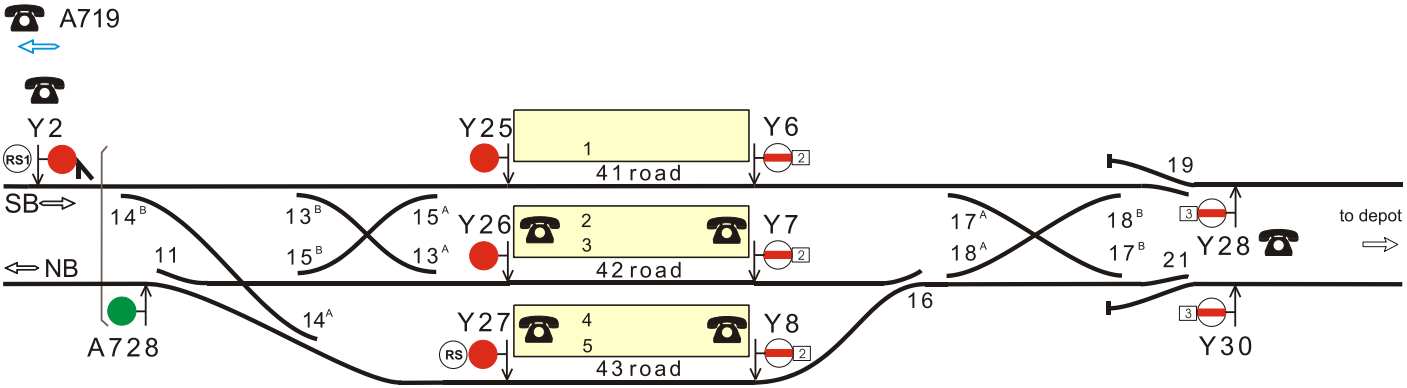

MX629
M1
M2
M4
A6291
SB
O
St
6A
M8
8
7
P
M3
6B
FRL
NB
A628B
A628A
A630
M9
M11
FNX632
has no 'A'
FNX6341
has no 'A'

MORDEN

Signal phone panel locations: all signals - DMT office
Bell repeated in Ops room/SSUP office: **NO** Panel extended to Ops room/SSUP office: **NO**

Signal	Phone	Signal location	additional information
Y2	yes	SB Junction signal to platform 2, 3 or 5	
Y6	yes	SB Platforms 1/2; shunt signal to depot	Direct line to DMT on platform 2/3
Y7	yes	SB Platforms 3/4; shunt signal to depot	Direct line to DMT on platform 2/3
Y8	yes	SB Platform 5; shunt signal to depot	Direct line to DMT on platform 5
Y25	yes	NB Platforms 1/2 starter	Direct line to DMT on platform 2/3
Y26	yes	NB Platforms 3/4 starter	Direct line to DMT on platform 4
Y27	yes	NB Platform 5 starter	Direct line to DMT on platform 4
Y28	yes	NB Shunt signal ex depot 44 Rd (south side)	Situated between 44/45 roads
Y30	yes	NB Shunt signal ex depot 45 Rd (north side)	Situated between 44/45 roads
A719	yes	SB South Wimbledon to Morden; was X	

MORDEN



P in DMTs office

MORNINGTON CRESCENT

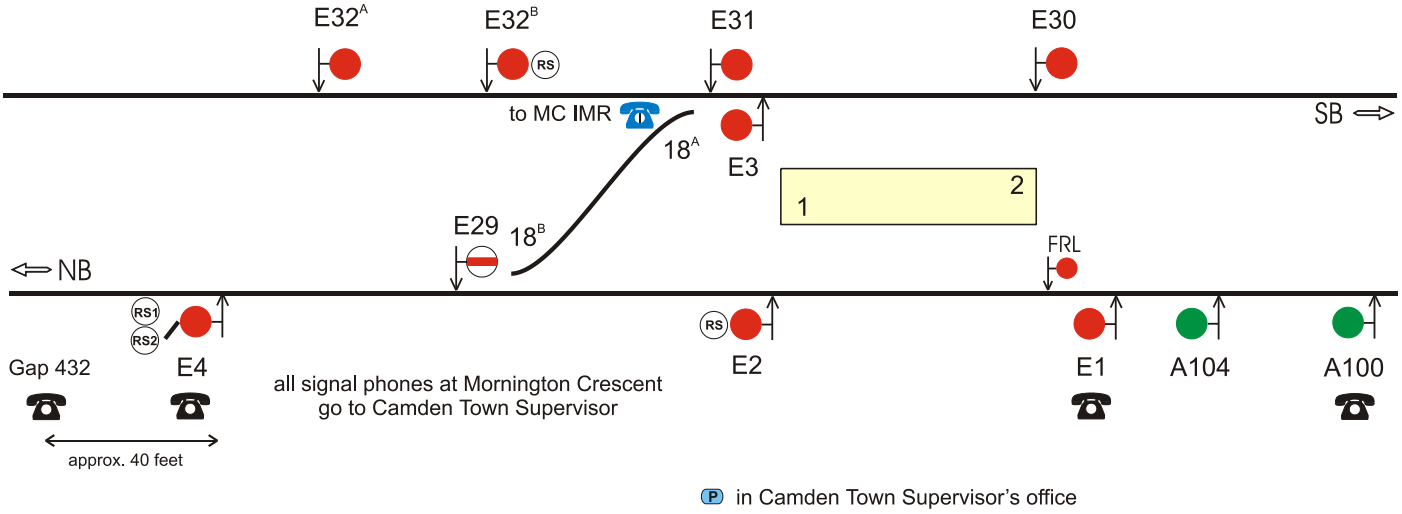
Signal phone panel locations: all signals - Camden Town Supervisor's office
Bell repeated in Ops room/SSUP office: **NO** Panel extended to Ops room/SSUP office: **NO**

Signal	Phone	Signal location	additional information
E1	yes	NB	'1' Mornington Crescent
E2	no	NB	Starter; approach controlled; may clear in advance if train speed is <20mph on entry
E3	no	NB	SB platform wrong road starter; SB-NB
E4	yes	NB	'3' Mornington Crescent; junction signal for Edg/HB *Wrong route can be accepted after 2 minutes if no contact with Line Controller*
E29	no	SB	Shunt signal from emergency crossover; NB-SB
E30	no	SB	Starter; approach controlled; may clear in advance if train speed is <20mph on entry
E31	no	SB	'1' Mornington Crescent; between crossover and platform
E32a	no	SB	'1' Mornington Crescent; first signal after SB junction; protects the crossover
E32b	no	SB	'1' Mornington Crescent; last signal before crossover; protects the platform
A100	yes	NB	'1' Mornington Crescent; was X
Gap 432	yes	NB	approx. 40 feet north of E4; overrun phone for E4
IMR phone		SB	At south end of emergency crossover (18a points) on junction wall - magneto phone labelled "Telephone to Mornington Crescent IMR only"

The IMR phones are not used unless instructed - IMR normally unoccupied

If the signal phone at E4 is unavailable, secure the train and use the signal phone at the rail gap - Gap 432. This signal phone is on a separate circuit

MORNINGTON CRESCENT

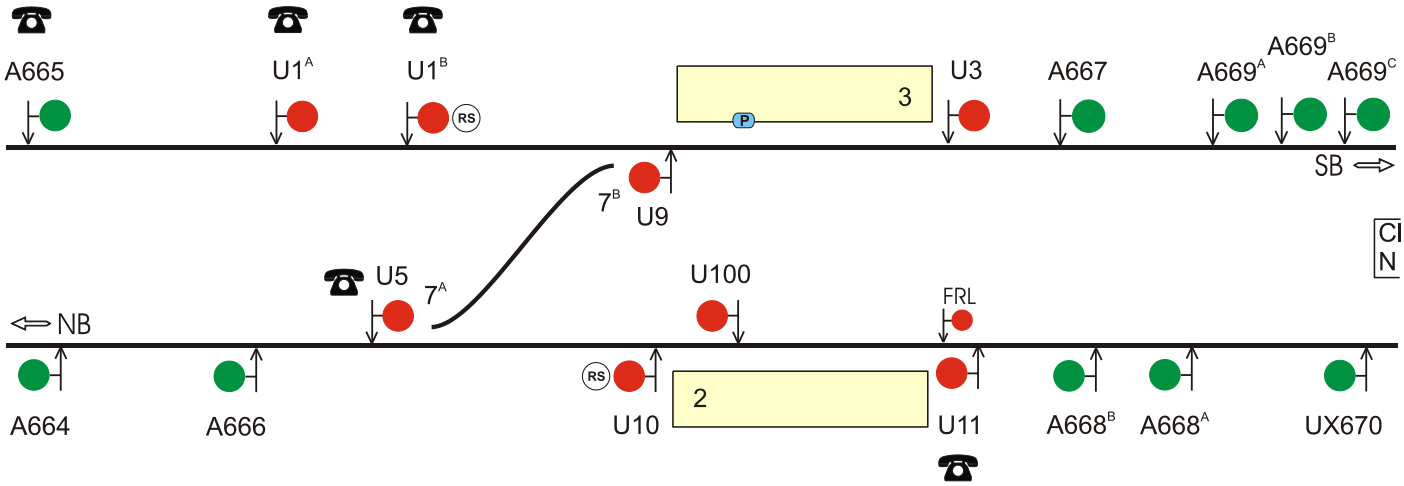


STOCKWELL

Signal phone panel locations: all signals - door marked 3/242 in cross passage at north end of SB platform
Bell repeated in Ops room/SSUP office: **YES** Panel extended to Ops room/SSUP office: **NO**

Signal	Phone	Signal location	additional information
U1a	yes	SB '1' Stockwell; protects crossover and platform	
U1b	yes	SB '1' Stockwell; last signal before crossover	
U3	no	SB Starter	
U5	yes	SB Colour signal from emergency crossover; NB-SB	
U9	no	NB SB platform wrong road starter; SB-NB	
U10	no	NB Starter; approach controlled	
U11	yes	NB '1' Stockwell; speed signal if crossover in use	
U100	no	NB In platform; draw-up; normally goes to yellow when U11 clears - acts as a draw-up if crossover in use	
UX670	no	NB Clapham North starter	
A665	yes	SB Between Oval and Stockwell; was X	

STOCKWELL


A665
U1A
U1B
RS
3
P
U3
A667
A669A
A669B
A669C
SB
7B
U9
U5
7A
U100
FRL
NB
RS
2
A664
A666
U10
U11
A668B
A668A
UX670

TOOTING BROADWAY

Signal phone panel locations: all signals - NB tailwall unit
Bell repeated in Ops room/SSUP office: **YES** Panel extended to Ops room/SSUP office: **NO**
No bell repeater to Ops room/SSUP office if the tunnel telephone wires are operated in the siding

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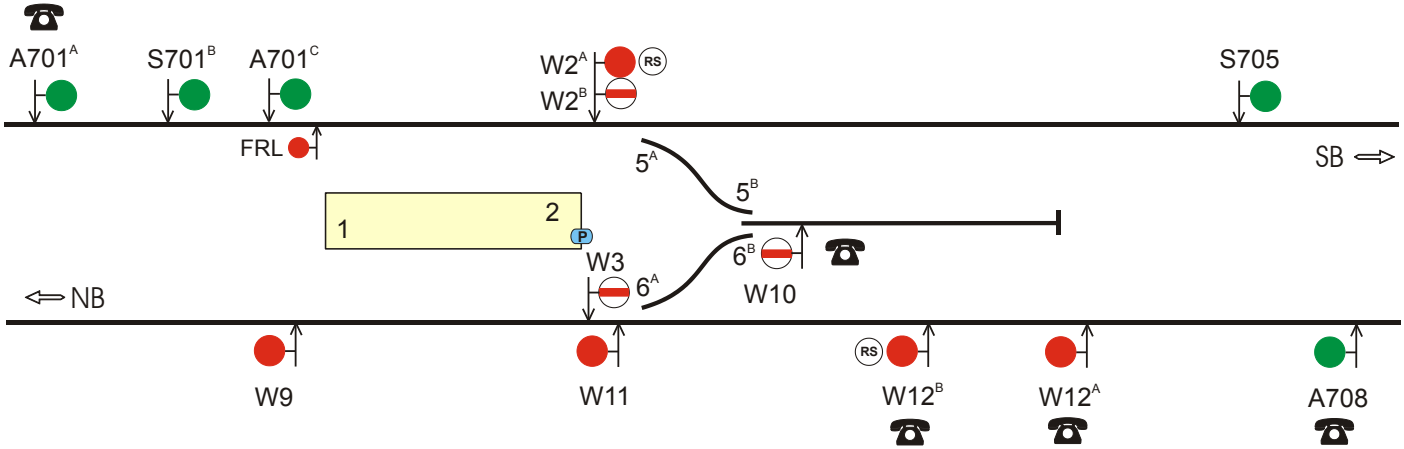
Signal	Phone	Signal location	additional information
W2a	no	SB Starter; approach controlled	
W2b	no	SB SB platform; shunt signal to siding	
W3	no	SB NB platform; shunt signal to siding	
W9	no	NB Starter	
W10	yes	NB Shunt signal from siding	
W11	no	NB ‘1’ Tooting Broadway; between crossover and platform	
W12a	yes	NB ‘1’ Tooting Broadway; protects siding and platform	
W12b	yes	NB ‘1’ Tooting Broadway; last signal before crossover	
A701a	yes	SB ‘1’ Tooting Broadway; was X	
A708	yes	NB Colliers Wood - Tooting Broadway; was X	

TOOTING BROADWAY



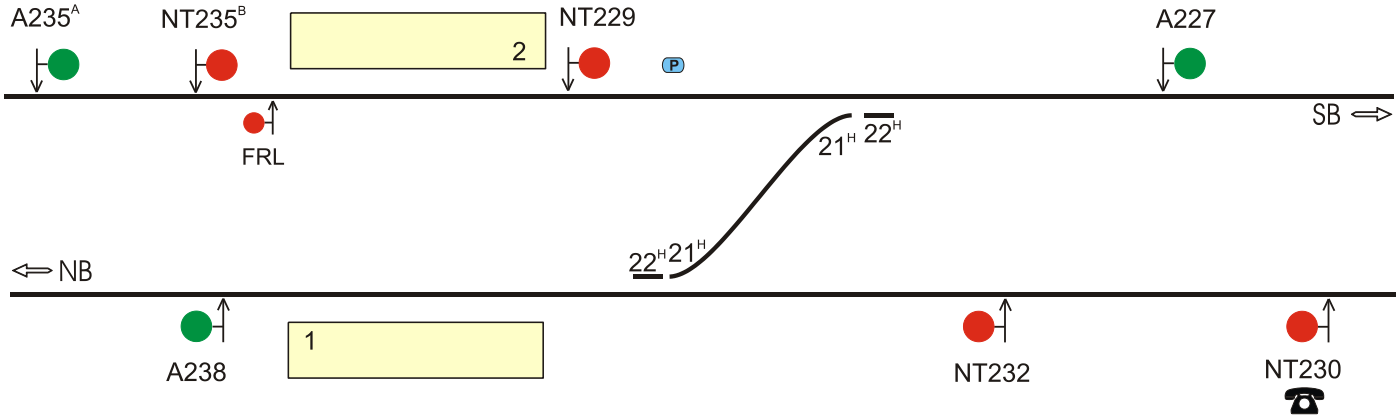
TOTTERIDGE

Signal phone panel locations: NT230 - at ground frame
Bell repeated in Ops room/SSUP office: **NO** Panel extended to Ops room/SSUP office: **NO**

Signal	Phone	Signal location	additional information
NT229	no	NB Starter	
NT230	yes	NB '1' Totteridge; protects crossover	
NT232	no	NB '1' Totteridge	
NT235b	no	SB '1' Totteridge	

All NT signals have an illuminated 'A' and are operated locally from a ground frame

TOTTERIDGE



Totteridge is operated from a ground frame.
All NT signals have an illuminated 'A'.

FNX** flood signals

Flood signals are situated between Kennington and Tottenham Court Road / Moorgate. They are controlled separately from the rest of the controlled signals - at Bull and Bush.

Most FNX signals have illuminated ‘A’s. The rest usually have a signal phone that goes to the normal panel at the station in advance.

Many FNX signals have phones, but other than those shown as going to the station panel, it can be assumed that there will be no answer from these phones if they are used, if indeed they actually work. They generally go to a separate box at the station or to the floodgate. Some of these may be magneto operated.

Identification of the signal phone at these signals varies. Some are in standard boxes, some are in large boxes, some boxes have a black ‘X’ on them, some have stripes and some are not labelled. Some signals also have a “squashed D” symbol nearby. Other than at London Bridge, the “D” is not mentioned in the text.

All the flood signals are listed below. Where they form part of the controlled area diagram, they are duplicated on the relevant page as well.

It is possible that there may be a signal phone in the vicinity of a FNX station starter, e.g. at Elephant & Castle NB. Unless visible, these are not mentioned. There may be other floodgate related phones - a direct line to the floodgate controller, for example. It is assumed that these are all redundant.

FNX** flood signals

Signal	Phone	Signal location	additional information
FNX51b	yes	SB ‘1’ Kennington 2 (CX)	currently out of use (flood only?)
FNX55	yes	SB Waterloo - Kennington	large box; no label
FNX62b	no	NB ‘1’ Waterloo NB; speed signal if platform occupied	
FNX62c	no	NB ‘1’ Waterloo	
FNX62d	no	NB ‘1’ Waterloo	
FNX62e	no	NB ‘1’ Waterloo	
FNX64	no	NB Waterloo starter	
FNX65	no	SB Waterloo starter	
FNX67a	yes	SB ‘1’ Waterloo	white box before signal; no label
FNX67b	yes	SB ‘1’ Waterloo	white box before signal; no label
FNX67c	yes	SB ‘1’ Waterloo	“D”; white box before signal; no label
FNX72	yes	NB ‘3’ Embankment / ‘1’ CX; no illuminated ‘A’	large box; no label; Charing Cross panel
FNX75	no	SB Leicester Square starter	
FNX78	no	NB Leicester Square starter	
FNX80a	yes	NB ‘1’ Tottenham Court Road	labelled “headwall only
FNX80b	yes	NB ‘1’ Tottenham Court Road	black ‘X’; no label
FNX80c	yes	NB ‘1’ Tottenham Court Road	black ‘X’; no label
FNX85	no	SB Tottenham Court Road starter	
FNX87b	no	SB ‘1’ Tottenham Court Road	
FNC87c	yes	SB ‘1’ Tottenham Court Road	black ‘X’; no label
FNX632	yes	NB ‘1’ Moorgate; has no illuminated ‘A’	labelled “to Moorgate”; Moorgate panel
FNX634	no	NB Bank Starter	
FNX635c	no	SB ‘1’ Bank	
FNX636a	yes	NB ‘1’ Bank	“D”; labelled “to floodgate only”
FNX637	no	SB Bank starter	
FNX640a	yes	NB ‘1’ London Bridge; has no illuminated ‘A’	labelled “to London Bridge”; LB panel
FNX640b	no	NB ‘1’ London Bridge; has no illuminated ‘A’	

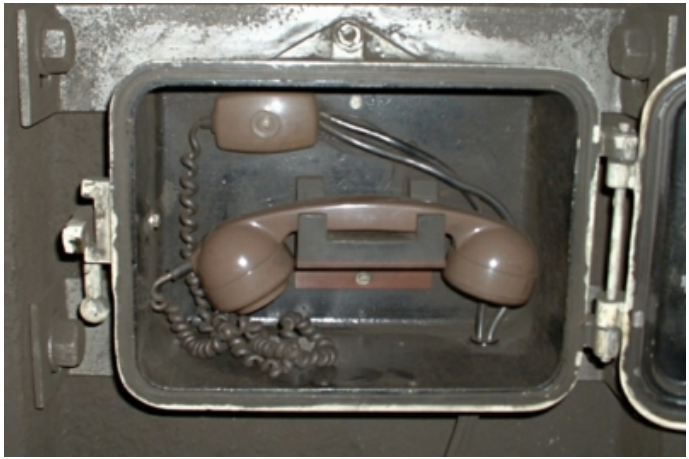
Signal	Phone	Signal location	additional information
FNX651	yes	SB Elephant & Castle starter	on headwall; unlabelled box; labelled inside “to floodgate controller”
FNX655a	yes	SB ‘1’ Kennington 4 (City)	Kennington panel *
FNX655b	no	SB ‘1’ Kennington 4 (City)	
FNX6341	yes	NB Bank - Moorgate; has no illuminated ‘A’	labelled “to Moorgate”; Moorgate panel
FNX6371	yes	SB ‘3’ Bank	large box; labelled “to floodgate”
FNX6381	yes	NB ‘3’ London Bridge	labelled “to floodgate only”

Miscellaneous floodgate phone locations

* FNX655a has been diverted adjacent to the panel at Kennington 2.

Miscellaneous automatic signals

A639	yes	SB	Bank-London Bridge; was FNX *no known connection at London Bridge - redundant?*	“D”; labelled “to London Bridge”
A641a	yes	SB	Bank-London Bridge; was FNX *no known connection at London Bridge - redundant?*	“D”; labelled “to London Bridge”
A615	yes	SB	Kings Cross - Angel *used to go to Angel before the new station was built; no known connection at Angel - redundant?*	not labelled;
A616	yes	NB	Angel - Kings Cross	labelled “to Kings Cross”; KX panel



Standard style signal phone - at B31a - shows the correct position of the handset before and after use.
Hold handset vertical to use.
Make sure the door is securely latched closed after use.

FNX6381 Signal phone
"To floodgate only"

New vertical style signal phone

Magneto telephone at Edgware / Barnet Branch CX junction
- to Northbound IMR at Camden Town