

## Notes to Signalmen

**These notes contain:**

### **1. A Regional Schematic Map**

This map shows the Main Line and Loop Line passenger stations on the route, the major industries and the location of significant destinations in the surrounding area.

This map is useful for gaining familiarity with the layout of the route and for identifying the points of origin and destination of trains passing through the route.

### **2. Schematic Map of Signal Box Locations**

This map shows the relative location of all Signal Boxes on the route. The type of signal box, as described in the Operation manual, is identified.

This map also includes those locations which have a 'yard shunter' to manage points in a yard. These 'yard shunters' operate in a similar manner to Auxiliary signal boxes as described in the Operation Manual. They have a track plan for control of points, but no block instruments.

### **3. Signal Box Control Panels and Notes**

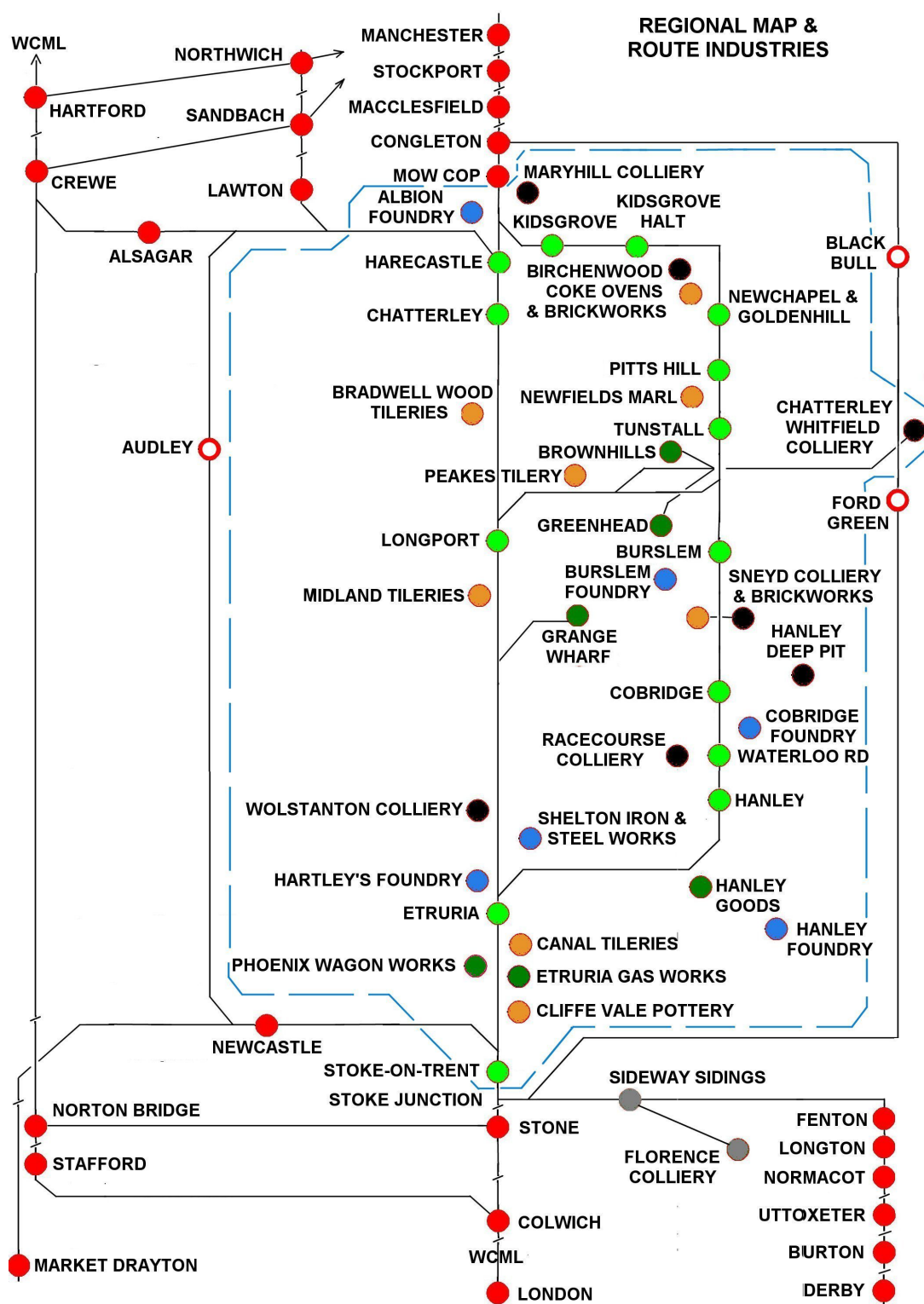
The signal Box Control Panel for each Signal Box or 'yard shunter' shows the track layout under its control including the location of points, signals, key infrastructure items such as stations, goods sheds etc. and where appropriate, level crossings, turntables. Arrows indicating the location from which tracks enter the signal box's home section and where departing tracks go, as well as the status of each track (main line, goods etc) and the usual direction of travel are also shown.

Placing the cursor over these items in the in-game Signal Box Control Panel will give descriptive details of the item.

Notes describing the principle features of each location, including industries served and the principal functions of the signal box, are provided, as well as any special operating procedures required for effective operation of each signal Box..

A guide to the complexity of operating each box when switched IN LINE is also given. Operational difficulty is rated from 1 - Easy to 5 - Particularly complex.

# 1. Regional Map and Route Industries

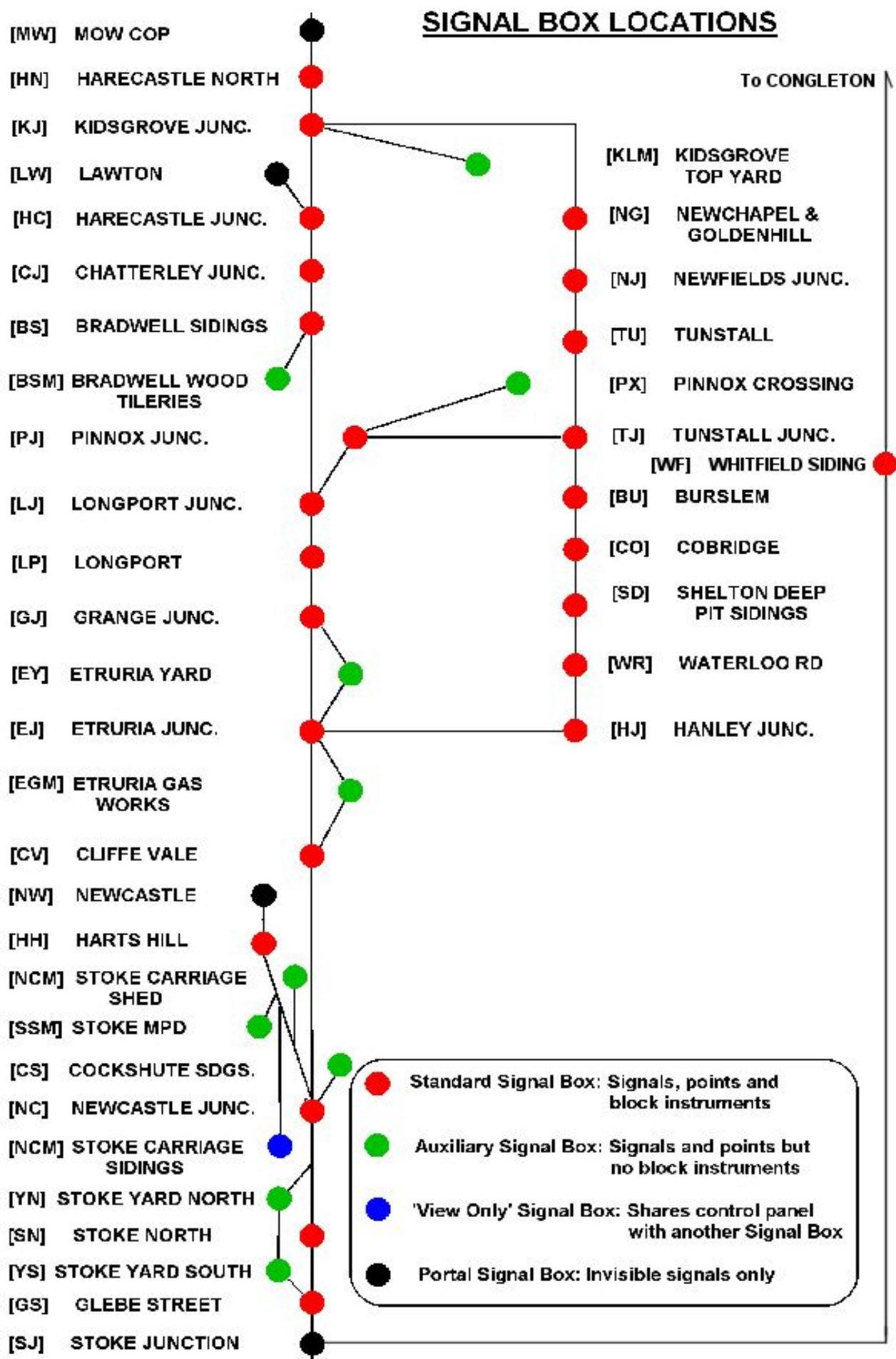


Locations within the broken blue line are included in the Potteries Loop Line Route.

- Passenger Stations
- Goods Stations/Wharves
- Tileries / Potteries / Brickworks
- Steelworks / Foundries
- Collieries / Coke Ovens

- Locations beyond the route:**
- Stations / Major Cities
  - Stations closed before 1935
  - Colliery / Exchange Sidings

## 2. Schematic Map of Signal Box Locations



Signal Box codes are shown in brackets. [ ]

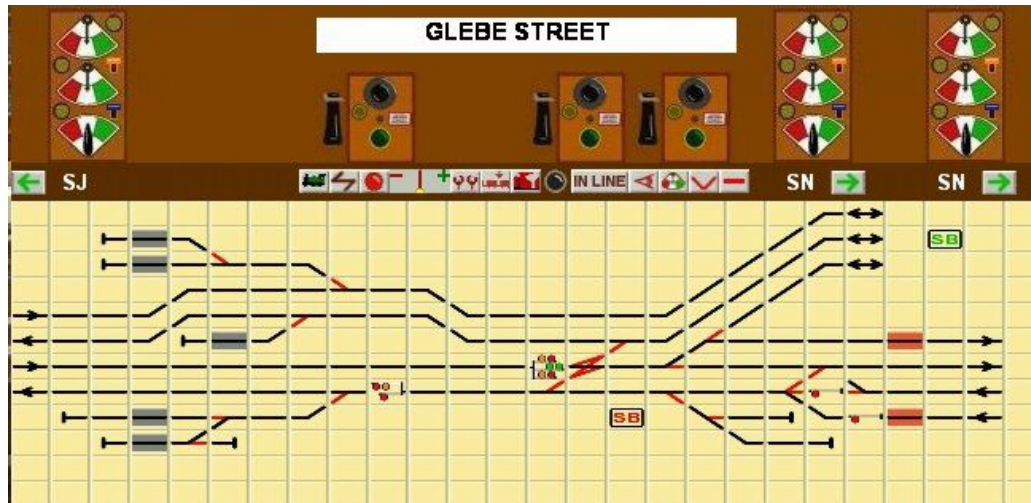
### 3. Signal Box Control Panels and Notes

In the following pages, signal box information is provided beginning from the Up (or southern) end of the Main Line. Main Line boxes and adjacent yards are shown in order, proceeding in the Down direction, followed by Loop Line boxes beginning at Hanley Junction and proceeding in the Down direction.

#### Stoke Junction SJ

This is a 'Portal' Signal Box consisting simply of invisible Down Starter and Up Home signals which monitor trains leaving and entering the portal. These signals are monitored in order to update the block instruments of adjacent signal boxes. There is no signal box model on the route.

#### Glebe Street GS

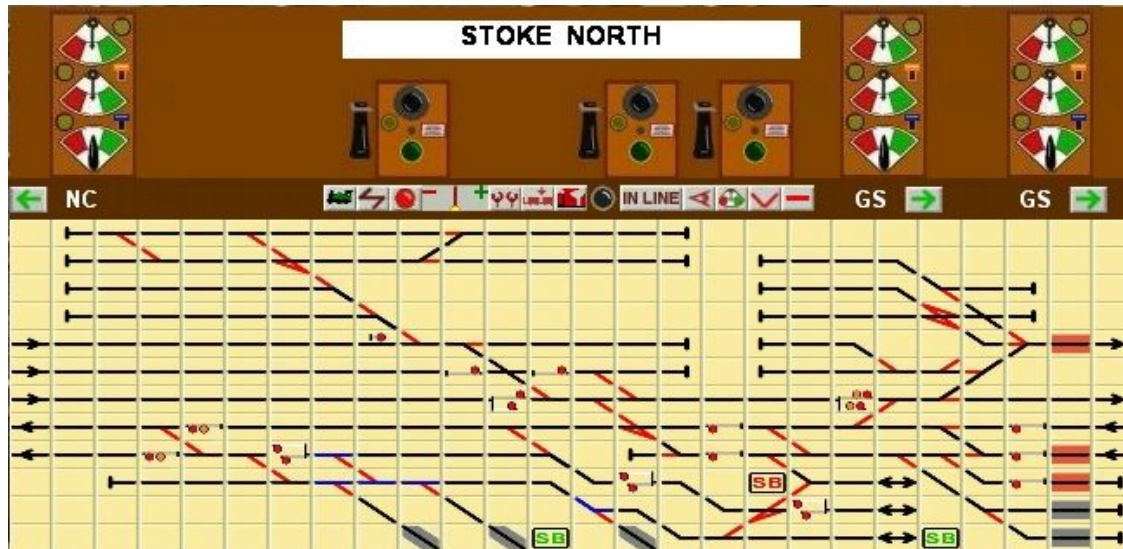


- This box controls access to Stoke station and to Stoke Yard South.
- The goods lines to/from Stoke Junction and to/from Stoke Yard South are not monitored by block instruments. Rely on the timetable for advice on movement of trains on these lines.
- The 3-way branch signal [GS3] serves as both Down Home and Down Starter signal.
- Of the two block instruments controlling access to Stoke station, the LEFT hand instrument controls the through lines and the RIGHT hand instrument controls the main platform lines.
- **Level of operation difficulty: 4**



## Stoke North

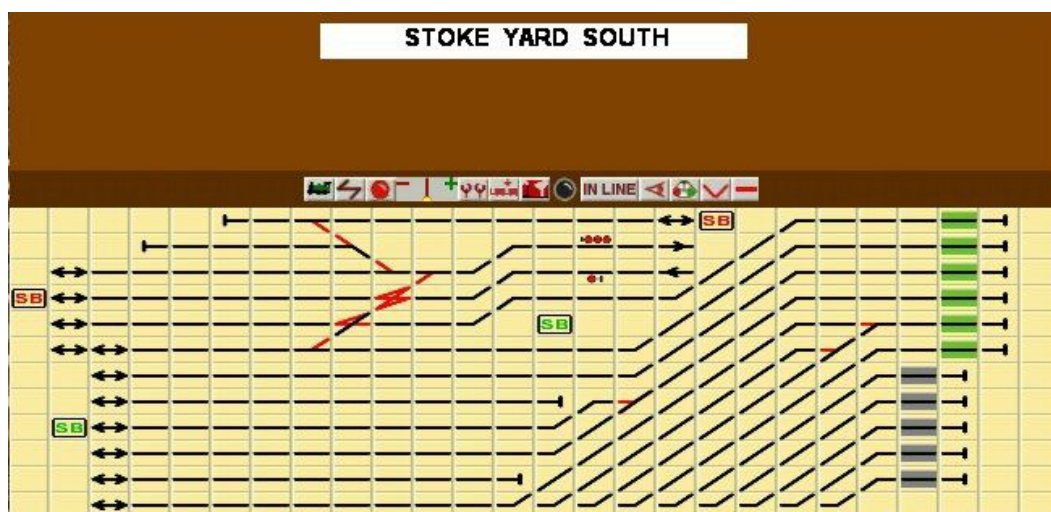
SN



- This box controls access to the Down end of Stoke Station, Up carriage sidings leading to Platform 1, Up goods sidings shown at top left of the control panel, Stoke Yard North, goods lines to Stoke Yard South and Stoke Down carriage sidings adjacent to Platform 3.
- The freight lines from the direction of Newcastle Junction are not controlled by block instruments, nor is access to Stoke Yard North or the to the goods avoiding lines to Stoke Yard South. The 'Traffic Notice' driver command can be used to notify signalmen of trains approaching from these lines.
- Of the two block instruments controlling traffic in the direction of Glebe Street Box, the **LEFT** instrument controls the main platform lines and the **RIGHT** instrument controls the through lines.
- Up goods trains proceeding to Stoke Yard must approach using the Up Goods Loop line which can be accessed at Newcastle Junction. These trains will then cross the Up main and goods lines and the Down main line.
- The junctions shown in blue provide access to and from Stoke Yard North. They are primarily controlled by signal box YN but, for convenience, can also be controlled from this panel.
- Shunting of Platform 3 and adjacent carriage sidings will generally obstruct the Down Main line as the track immediately in front of the signal box is too short to accommodate 3 or 4 car trains.
- **Operational Level of difficulty: 5**

## Stoke Yard South

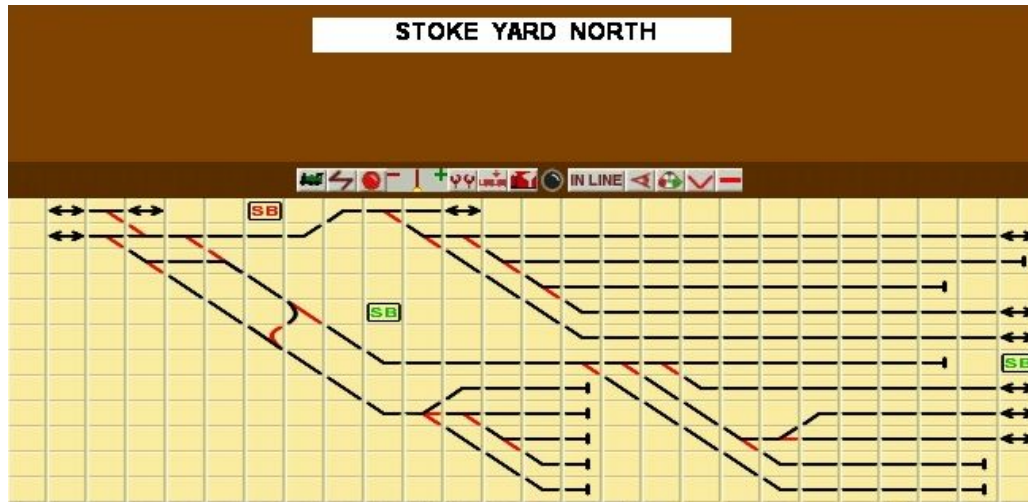
YS



- This box controls access between Stoke Yard and the main lines at Glebe Street Box, and to Stoke Goods Shed and its associated sidings.
- **Operational Level of difficulty: 3**

## Stoke Yard North

YN



- This box controls access between Stoke Yard North and the main lines - particularly the Down Goods line.
- Tracks to the right of the signal box are primarily Arrival lines.
- Tracks to the left are primarily Departure lines.
- **Operational level of difficulty: 3**

## Newcastle Junction

NC



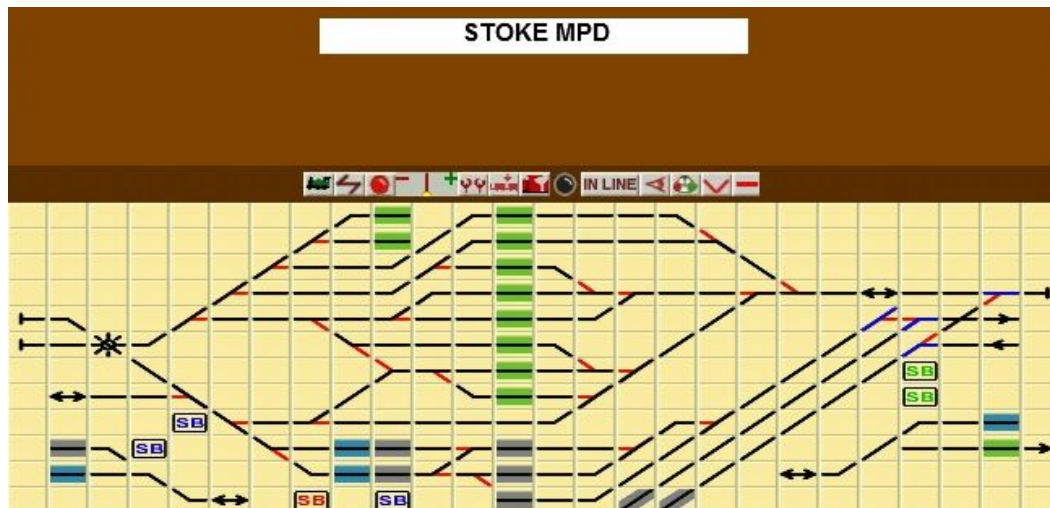
- This box controls the junction between the Main Line and the branch to Newcastle and Market Drayton. It also controls access to Stoke MPD, Stoke Carriage Shed, Stoke Carriage Sidings and the adjacent MPD Coal Sidings, the Coal Wharf and Cockshute sidings. It is very complex.
- Note that the Down Main Line Starter is on the Up side of the box.
- The Down Starter for the Newcastle branch is beyond the crossover providing access for locomotives departing Stoke MPD and proceeding in the Up direction.
- Locomotives departing Stoke MPD and proceeding in the Down direction will generally depart via junction NC24a and proceed onto the Down Goods line.
- Special care needs to be taken when operating the Down Goods line immediately behind the signal box. This line is also used by locomotives departing Down from the MPD and is the head shunt for the carriage shed. It is essentially a bi-directional track.
- The 4-way signal [NC38] has the following indications from left to right:  
Newcastle Branch; Carriage Shed; Down Goods Line; Down Main Line;
- There are no block instruments for the goods lines. The 'Traffic Notice' driver command can be used to notify signalmen of trains approaching from these lines.
- The Carriage Sidings to the south of the MPD are used for longer term carriage storage.
- One of the three through carriage lines beside the Carriage Shed must be kept clear at all times to allow locomotive run-around.
- **Operational level of difficulty: 5.**



Stoke MPD  
Stoke MPD South  
Stoke Coaling Rower

SSM  
SST  
SSC

['View only' position uses the same Panel as SSM]  
['View only' position uses the same Panel as SSM]

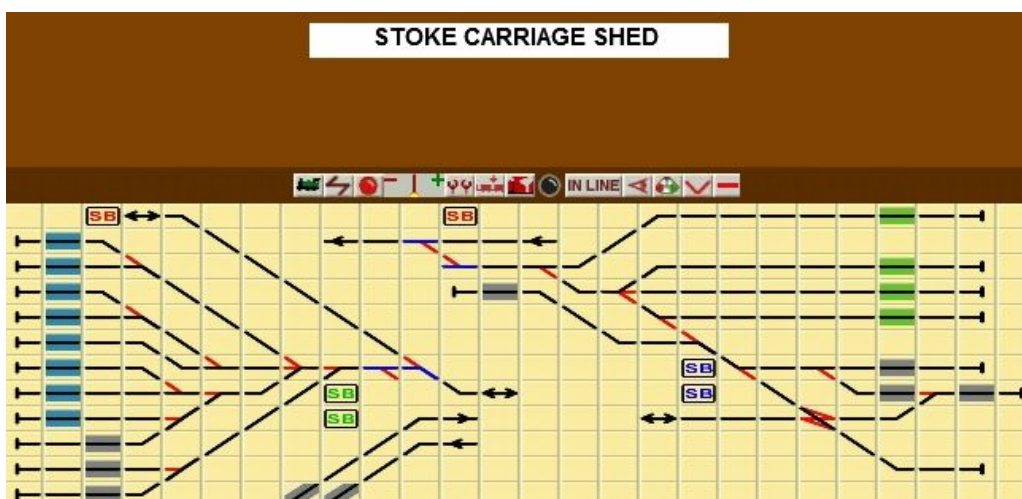


- This section is controlled by two shunters who work out of their yard huts. There is no signal box.
- Shunter [SSM] is at the northern end of the MPD and shunter [SST] is at the southern end.
- It is possible to view operations from the Coaling Tower by clicking the [SSC] icon
- This box controls internal movements within the MPD, including coaling, watering and turntable operation, as well as access to Stoke Carriage Sidings.
- There are no block instruments. The 'Traffic Notice' driver command can be used to advise the signalman of trains entering the MPD.
- For convenience of operation, provision has been made for operation of Arrival and Departure junctions at the northern end of the MPD from this box. [see blue track] These junctions actually belong to Newcastle Junction box and can be controlled from there. Special care must be taken when accepting or releasing locomotives to the main lines.
- Locomotives departing in the Down direction may find it more convenient to depart by proceeding via the Carriage Sidings and using Junction NC24a onto the Down Goods Line and then proceed. Arrival and departure from the southern end of the MPD is controlled by shunter [NCM].
- Locomotives proceeding in the Up direction will depart from the Departure track and proceed to the Main Lines via the Newcastle branch.
- Move to the southern end of the MPD by clicking the blue [SST] icon, to the Coaling Tower by clicking the blue [CCT icon, ]to Newcastle Junction box by clicking the red [NC] icon, or to the adjacent Carriage shed and sidings by clicking the appropriate green [NCM] or blue [NCS] icons.
- **Operational level of difficulty: 4**

Stoke Carriage Shed  
Stoke Carriage Sidings

NCM  
NCS

['View only' position uses the same Panel as NCM]

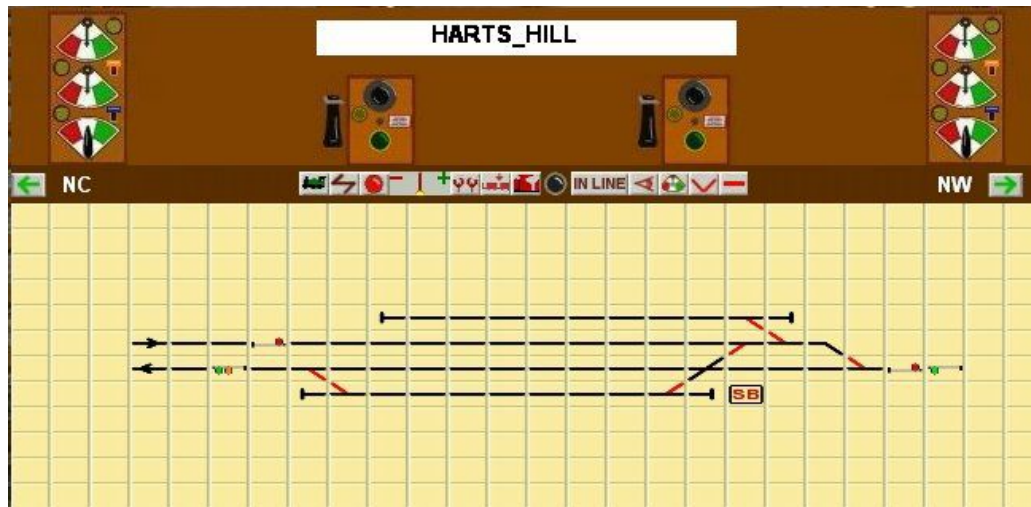


- This section is controlled by shunters who work out of their yard huts. There is no signal box.
- This panel is used to control the Carriage Shed [Left] and the Carriage and MPD Coal Sidings [Right].

- It also controls access to enable filling of the MPD coal tower.
- The double-slip junction can be used to enable locomotives to depart the MPD to the Down Goods Line.
- There are no block instruments. The 'Traffic Notice' driver command can be used to advise the signalman of trains approaching the Yard.
- **Operational level of difficulty:** 2

## Harts Hill

HH



- This box controls access to and from the single track line to Newcastle and Market Drayton.
- **Operational level of difficulty:** 1

## Newcastle

NW

- This is a 'Portal' Signal Box consisting simply of invisible Down Starter and Up Home signals which monitor trains leaving and entering the portal. These signals are monitored in order to update the block instruments of adjacent signal boxes. There is no signal box model on the route.

## Cliff Vale

CV

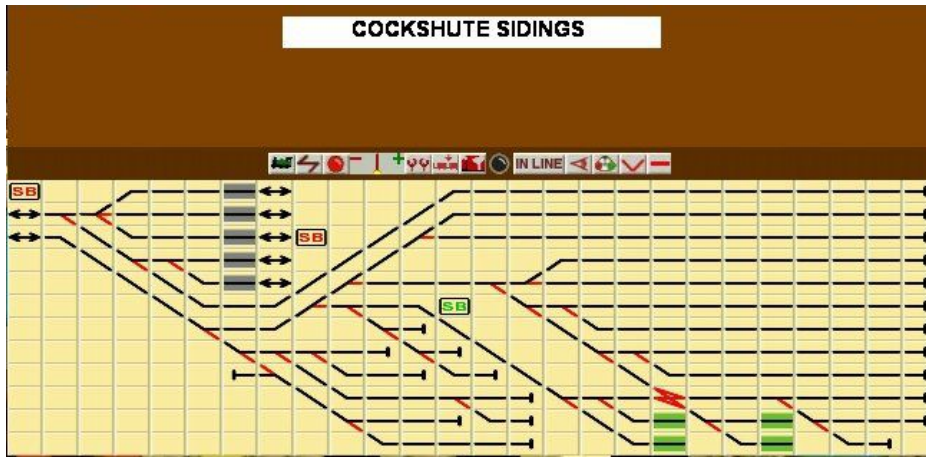


- This box controls access to/from the Down end of Cockshute Sidings, the Down end of the Through Carriage Sidings beside the Carriage Shed and the sidings for Etruria Gas Works and Canal Tileries.
- Special care needs to be taken when bringing trains across the Main Lines from the sidings on the Down side of the Main Line. The 'Traffic Notice' driver command can be used to notify signalmen of trains approaching from these lines.
- The Up and Down Goods lines are not controlled by block instruments.
- The 'Traffic Notice' driver command can be used to notify signalmen of trains approaching from any of the sidings controlled by this box.
- **Operational level of difficulty** 3



## Cockshute Sidings

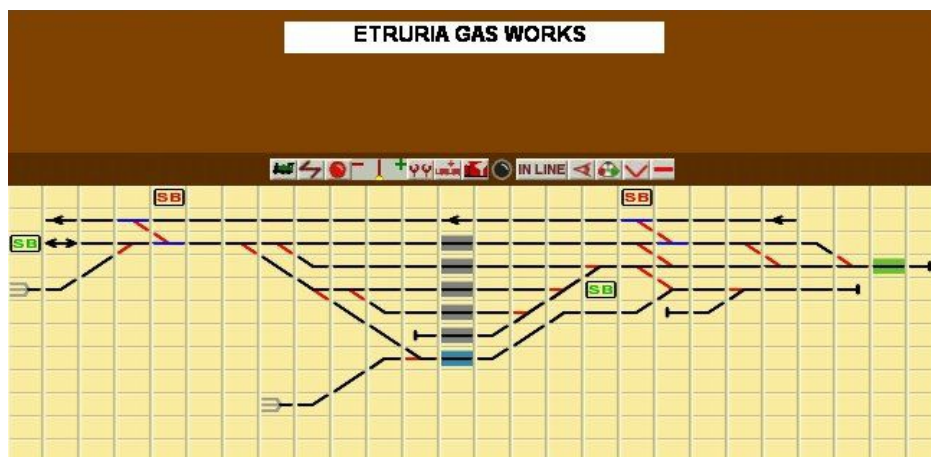
CS



- This box controls Cockshute Sidings, used to manage freight from the Newcastle Branch and adjacent industries, access to Cliff Vale Pottery and five Through Sidings adjacent to the main Line, used for assembling and reversing trains.
- There are no block instruments. The 'Traffic Notice' driver command can be used to advise the signalman of trains approaching the Yard.
- At least one of the five Through sidings must be kept clear at all times to permit locomotive run-around.
- **Operational level of difficulty: 2**

## Etruria Gas Works

EGM



- **This section is controlled by a shunter who works out of his yard hut. There is no signal box.**
- This panel controls the Gas Works Sidings, primarily concerned with delivery of coal to the unloader, and access to the delivery and collection line for Canal Tileries. It also controls access to the wagon repair works to the south of the Gas Works.
- There are no block instruments. The 'Traffic Notice' driver command can be used to advise the shunter of trains approaching the Yard.
- Access to the Up Goods line is controlled by Cliffe Vale and Etruria Junction signal boxes. For convenience these junctions can also be controlled from this panel. See blue junctions.
- One of the through sidings must be kept clear for engine run-around.
- Etruria Gas Works has a shunting locomotive which can shunt the yard leaving main line locomotives free to simply drop off or collect wagons.
- **Operational level of difficulty 2**

## Etruria Junction

EJ



- This box controls access to the Potteries Loop Line via a junction in the direction of Hartley, as well as the south end of Etruria Yard which provides exchange sidings for Shelton Bar Steelworks, Hartley's Foundry sidings, the southern end of Grange Junction Down sidings, Phoenix Wagon Works sidings, Etruria Gas Works and Canal Tileries sidings as well as the small local yard..
- Note that the Down Starting signal for the Main Line is the Loop Line Branch signal but the Down Starting signal for the Loop Line is on that line itself.
- The Up and Down Goods lines are not controlled by block instruments. The 'Traffic Notice' driver command can be used to advise the signalman of trains approaching from these lines.
- The operation of this box is straightforward but can get very busy and complex.
- **Operational level of difficulty**      5

## Etruria Yard

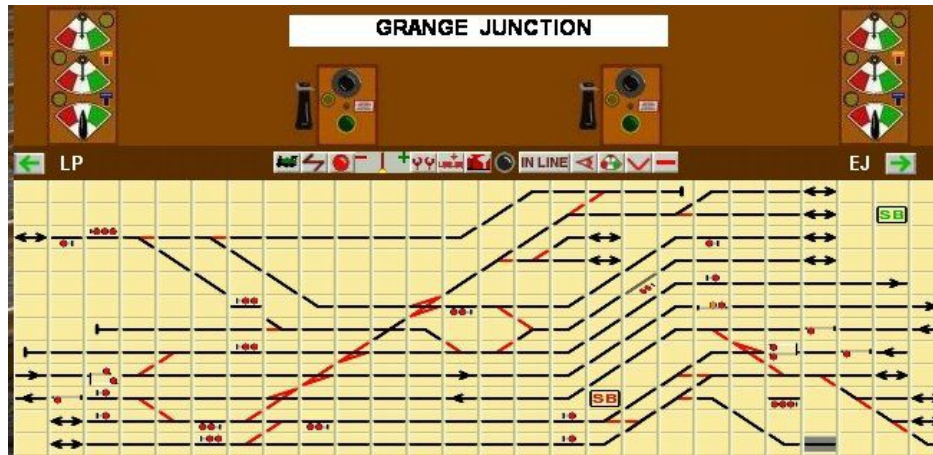
EY



- This box controls Etruria Yard through sidings and storage sidings as well as the southern end of Grange Junction Up Sidings which provide exchange sidings for Shelton Bar Steelworks, and access to the Steelworks.
- There are no block instruments. The 'Traffic Notice' driver command can be used to advise the signalman of trains approaching the Yard.
- **Operational level of difficulty**      3

## Grange Junction

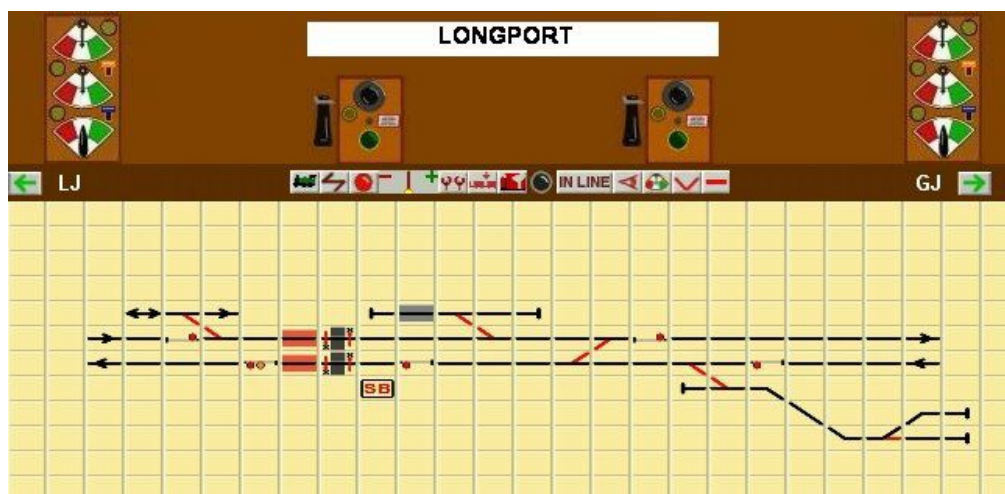
GJ



- This box controls the northern end of Grange Yard and Etruria Up and Down Yards. Via the Grange Branch it controls access between these yards and the North Yard of the Shelton Bar Steel Works, and to Grange Wharf. It also manages traffic to a wagon and engineering works and to Wolstanton Colliery.
- The box also controls the northern end of the goods lines which follow the mainlines south through Stoke-on-Trent.
- Whenever possible Up freight trains should be moved on to the Up Goods line on arrival at Grange Junction.
- Care must be exercised when releasing Down goods trains from the Down Goods line onto the Down main line.
- The Goods Lines are not controlled by block instruments. The 'Traffic Notice' driver command can be used to advise the signaller of trains approaching the Yard.
- The triple shunting signal at bottom right of the panel controls movement through junction GJ59b. The top semaphore indicates clearance for Wolstanton colliery, the middle semaphore indicates clearance to the Down Goods line and the lower semaphore indicates clearance to the Down Main Line.
- **Operational level of difficulty**      **3**

## Longport

LP

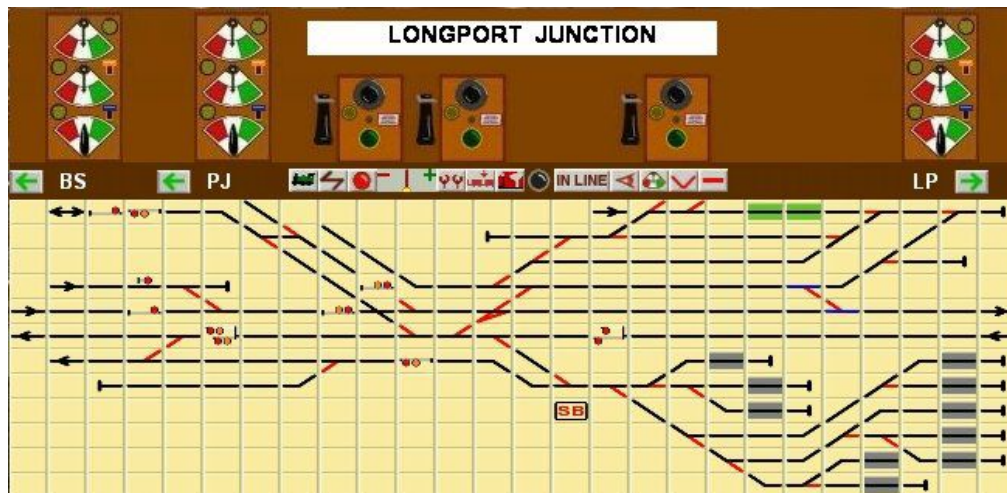


- This box controls the level crossing at Longport, access to the goods platform opposite the signal box, to the Midland Tileries siding on the Down side of the line and to the southern end of Longport Goods Yard on the Up side of the Main Line.
- The major unusual issue when operating this box is safe operation of the level crossing. The gates must be closed before either the Up Home signal [] or the Down Inner Home signal [] is pulled off.
- These signals must be pulled off, and the gates closed to road traffic, in time to avoid delaying trains, particularly express passenger and heavy or fast freight trains, but road traffic should not be obstructed for unnecessarily long periods. Trains have priority.
- **Operational level of difficulty**      **4**



## Longport Junction

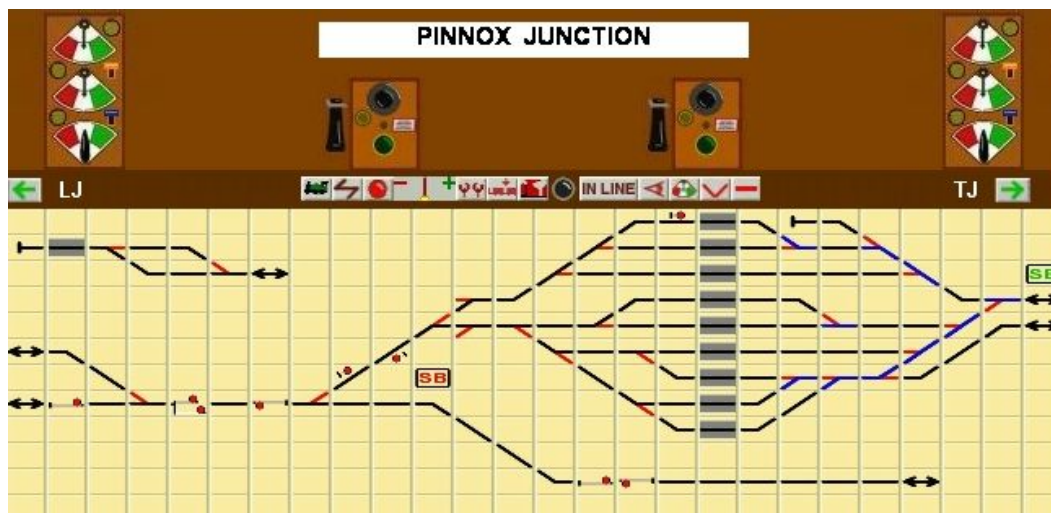
LJ



- This box controls the junction to Tunstall and to Pinnox Sidings and Chatterley-Whitfield Colliery, Longport Goods Yard on the Up side of the Main line and the Longport Sidings, which support major coal movements, on the Down side of the Main Line.
- Note that the Up Starter signals are located on the Down side of the junction to Tunstall and Pinnox Sidings, so that the Down track in front of the signal box is, in fact, the block between this box and Longport box.
- Because of the short distance to Longport and of the location of the Up Starter signals, special care must be taken to ensure that timely notification of 'Train on Line' is given to Longport box. This applies particularly to express passenger and fast freight trains. If the train has passed your box you are too late!
- Operation of the Longport Sidings can be quite complex, involving up to three locomotives for one operation. This is well illustrated in the 'Pinnox Mineral Railway' session.
- **Operational level of difficulty** 5

## Pinnox Junction

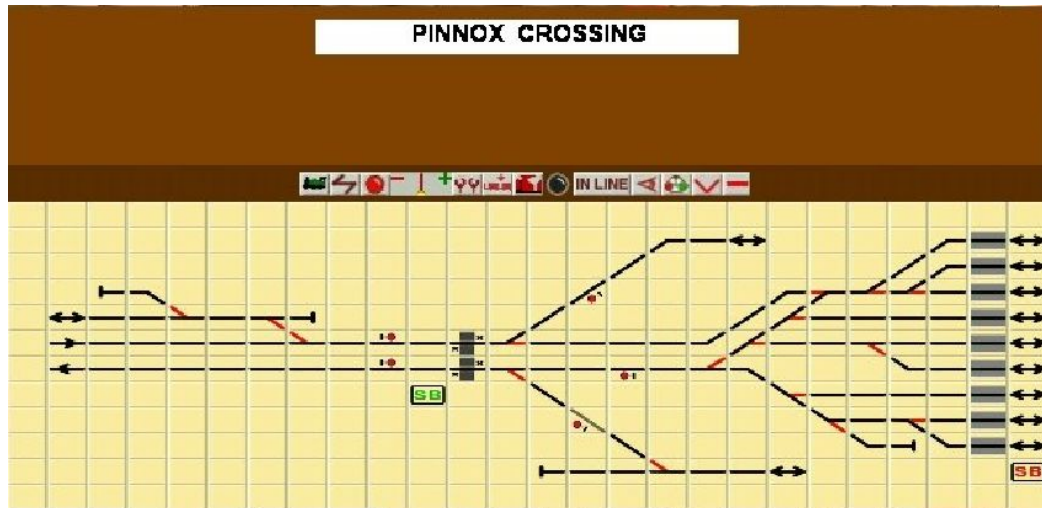
PJ



- This box controls access to Pinnox Sidings from the Longport-Tunstall branch line, as well as to Peake's Tilery and the junctions at the Longport end of Pinnox Sidings.
- Typically, empty coal trains enter Pinnox Sidings to the left and loaded coal trains leave from tracks to the right.
- For convenience of game operation, points at the Pinnox Crossing end of Pinnox Sidings can also be controlled from this box. These junctions are shown in blue on the track plan. Care must be taken when using these junctions, not to allow shunting engines to proceed past the signal protecting the level crossing on Scotia Road. This level crossing is controlled by Pinnox Crossing box.
- Siding 1 should be kept clear to permit shunting engines to run around their trains.
- **Operational level of difficulty** 3

## Pinnox Crossing

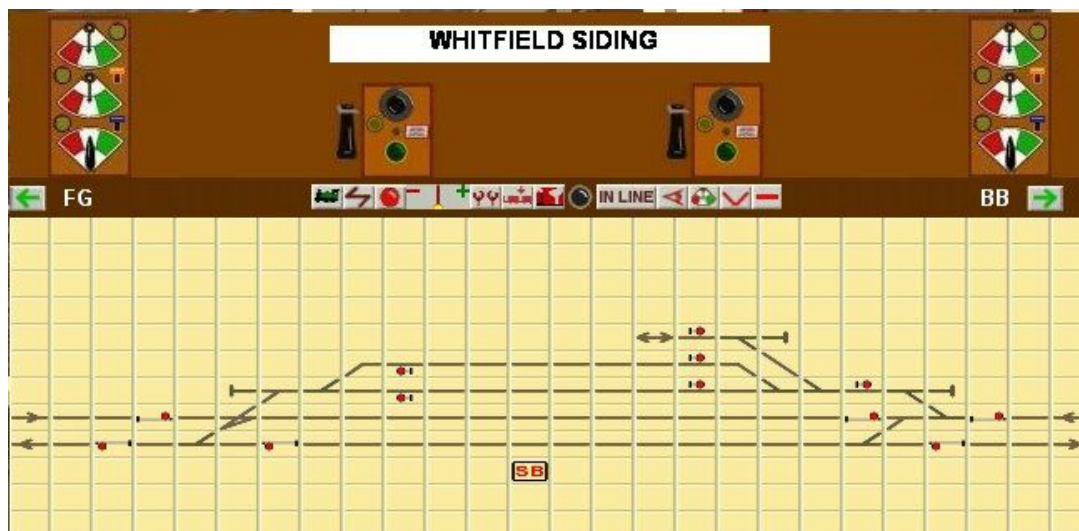
PX



- This box is owned by the Chatterley-Whitfield Colliery and is part of the Pinnox Mineral Railway.
- Its primary purpose is to protect the busy Scotia Road level crossing. It also controls access to Brownhills and Greenhead coal wharf branches and controls the points at the Down end of Pinnox Sidings.
- Note that there are no level crossing gates. Trains must be controlled using the signals.
- Trains must not pass from Pinnox Sidings to Tunstall Park Sidings on the right hand track as there is no signal on this track to protect the level crossing.
- **Operational level of difficulty** 3

## Whitfield Siding

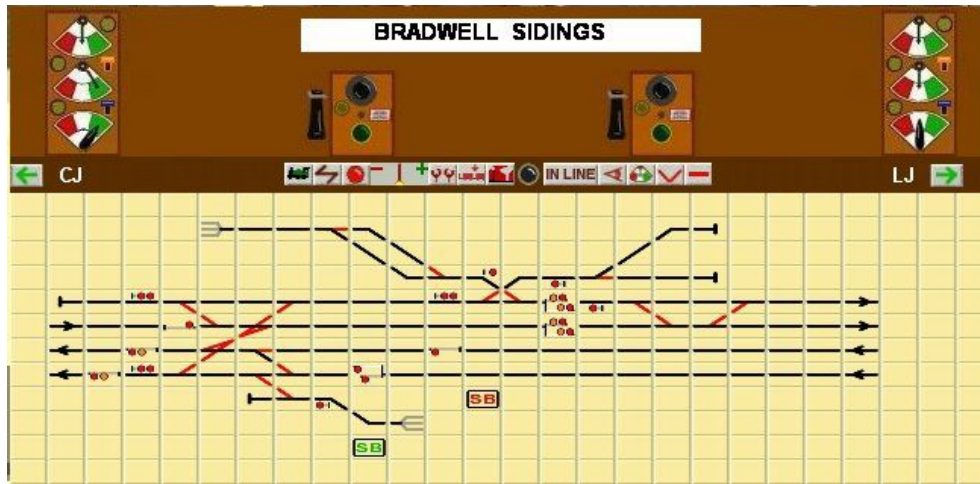
WF



- This signal box is located on the line running between Stoke Junction and Congleton to the east of the Potteries Loop Line and via the closed stations of Ford Green and Black Bull. There is no passenger traffic on this line.
- This box controls access to exchange sidings and to Chatterley-Whitfield Colliery sidings which facilitate arrival and dispatch of predominantly southbound coal traffic to and from the Colliery.
- Operations controlled by this box are well illustrated in the 'Pinnox Mineral Railway' session.
- **Operational level of difficulty** 2

## Bradwell Sidings

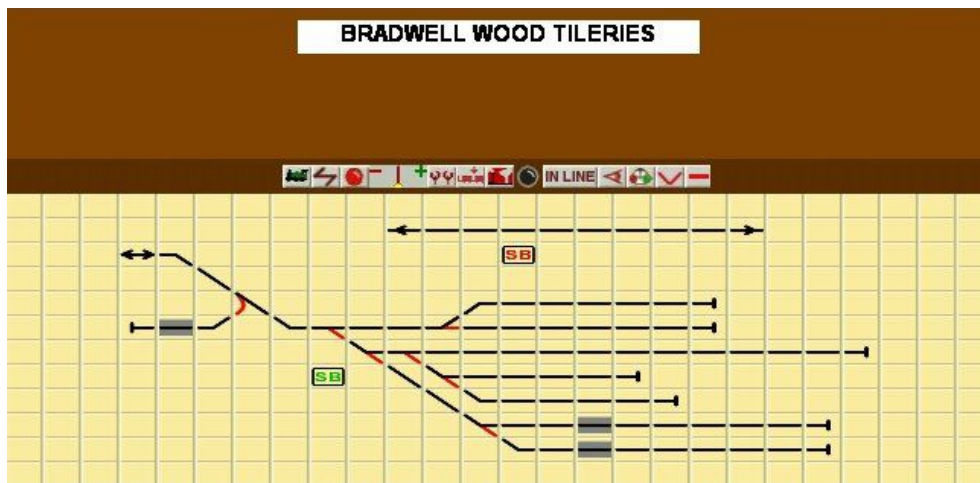
BS



- This box controls access to the Bradwell Wood Tileries on the Down side of the Main Lines, to the Brownhills and other tileries, and an industrial siding, on the Up side of the main lines.
- This box also provides the opportunity to move Up freight trains to the Up goods line between here and Longport Junction.
- Particular care must be taken when trains are crossing the main lines.
- The Goods Lines to and from Longport Junction and the Goods Line to Chatterley Junction are not controlled by block instruments. The 'Traffic Notice' driver command can be used to advise the signalman of trains approaching the home section.
- **Operational level of difficulty** 3

## Bradwell Wood Tileries

BSM

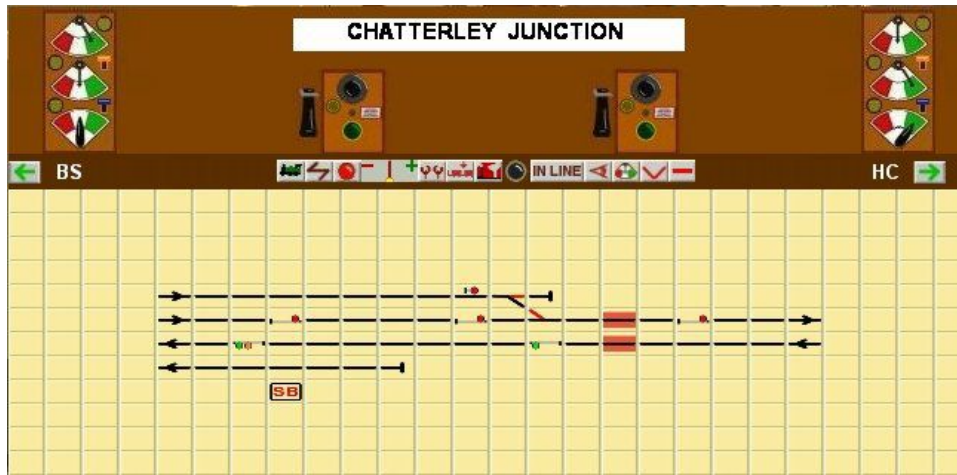


- This panel controls shunting of the sidings at Bradwell Wood Tileries.
- Coal is brought in; completed product is taken out.
- There are no block instruments. The 'Traffic Notice' driver command can be used to advise the shunter of trains approaching the Yard.
- **Operational level of difficulty** 2



## Chatterley Junction

CJ



- As well as its role as a block section on the Main Line, this box also provides for Down freight trains to return to the Main Lines before passing through the Harecastle tunnels.
- **Operational level of difficulty** 1

## Harecastle Junction

HC



- This box controls the junction to Lawton and Northwich, and to Alsager and Crewe.
- It also controls the Harecastle Goods Yard and the Up Goods Line from Kidsgrove Junction.
- The Up Goods Line from Kidsgrove is not controlled by block instruments. The 'Traffic Notice' driver command can be used to advise the signaller of trains approaching the Harecastle home section.
- Up and Down refuges are provided on the Lawton branch.
- **Operational level of difficulty** 2

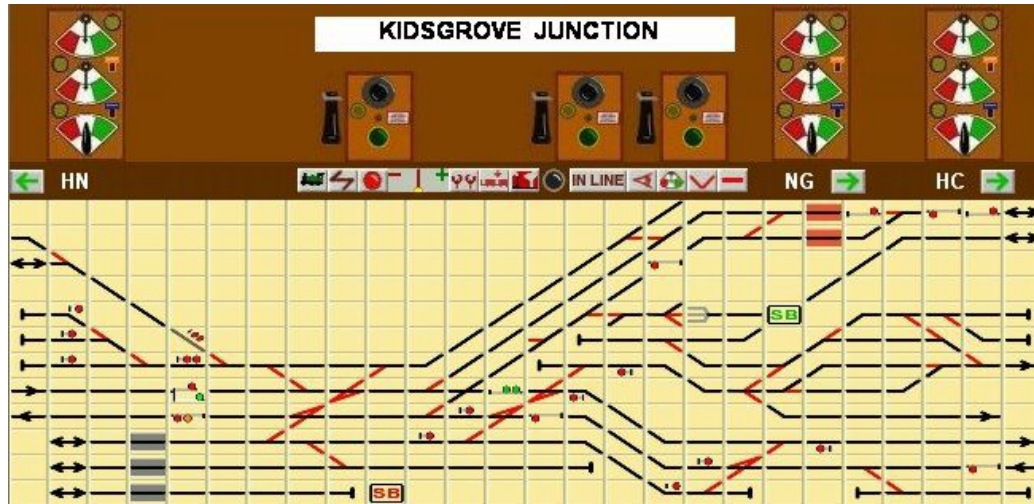
## Lawton

LW

This is a '**Portal**' **Signal Box** consisting simply of invisible Down Starter and Up Home signals which monitor trains leaving and entering the portal. These signals are monitored in order to update the block instruments of adjacent signal boxes. There is no signal box model on the route.

## Kidsgrove Junction

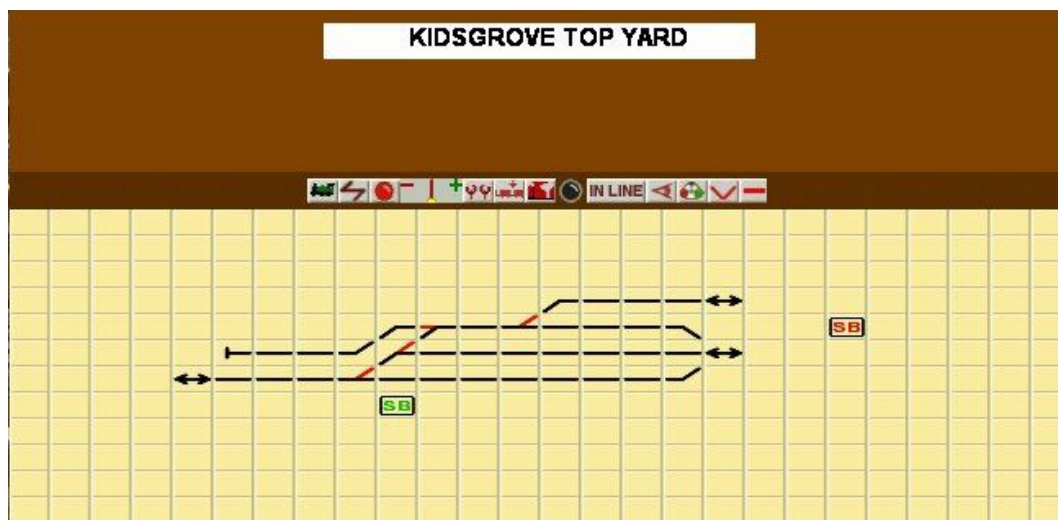
KJ



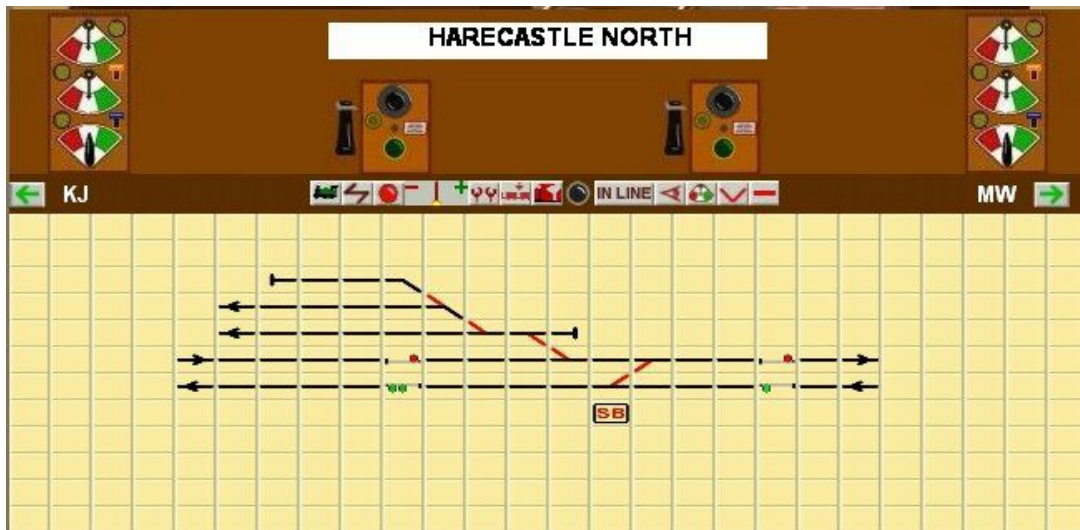
- This box controls access to the northern end of the Potteries Loop Line via Kidsgrove station, to Kidsgrove Top Yard which manages traffic to and from Birchenwood Coke Ovens and Brickworks, to Maryhill Colliery and Albion Foundry, to sidings for a mineral railway and to an Up Goods Line to Harecastle Junction, all on the Up side of the Main Line. On the Down side of the Main Line there are several holding sidings.
- This panel controls handling of terminating trains at Kidsgrove station.
- Because of the various operations connecting with the Main Lines here, particular care needs to be taken to ensure that Main Line through traffic is not obstructed by shunting operations.
- The Goods Lines are not controlled by block instruments. The 'Traffic Notice' driver command can be used to advise the signalman of trains approaching the Kidsgrove home section.
- **Operational level of difficulty** 4

## Kidsgrove Top Yard

KJM



- This panel controls shunting for, and access to the Birchenwood Goods Line.
- Care needs to be taken not to allow shunting operations to proceed to Kidsgrove Junction without the approval of that box.
- **Operational level of difficulty** 1



- As well as providing a block section, this box controls a Down Goods Line from Kidsgrove Junction and a number of sidings.
- The goods line is not controlled by a block instrument. The 'Traffic Notice' driver command can be used to advise the signalman of trains approaching the Kidsgrove home section.
- **Operational level of difficulty**      **1**

### Mow Cop

### MW

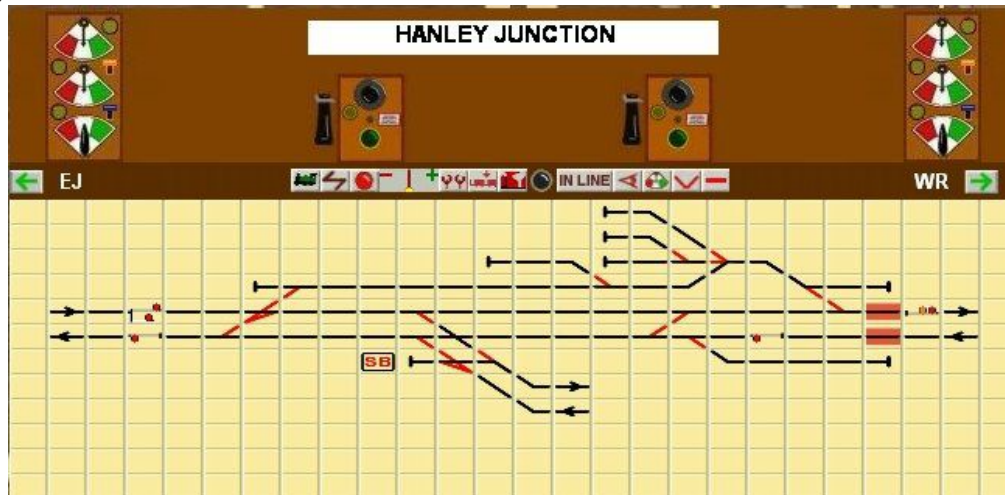
This is a '**Portal**' **Signal Box** consisting simply of invisible Down Starter and Up Home signals which monitor trains leaving and entering the portal. These signals are monitored in order to update the block instruments of adjacent signal boxes. There is no signal box model on the route.



# Potteries Loop Line

## Hanley Junction

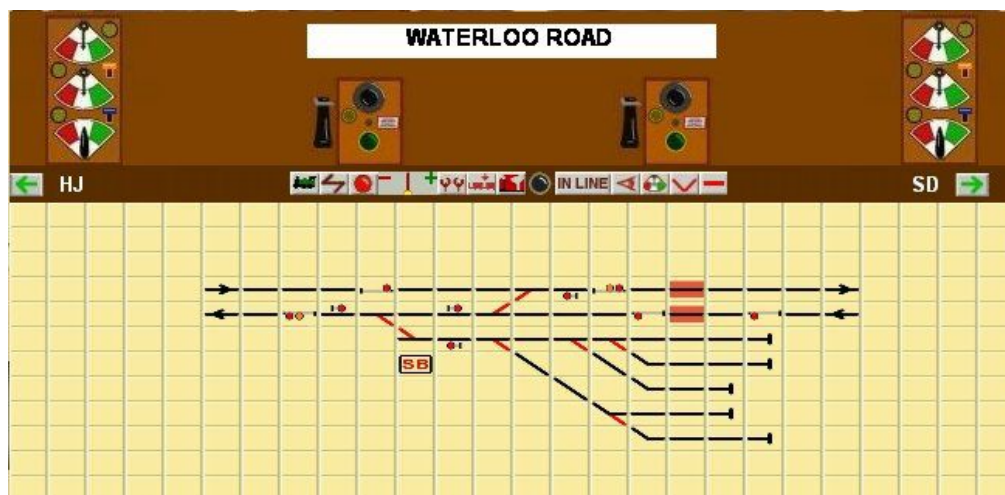
HJ



- As well as providing a block section, this box controls access to the substantial sidings of Hanley Goods Yard.
- **Operational level of difficulty** 2

## Waterloo Road

WR



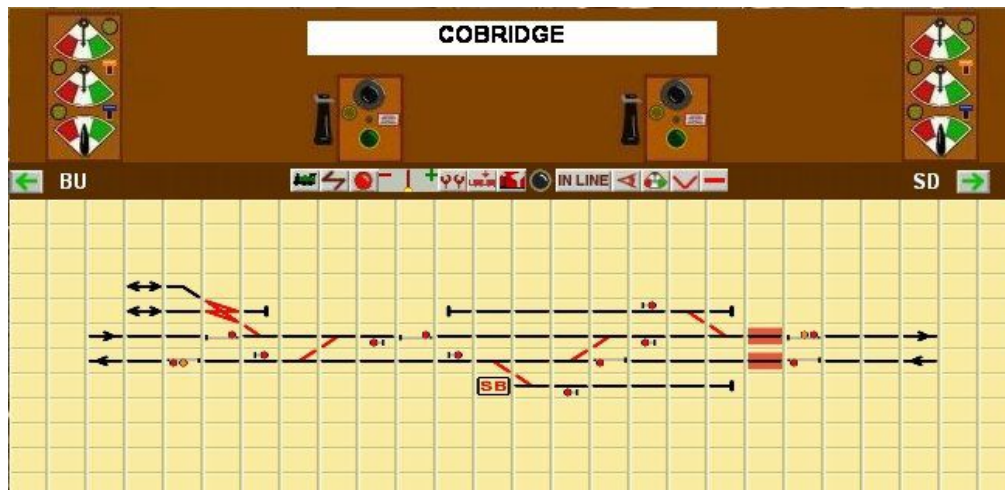
- As well as providing a block section, this box controls access to Waterloo Rd. Yard on the Up side of the Loop Line.
- Note that the distance to Shelton Deep Pit box is short, so that 'Train on Line' warning needs to be provided and responded to promptly.
- **Operational level of difficulty** 2

## Shelton Deep Pit Sidings SD

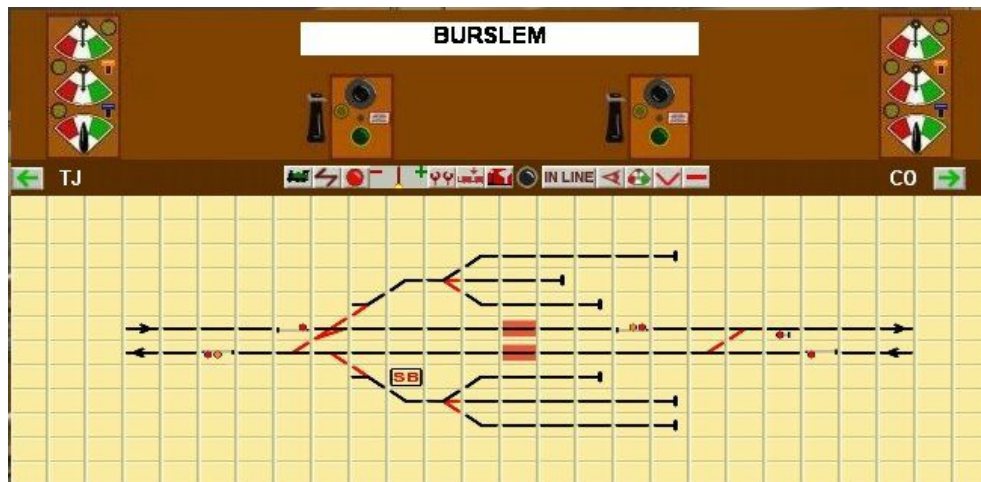


- As well as providing a block section, this box controls access to the extensive sidings of Hanley Deep Pit on the Up side of the Loop Line.
- Note, however, that access to and from the Colliery siding can only be obtained from the Down line.
- The Colliery's reception and dispatch sidings are quite short so that full trains will need to be assembled on the Loop Lines after leaving the Colliery and arriving empties will need to be split on the Loop Lines before entering. This must be done without disrupting other Loop Line traffic.
- Operations controlled by this box are illustrated in the 'Deep Pit Circle' session which shows how to split and then make up a long train at a time of high traffic density with minimum obstruction of the Down Loop Line.
- Signal SD20 is both the Up Home and Up Starter signal.
- **Operational level of difficulty** 4

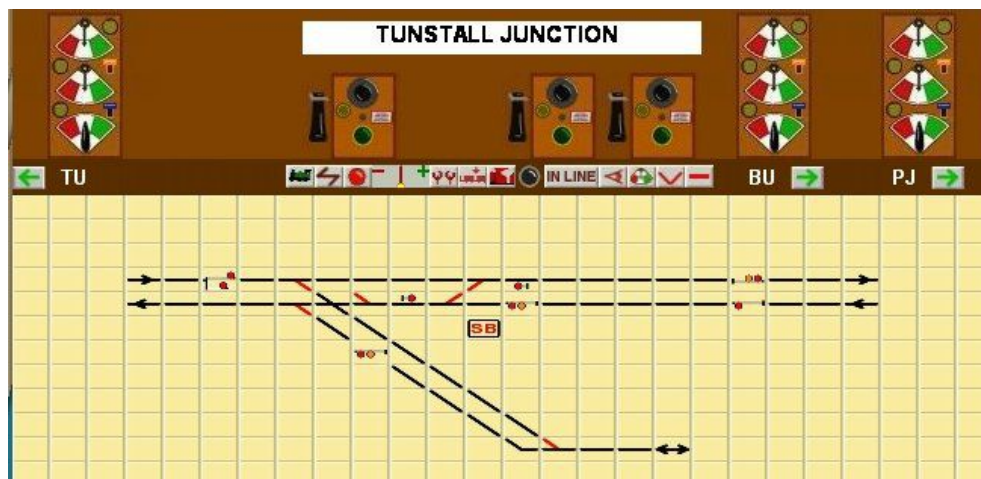
## Cobridge CO



- As well as providing a block section, this box controls access to the extensive sidings of the Sneyd Colliery and Brickworks on the Up side of the Loop Line.
- The length of the Colliery reception and dispatch sidings is not restrictive.
- Up and Down refuges are provided for managing arrival and dispatch of freight trains.
- Care must be exercised not to disrupt the operation of the Loop Line because of shunting operations.
- **Operational level of difficulty** 3



- As well as providing a block section, this box controls access to Burslem Yard which has sidings on both sides of the Loop Lines.
- Shunting operations must not interfere with other Loop Line traffic.
- **Operational level of difficulty** 2

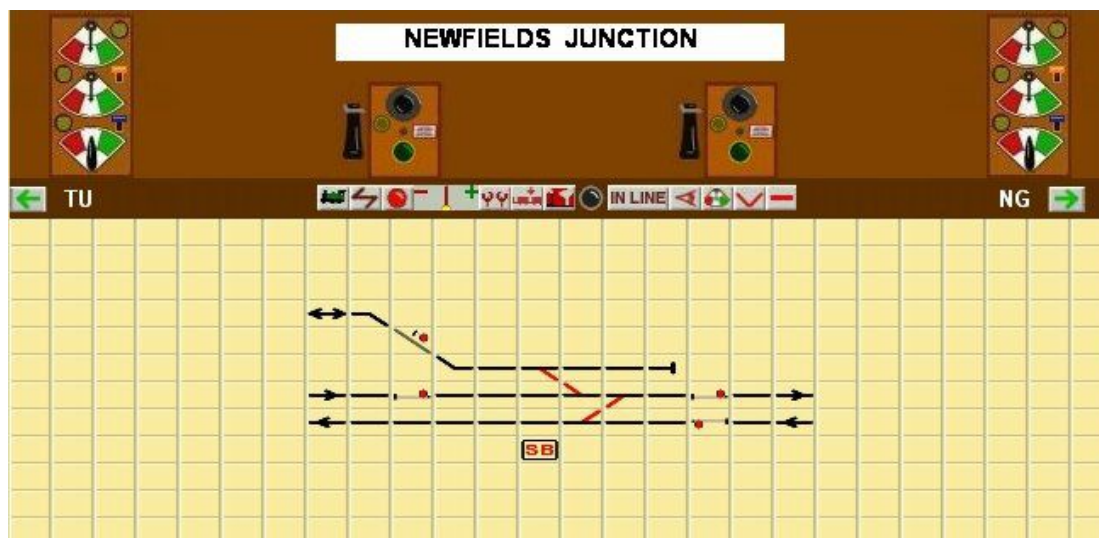


- As well as providing a block section on the Loop Line, this box controls access to the branch line to Longport Junction.
- Note that signal TJ17 is the Loop Line Down Starter but is on the Up side of the signal box.
- Signal TJ19 is the Down Home and Starter for the branch line.
- Signal TJ2 is the Home Signal for the Loop Line and both Home and Starter for the branch.
- The distance to Tunstall box is not great. Timely 'Train on Line' notification and response is required.
- **Operational level of difficulty** 2

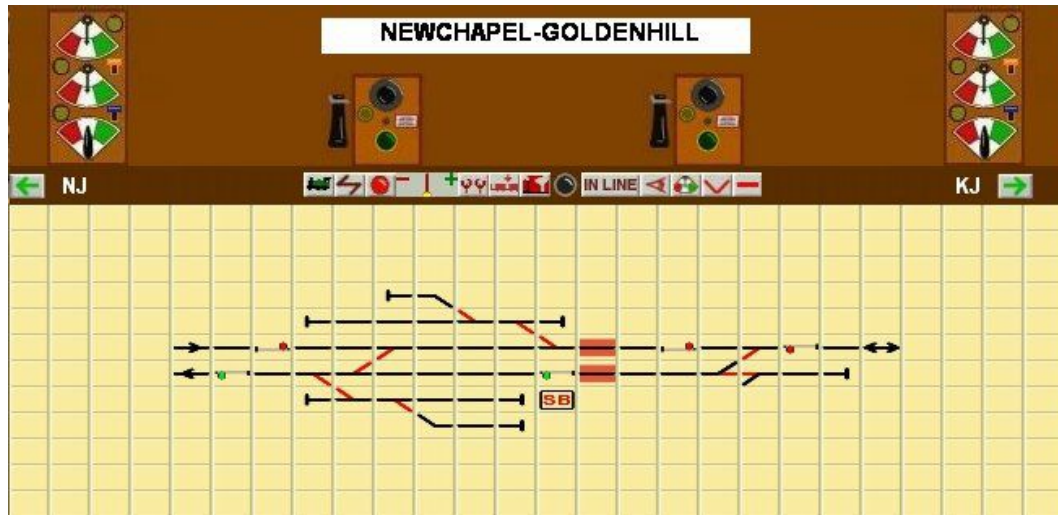




- As well as providing a block section on the Loop Line, this box controls the extensive Tunstall Yard with sidings on both sides of the Loop Lines.
- Shunting operations must not interfere with other Loop Line traffic.
- Loop Line passenger trains regularly terminate and start from Tunstall. Storage sidings are provided on the Down side of the Loop Lines, a run-around siding and loop are provided on the Up side of the Loop Lines and two Loop Line crossovers are provided to facilitate these operations.
- The distance to Tunstall Junction box is not great. Timely 'Train on Line' notification and response is required.
- **Operational level of difficulty**      3



- As well as providing a block section on the Loop Line, this box controls access to the Newfields branch, leading to Newfields Sidings and the Newfield Pottery.
- Signal NJ13 is both the Up Home and Up Starter signal.
- Shunting operations must not interfere with other Loop Line traffic.
- **Operational level of difficulty**      2



- As well as providing a block section on the Loop Line, this box controls access to the single track line to Kidsgrove.
- A number of sidings are provided but these are largely disused.
- **Operational level of difficulty**      2