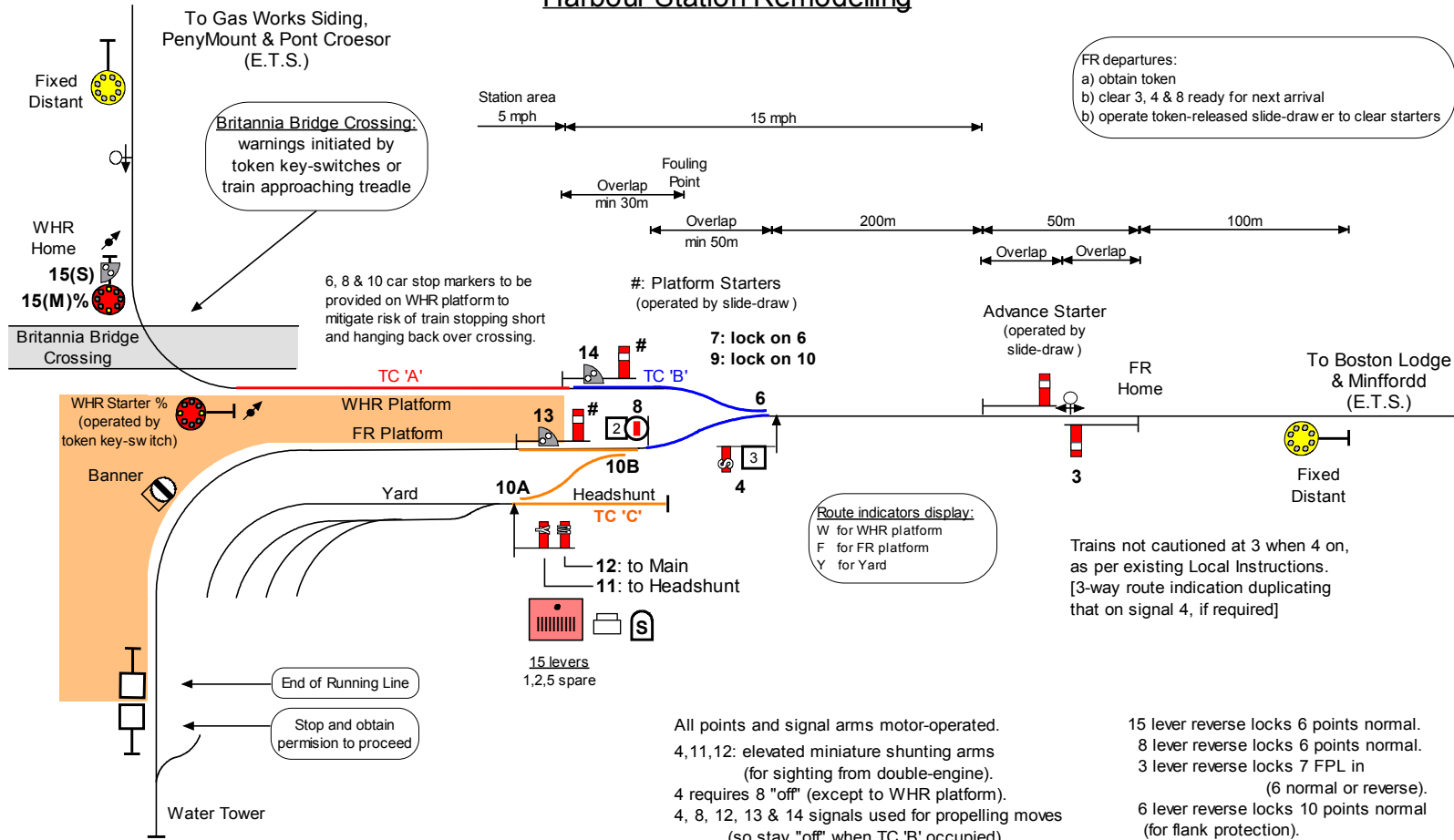


# Harbour Station Remodelling



FR departures:  
 a) obtain token  
 b) clear 3, 4 & 8 ready for next arrival  
 b) operate token-released slide-draw er to clear starters

**Britannia Bridge Crossing:**  
 warnings initiated by token key-switches or train approaching treadle

6, 8 & 10 car stop markers to be provided on WHR platform to mitigate risk of train stopping short and hanging back over crossing.

#: Platform Starters (operated by slide-draw)

7: lock on 6  
 9: lock on 10

Advance Starter (operated by slide-draw)

**Route indicators display:**  
 W for WHR platform  
 F for FR platform  
 Y for Yard

Trains not cautioned at 3 when 4 on, as per existing Local Instructions. [3-way route indication duplicating that on signal 4, if required]

?: combined stop-board signal and crossing indicator (stop-board signals with two vertical yellow lights as provided at Tanygrisiau: the yellow lights to flash in unison to indicate that the road lights are flashing)

All points and signal arms motor-operated.  
 4, 11, 12: elevated miniature shunting arms (for sighting from double-engine).  
 4 requires 8 "off" (except to WHR platform).  
 4, 8, 12, 13 & 14 signals used for propelling moves (so stay "off" when TC 'B' occupied).  
 Signal 4 controls to permit the signal to clear with TC 'B' occupied, to allow for setting-back of stock from signal 8 with loco beyond signal 4.  
 Signal to be replaced when TC 'B' goes clear, except after departure draw-slide operated.  
 TC 'C' provided purely for dead-locking of 10 points.

15 lever reverse locks 6 points normal.  
 8 lever reverse locks 6 points normal.  
 3 lever reverse locks 7 FPL in (6 normal or reverse).  
 6 lever reverse locks 10 points normal (for flank protection).

Based on PW drawing S35-Sk1 rev.B  
 Version H  
 PJM 03/10/07

### **Train approaching from Caernarfon (with Platform Clear)**

The Britannia Bridge crossing lights will be initiated by the train operating the treadle, provided:

- lever 15 is pulled (locks 6 points normal, preventing any conflicting moves)
- the WHR platform track-circuit (TC 'A') is clear

Signal 15's main aspect (2 flashing yellow lights) will clear after the road warnings have been proved operating for sufficient time, provided that TC 'A' is clear.

### **Loco approaching from Gas-Works Loco Siding (with Platform Occupied)**

With TC 'A' occupied, the treadle will not initiate the Britannia Bridge crossing lights. The loco will have to stop at signal 15, and phone for permission to proceed. The Britannia Bridge crossing will then be initiated using the token-operated key-switch on the signal-post, provided lever 15 is pulled. Signal 15's subsidiary aspect will clear after the road warnings have been proved operating for sufficient time.

### **Train departing for Caernarfon**

Britannia Bridge crossing will be initiated by the train-crew using the token-operated key-switch on the starter signal-post, when the train is ready to depart. The starter signal will clear (2 flashing yellow lights) after the road warnings have been proved operating for sufficient time. If the signalbox is unmanned, the train-crew can pull lever 15 before the train departs, ready for the next arrival, provided that they are protected by the token.

### **Train approaching from Minffordd (with Platform Clear)**

Signals 3, 4 and 8 will all be "off", with signal 4 displaying an "F" or "W" route indication as applicable.

### **Loco approaching from Boston Lodge (with Platform Occupied)**

Signal 3 will be cleared, but the driver must expect to stop at signal 4. The train will be cautioned at signal 4, which will then be cleared with an "F" or "W" route indication as applicable. If the loco is being signalled into the FR platform, disc signal 8 must be cleared before signal 4 will clear.

### **Train departing for Minffordd**

The platform starter and advance starter will be cleared by operating the token slide-drawer, similar to current arrangements. A plunger will be provided to replace both platform starter and advance starter when necessary.

If the signalbox is unmanned, the train-crew can clear signals 3, 4 and 8 before the train departs, ready for the next arrival, provided that they are protected by the token (note that the signals must not be replaced by the departing train!).

### **Operation when unmanned**

The existing signalling allows the loco-crew to clear the FR home signals before departure, ready for the next arrival. It is proposed to continue this, as described above, and provide a similar arrangement for WHR departures/arrivals.

It is proposed to perpetuate the existing instruction allowing the home signal to be left off, provided that vehicles in the FR platform are protected by the shunt signals.

These instructions require the driver to expect to stop at the shunt signals, without being cautioned at the home signal. This allows a loco from Boston Lodge to approach the station when the frame is unmanned. Once stopped at the shunt signal, a member of the loco-crew can then walk to the lever-frame in order to clear the signals for the loco to enter the station and attach onto the front of the train.