

EAST LONDON LINE POST-CLOSURE NOTES – 3

by John Thomason

With contributions from Alan Blake and Simon English

These notes continue on from those published in *Underground News* No.557 (May 2008). The new railway is to be known as the East London Railway (ELR).

A visit to the ELR at the end of March revealed that steel work erection is in progress at Dalston Junction. Slab track decking is being laid where the line comes off the Broad Street viaduct. It appears that the geometry is so tight between Shoreditch High Street station and the original Broad Street alignment that slab track is the only viable option. It has been reported that this slab track will incorporate comprehensive noise mitigation measures. Many gangs are at work between Whitechapel and the area of bridge GE19. Much work is being carried out about the ramp from Valance Road towards Shoreditch. It is reported that the track north of Whitechapel is likely to become "slabbed". The rail bridge over Surrey Canal Road has been removed and will need to be replaced. It is believed that the bridge is inappropriate for reuse and the opportunity may be taken to improve the roadway and pedestrian clearances. The bridge structure for the flyover north of New Cross Gate, which will carry northbound trains over the main line and onto the ELR, is more-or-less ready for installation. The New Cross branch has had new track laid in the vicinity of the former New Cross depot. The leading flat wagon of engineering trains has now acquired a kind of sentry box on the end remote from the loco – a brake setter and air horn are fitted (see illustration on page 368 of *Underground News* No.557). Leading open wagons have similar facilities built into the void using scaffolding materials. It has been reported that the escalators at Rotherhithe are in good order but opportunity will be taken to overhaul the lifts at Shadwell and Wapping.

At the London Assembly Transport Committee meeting on 11 March, Peter Hendy spoke in detail about the East London Line Extension Phase 2. He mentioned the advantages of putting in Deptford Road Junction for ELL phase 2 while the line is still closed and hinted at progress in this area. Certainly groundwork is in evidence that would be relevant to a grade-separated junction at this location.

Network Rail have published their South London Route Utilisation Strategy, which recommends that the East London Line phase 2 extension via the South London Line is implemented. Further information from the Office of Rail Regulation website advises service patterns on the ELR. There will be 8 ELR trains per hour beyond Dalston Junction to Highbury & Islington. These will originate at Crystal Palace and New Cross (4-tph each). The remaining 4-tph from West Croydon will only go as far as Dalston Junction. Track plans for the East London Railway/North London Line show a segregated route to Highbury & Islington – there is little possibility of ELR trains continuing further. It also mentions that six trains from the East London fleet will be stabled at Stratford overnight, suggesting that the ELR fleet will be dual voltage. <http://londonconnections.blogspot.com/> (navigate to 3 April) has a useful diagram of the arrangements at New Cross Gate and some background information concerning the bridge move and planning application. This report triggered a visit to Lewisham Council's planning section and it was discovered that the answer given by ELLX staff at a planning meeting on 5 June 2007 was that the new depot would have a capacity of 21 trains. Assuming this to be true then there

will be insufficient capacity to stable the entire fleet since this is expected to be 23 trains plus a maintenance spare.

The Flora London Marathon on 13 April has always caused disruption to public transport within the area of the race. When the ELL was in operation a valuable link was provided for many people in the Wapping, Bermondsey and New Cross area. During the previous ELL closure the replacement buses were considerably disrupted – this year was no different. Posters were seen at the beginning of the week advising that the ELC would be suspended between 08.30 and 13.30, Underground tickets would be accepted on the 225 between New Cross & Surrey Quays and that the 381 would be diverted between 08.30 and 13.30. Similar arrangements were publicised for the north side of the river.

A TfL Press Notice told us that “Liverpool Street mainline station is to close during Sunday May 4 and Monday May 5 for vital engineering work; a team of engineers will roll an 800 tonne bridge into place, the second key installation for the project in five weeks. The bridge will carry the extended East London Line over all the main lines coming out of Liverpool Street station, and is a crucial part of the project that will put Hackney on the Tube map for the first time, and involve the building of new stations at Shoreditch High Street, Hoxton, Haggerston, and Dalston Junction.

“Installation of the new bridge is a huge engineering operation, which involves inching it slowly into place on the same kind of wheels used to manoeuvre space shuttles to their launch pads. The intricate process can be followed, via Web Cams, on the TfL website.



Previous Page: (Lower) Major bridge works have been a feature of the East London Line re-construction and extension earlier this year. Following on from the positioning of the bowstring bridge over Shoreditch High Street on 29 March (lower back cover, this issue), the girder bridge to carry the ELL over the Liverpool Street

main lines (*lower inside back cover*) was rolled into place on Sunday 4 May. It is seen here at about midday, part way through the move with the temporary “nose” cantilevered over the main lines. The concrete block at the nearest end of the bridge (over the wheels) acts as a counterbalance.

Photo: Alan Blake

“From May 2, a short section of Brick Lane will be closed at the northern end between Grimsby Street and Pedley Street to vehicle traffic for four months to allow supplementary works around the bridge and build a new viaduct over Brick Lane. The bridge is 84m long, 10m high, 10m wide and weighs 812 tonnes. A 42m temporary “nose”, 300 tonnes of temporary steel work and two jacks will be required to help move the bridge into place.

The 500 tonnes concrete deck on the rear half of the bridge will be used as a counterweight during the lift. Half way through the lift, 320 tonnes of concrete will be poured to complete the concrete deck. The bridge is made of British Corus steel at Chepstow in South Wales and assembled on the East London site over the last four months”.

The new bridge over Surrey Canal Road was installed during the weekend of 11-13 April. It is a vast improvement over the earlier one with greater clearances for both vehicles and pedestrians. Work had also started on overbridge strengthening work at Cope Street and Rotherhithe New Road (near Surrey Quays station). **Londonconnections.blogspot.com** for 20 April has a useful illustrated walk-through from Deptford Road Junction to the South London Line.

A walk past Surrey Docks substation in late April found the door open and two supply staff chatting in the doorway. They confirmed that all traction current distribution cables have been removed and that the substation now only provides 415 volts, three phase for local use. The traction current equipment and switchgear are to remain in situ and live pending use as a training facility, the ELR traction current supply will be provided from elsewhere [Canal Junction].

The April edition of *East London Line Information*, the staff magazine of Balfour Beatty Carillion Joint Venture, confirms that the Shoreditch station remnants are to be reused as a recreation area. There is an informative report on the work north of Whitechapel – a particular problem is the renewal of the Anglesey Road Bridge, which has the misfortune to incorporate a foul sewer built into the adjacent abutment. We also learn about the discovery of a number of breeding pairs of the Black Redstart, an endangered species of bird, at Bishopsgate Goods Yard, the Kingsland Viaduct and near to Millwall Stadium.

A TfL press release told us about plans for the New Cross Gate Bridge. “The 600 tonne truss steel structure will carry the line towards London over Network Rail tracks. The bridge was designed by Scott Wilson Railways and made from concrete and British Corus steel. Fairfield Mabey, the company behind some of Britain’s landmark bridge construction, was responsible for some of the engineering detail. A limited rail service will operate on the London Bridge local lines during the May Bank Holiday weekend 3-5 May while preparatory works to install the bridge are undertaken. In order to ensure safety during the bridge launch between 10 and 12 May, Network Rail lines to New Cross Gate will be closed for 52 hours”.

Opposite: (Top) The flyover bridge north of New Cross Gate to carry the northbound ELL over the *Southern* main lines was positioned between 10 and 11 May and is seen here two days later on 13 May. Because the bridge could not be built on the required alignment, the move involved both slewing it to be parallel to the approach ramps and then moving it sideways into position.

Both photos: Alan Blake



The second of the three major bridges for the East London Line extension at Brick Lane was moved into place on 4-5 May. Bridge GE19 that crosses the Great Eastern Main Line right next to where Shoreditch station was positioned using strand jacking, which is where a hydraulic ram is used to pull on a steel cable. Once the ram is fully extended, it is disconnected from the cable, retracted, and reattached further down the cable, so the process can begin again. The bridge move went well and was completed on time. The usual webcam provision was made and some impressive time-lapse images were made available to the media and shown on local TV news. During the same weekend preparatory work was undertaken at New Cross Gate for the following weekend's move. The single-track flyover at New Cross Gate was successfully moved into place on Saturday 10 May, associated works continued on 11 May and the line was reopened on 12 May. A splendid set of images showing the bridge move and progress north of Whitechapel can be seen at londonconnections.blogspot.com (navigate to 10/11 May). It was also noted that new point work has been laid in on the down side south of New Cross Gate to provide the connection for ELLX trains. It has been reported that once this link is

completed then engineer's trains will use it to gain access for materials delivery, presumably under occupation conditions. Track components were noted ready for laying when passing by on 20 May.

A LOROL briefing meeting on 22 May advised us that the four new stations currently under construction, should be externally complete by Autumn 2008. We also learnt that funding for ELLX 2B (Surrey Quays to Clapham Junction) is still under discussion.