

# **MEETING REPORTS**

## **MANAGING LONDON UNDERGROUND'S HERITAGE**

### **by Mike Ashworth**

**A report of the LURS meeting at All Souls Clubhouse on 11 March 2008**

Mike began by providing the audience with a sketch of his career to date, stating that before joining LUL he had worked as Curator for the Scottish National Coal Board Museum, so had effectively chosen to 'come out of one dirty hole and down another' he stated, to audience laughter. Mike said that he had been involved with the 1991/92 redisplay at the London Transport Museum then moved to Acton Depot, helping to assemble all the material from various storage sites around the capital, then four years ago he began detailing heritage features around the Underground network, whilst being seconded to LUL, and just over three years ago was offered the post of Design and Heritage Manager. This job involves him in the station architecture and rebuilding schemes, and not only by ensuring that stations are refurbished in the way that LUL wants them, replacing original finishes if appropriate, but also by formulating new designs for stations, brand identity on stations and train design.

Why is it important to manage LUL heritage features? Mike stated that not only is there an awful lot of it, but a lot of it works very well, Customers enjoy the variety of it as they journey through the system, and it is important to LUL's corporate identity to take care of it. Mike said that his talk would look at issues surrounding both the built environment and the objects, and talk about the challenges LUL faces and the processes it uses to manage heritage. Mike showed the audience a map detailing all the listed stations and stations with listed features. He said that it is felt that LUL has the most visited listed buildings in Britain, not something English Heritage would like to admit! But despite this heritage LUL has to evolve, and there are legal requirements now which did not affect these buildings 10 or 20 years ago. Redesigns are often required to comply with the Disability Discrimination Act (DDA) requirements for step free access. Other stations are interfacing with developments such as of Crossrail, Thameslink, and LU congestion relief schemes such as at Victoria. There is a lot going on. Mike works closely with English Heritage and has recently helped them by providing submissions relating to the new white paper that is currently before Parliament, overhauling the methodology of listing, maintaining and overhauling heritage structures. LUL are seen as owners of listed buildings who do take it seriously, and in some cases are seen as an example of industry best practice.

Whilst not all stations are listed, LU has a raft of policies, and most stations have listings of heritage features (the audience were shown an example for Southgate). These detail both small items (clocks, benches) and larger features (tile finishes, architecture) and were introduced as part of PPP, since there was a need to know what existed in order to ensure that infracos managed and maintained these features in a correct and responsible way. Other documents used include the Company Standard on managing listed buildings, and Good Practice Guides (effectively the "owners manual" for the Underground). They detail how LUL would like to see its heritage managed. It is always preferable to keep heritage objects in situ where

possible as long as they do not conflict with operational requirements (in which case they may be better off in the museum) because it helps them keep their context, very often in the location for which they were specifically designed. Mike hopes he has brought some extra sensitivity to the choice making process for heritage object retention, and makes sure that certain questions are asked such as 'Is the object secure in that location (is it likely to be pinched?)' and 'will the object deteriorate any more by being left in its original location?'. Design briefs are issued for each station works project so that LUL can retain an influence on what happens in its stations, since there is sometimes a 'cultural difference' which can hamper Tube Lines or Metronet from seeing what heritage is and why it is important to retain it where possible. Thus very detailed design briefs are issued, often detailing such minutiae as the size of the tiling and the style of grouting used. Design briefs are just one of a series of guidance notes issued. Technical advisory notes detail how repairs to brickwork, ceramic tile finishes and the like should be undertaken. LUL's relationship with the infracos is quite complex. Metronet's coming back in house has lessened this complexity to some extent, for two thirds of the stations, but there are still some issues in which PPP restricts how much influence LUL can exert over station works.

Mike then went on to exemplify the process of interfacing with the infracos, by giving some practical examples of particular refurbishment projects and the problems encountered.

Starting with Sudbury Town, Mike outlined the complex relationship between LUL, the local authority conservation officer, English Heritage, and Tube Lines. The station is grade two listed, and a building of international significance being one of Charles Holden's key buildings of the 1930s Piccadilly Line extensions. Whilst LUL owns the building, at that time there was no one key person to take on board the discussion of how to refurbish, or to vocalise LUL's expectations of the finished product. Camera positioning was a particular concern, and because LUL demands 95% camera coverage of stations, more cameras were fitted where less might have sufficed. Brickwork repairs were similarly fraught, with the infraco proposing 20% brick re-pointing, but not necessarily in the areas of damage. Mike showed slides of badly refurbished brickwork and stated that both infracos have since discovered the need to hire and retain good craftsmen for these projects, since heritage buildings do need this, and he showed slides of platform retaining walls at Epping, which in some cases had to be effectively demolished and rebuilt, *after* the infraco had repaired them! He detailed the way in which bricks had been repaired by using an angle grinder to remove the mortar, which then led to the risk of water ingress, and spalling, then the bricks were repaired with the wrong type of mortar which could lead to a different rate of expansion and the wall could fall apart. Mike said that, to better manage this issue, he has been increasingly able to work with specialist engineers in LU's Engineering Directorate and now contractors are advised to leave untouched any undamaged mortar – 'if you don't need to do the work, don't do it!' he said.

Moving on to the repair of concrete stations, Mike told the audience about Uxbridge, one of the earlier uses of 'in situ' concrete in the UK. Some of the earliest specialist advice received was that the station building was close to possibly having to be demolished due to concrete cancer. But in conjunction with English Heritage, LUL's and Metronet's engineers undertook an analysis of the buildings, how they were built and why failures were occurring. At Uxbridge, water ingress and lack of reinforcement bar coverage was causing spalling and degradation. The decision

was taken, in conjunction with EH and the local authority, to repair whole panels which gave a better aesthetic finish rather than isolated 'patches' that would have left a more 'blotchy' appearance. Mike remarked that through LUL being the owner of one the UK's largest estate of pre-war concrete buildings, a lot has been learnt about their conservation.

Regarding ceramic tiles, Mike said that this was a very emotive subject, since nearly every station has them and they contribute a major visual component of the station's ambience. Taking the refurbishment of Turnpike Lane as an example, he said that again, English Heritage and LUL had initially diverged in their opinions of how damaged tile sections should be replaced. Thinking as a museum curator, the idea would be to remove the bad and leave the good, but not only would this leave a patchwork quilt effect, but removing one bad tile might damage the four good ones surrounding it. Also there was the problem of getting replacement tiles from manufacturers which would match the original. Tile manufacturers nowadays specify metric sizes, whereas stations were tiled when Imperial was still the preferred system of measurement. English Heritage were initially adamant that tiles were to be replaced only where damaged, but they did allow the replacement of whole sections in the subways of the unlisted Manor House station. When the EH regional director was shown the results, he decided that complete finish replacement looked far better than the archaeologically pure replacement work done piecemeal at Turnpike Lane. Thus once again, Mike said, LUL has led English Heritage to effect a very significant change in elements of their conservation philosophy, and they are moving towards a view that the aesthetic finish of a station has potentially as much value as the retention of individual archaeological features such as tiles.

As to the method of preserving tiles, Cold resin repair (where you put car filler in, then spray colour on) was not, for Mike, an option. 'What does it achieve?' said Mike, 'you preserve the back of the tile, which no one ever sees, and not the aesthetic finish'. It was clear to LUL that Charles Holden and Frank Pick would have preferred clean lines and a slick, seamless finish to their stations, not patchwork quilt. But it is still a learning curve. Swiss Cottage and St. John's Wood were the next two non listed stations to have complete finish replacement, and while the effect was good, it became apparent that the modern quilt edged tiles (with slightly chamfered edges so that they drop out of the moulds more easily) and the British Standard 2.5mm grouting line left an effect which was akin to a sheet of graph paper, whereas original butt-jointed square-edged imperial sized tiles produced whole coloured panels, so the eye was drawn to a whole section of the wall, not to individual tiles. Showing slides of Wanstead to the audience Mike explained how on several station projects it was decided to manage the refurbishment of unlisted stations as if they were listed, carefully supervising the manufacture and fitting of tiled finishes. At Bethnal Green it was decided to keep four panels of original tiling, and replicate the rest, by far the more honest way to say 'there are some original 1940s tiles on this wall' as an archaeological survival. The handmade tiles at Bethnal Green came at a financial penalty to the infraco (which has to be considered), and in researching the red colour of some of the work, Mike discovered the colour had been achieved using depleted Uranium, perhaps not best replicated during the refurbishment! As to the individual tiles, the Stabler designs which went onto new works programme stations, Bethnal Green has 17 of the 18 designs, but only St. Johns Wood and Swiss Cottage have all eighteen. The audience saw slides of these designs. Other issues at Bethnal Green included the London Fire Brigade

unsuccessfully attempting to specify fire doors in the subways, and also there was the need to modify the size of poster frames to fit within the tiled borders. Aldgate East has now begun to be retiled, a major job since the concrete walls beneath were damaged and needed waterproofing, so all tiles had to be removed.

Moving on to the stations designed by Leslie Green, Mike commented that these tile design schemes bring their own particular issues. At Gloucester Road it was necessary to lose one of the three original name panels on each platform wall, to which English Heritage agreed, to make way for help points, new equipment, adverts and posters, and to change the elevation slightly. But it was a price worth paying, since now the actual patterns themselves can be viewed at the top end of each platform, uncluttered and very carefully replicated. In Mike's opinion there is nothing worse than a careful replication of pattern which then has to be covered up. At Regent's Park, the colour for the background tiles to the station name panels should be a slightly darker, greyer white than the white used elsewhere, but the tiling contractors accidentally mixed up the white and grey boxes so every so often a darker grey tile appears among the white! Through getting agreement from the Engineering Directorate not to have a standard grout width, Metronet was able to allow the tiling manufacturer to spread the design out to fit the wall, so as to avoid silly little off-cut tiles which were never part of the original design. It was also possible to get the name frieze completely above the tiling, to avoid the need to crop it above cartouches as at other station schemes. Also, it was decided not to replicate the 1980s modern tiling of the ticket hall but to go for a more original interpretation in keeping with the finishes elsewhere in the station, thus thematically linking the ticket hall, passages and platforms.

Mike also outlined the tile manufacture process to the audience, and how original manufacture methods which involved the young ladies of Stoke dipping their hands in vats of Cadmium and Lead to get the dark greens and blues of Leslie Green tiling, have given way to a very precise method of replicating tiles. Original tiles had lots of imperfections in them, depending on whether they were fired at the top or bottom of the kiln, for example, whereas modern firing methods give too much consistency, so Mike outlined to the audience the challenge of developing different glaze weights and how, in the factory in Ironbridge, a metronome is used to get the tiles dipped for the precise amount of seconds needed for a particular weight. He said that he felt LUL, in ordering tiles and specifying exact finishes, has an important role to play in keeping skills alive in the making and fitting of tiles.

Floor tiling is, said Mike, a very important element of a station, particularly in ticket hall areas where it defines the space you are walking into. In the first tranche of refurbishments, being unable to use original St. James Quarry floor tiles, a variety called Graniti was used, but as was discovered at Arnos Grove, it is very difficult to clean, so is now not preferred for use in stations. Repairing floors is necessary because Health and Safety requirements specify a certain slip resistance standard, and at the same time, the tiles must look right, so as not to spoil the ambience.

Moving his attention to Station finishes, Mike reminded the audience that amongst the policies LUL have is a desire to develop a thematic listing for groups of stations which are architecturally similar, such as Central London Railway stations, stations of the Great Eastern Railway, and even stations of the Jubilee Line Extension. A series of policies are being developed to give a consistent application of finishes to stations which share the same architectural pedigree or parentage.

On the CLR Mike said there is a movement towards the use of white tiles like the original CLR finishes, whereas on the ex-GER it is sometimes not so easy to settle on a colour scheme which is both original and meets modern visibility standards. The original GER stations were a chocolate brown colour, as was discovered at Snaresbrook during refurbishment, but it was felt better to use the 1935 LNER colour palate of Brunswick Green. Mike stressed his determination to ban the colour yellow from the Underground, and using the example of the three shades of Brunswick Green used at Fairlop, showed how it is possible to comply with Disability Discrimination Act requirements for colour banding, since there only needs to be 30 points colour difference between shades of colour. This is an example of how, if intervention into a scheme happens early enough in the design process, it is possible to be both considerate to design heritage and compliant with modern standards. Showing a slide of Becontree, Mike showed the audience how stations at the east end of District are no longer District Line pea green, nor are they the original LMSR deep brown, but are instead rather fetching shades of Crimson and Cream.

Mike then moved on to discuss what happens when things go wrong. He said that the budget for modernisation, post Metronet, is currently significantly adrift, and at many stations work may now be delayed. Mike personally felt that some of the 'overspend' was due to an over reliance on standards, such as at Theydon Bois and Ruislip where contractors erected a forest of lamp posts, some even in the middle of flower beds. 'How many lamp posts do you need?' he asked, and said that he much preferred to fix cameras, speakers and other equipment sympathetically to existing station fittings, and to avoid the needless cluttering-up of heritage stations. LU and the Infracos are now far better at looking ore carefully at requirements and designs and relaxing standards where possible or necessary. This should forestall issues such as at Loughton where cables were fixed round the ticket hall without even the slightest consideration for listed building consent. LUL is now in the embarrassing position of having to remove new fitments from a grade 2 listed structure because they were erected, in effect, illegally. Loughton is a fairly good example of what happens if you fail to ask questions and fail to get involved in the design process. For this and other reasons, some decisions now go 'right to the top'. There is a Design Governance Board chaired by LUL managing director Tim O'Toole, which was intended to meet quarterly but now meets monthly, and ratifies design decisions and issues decisions for design matters. Mike said that it's easy to allow clutter to seep back in. Using a slide of the brand new Shaw's fascia wall tiling in staircases at Bethnal Green, hand made in Darwen by the original company that made it in 1946, Mike showed how modern safety signs and stickers can compromise design integrity and heritage. It is vital to make people think and to get in on the design process early enough. Regarding the galvanised fencing at Eastcote, LUL suggested something should be done about it. What happened was that it was painted cream (not a more neutral green) which now means that the eye is drawn to the fence, not away from it.

Next, Mike turned his attention to current schemes. He said that his opinion was that White City station should be listed, as the best example of a post war station in original condition, in architectural terms, and built to "Festival of Britain" designs. It does have a architectural award plaque on the front which sadly now has electric wiring laid across it. The determination is to keep White City in as original condition as possible, which will be a challenge given the amount of new services and wiring required. He said 'It took 6 months and over a dozen meetings to look at a cable

management system in the ticket hall, which wouldn't destroy the brickwork, and would speak the correct architectural balance in terms of size, shape and colour. Detailed design ideas like the placing of lettering have proved difficult to embed in both of the infracos'. It's not only buildings of other eras which prove challenging to manage, also stations less than a decade old need vigilance. The Jubilee Line extension stations will in all probability be listed at some point in future decades, and as they are still in original condition it's all too easy to cause problems. Additional advertising panels have been prohibited from the walls at Southwark for example, and Mike believes we must take as much care of things like the currently unloved Victoria Line finishes as we do of the original Baker Street of 1863 or the original Farringdon. To this end Mike's department has ordered a series of heritage plaques, to draw attention to and advertise the fact that London Underground's heritage is being managed. They tell people what is there and why it is important, and will be placed on or near such important features as the street level roundels at Bethnal Green, important heritage items which are heavily identified with the London Underground. The audience was told to watch out for these plaques! Mike feels that over the years that strength of identity has been lost somewhat so such features as blue edged station canopies and javelin roundels and flagpole roundels are to be reintroduced. Such things have a really strong visual identity and help to move LUL's identity and visual heritage into the 21st Century. Occasionally heritage will be lost, such as the station building at Shepherd's Bush (Central Line), which then places more pressure on the surviving examples, but if a conscious decision is made to lose, Mike feels we must make an equally conscious decision to look after whatever is left. Snaresbrook is an example of what can be achieved. Mike said that as a Lancastrian he ought to be ashamed to say, but Snaresbrook took second place to 'some bridge in Salford' (although the winner was well deserved!) in the National Railway Heritage Awards, but it was no mean achievement considering that it was the first time for many years that LUL had put forward a contender for this award and it was doubly satisfying that it was judged in the category of listed stations despite not being listed. It is a testament to the sensitivity with which Metronet undertook the work, and something for which all can be justifiably proud.

Mike ended the talk by expressing the hope that he had given the audience some ideas to take with them as they walk around the heritage that is London Underground, and given them a better idea of the reasons behind some of the design decisions that were made.

Following applause, the Society Chairman invited any questions from members of the audience.

One questioner invited Mike opinion on the challenges faced in heritage terms by the group of ex Silverlink stations recently taken on as part of London Overground Rail.

Mike replied that, especially with listed structures such as Harrow & Wealdstone and Kew Gardens, there needs to be some consistency of approach to dealing with heritage such as applying for the correct listed buildings consent when installing such things as gate lines, and in dealings with Network Rail who still retain ownership of the bricks and mortar. Some quick win refurbishment schemes were undertaken over Christmas and the New Year, and LUL is desirous of reinstating the original LMS Crimson and Cream colour scheme.

Another questioner asked why the platform clocks at Bethnal Green had not been reinstated and invited Mike's thoughts on the retiling of Camden Town using over tiling, and to a very simplified pattern. Mike replied that clocks at Bethnal Green

would be returned once the new cable management system was fully installed, but this cable run is so deep that if certain items of platform furniture were replaced in their original location they would foul the track. He said 'Don't worry, they haven't been lost, they're not on eBay, and we will find some way of putting them back!'. He continued that one of the complexities of design is making the designers consider everything that has to go back on a station after refurbishment. As to Camden Town, generally neither he nor his colleagues in the Engineering Directorate approve of widespread over-tiling. If tiling is in a poor condition it is normally the substrata, so the retiling may fall off as well. Overtiling such as was originally proposed at Southgate means you lose some of the delicacy like returns on walls and corners and LUL aims to re-tile as precisely and honestly as possible. Sometimes there are hiccups in the delivery of the design brief, so it is imperative that final submitted designs are signed off by the design management process and nobody else. Mike stated that the committee are determined not to allow line colours to be part of station or train design. As to simplified tiling schemes, there is a need to evolve – 'We can't hang on to everything' he said, stating that whilst he is always unhappy to see original features disappear, there must be a place for high quality modern architecture. Camden Town would not be a great loss since there are better examples of Leslie Green tiling elsewhere. 'We must be unashamed of change and must identify and keep the best'. Wherever possible examples of the original tile pattern should be retained, subject to costing. As to the retiling of stations, there are obviously occasional problems with quality control such as at Tufnell Park and Chalk Farm, because LUL did not then have the ability they now have to get involve in the process early on. Mike said that the Infracos have taken a while to realise that LUL is not acting out of sheer cussedness but because of a duty of care and a desire to share knowledge. He hopes that with the tiling schemes at Russell Square and Covent Garden LUL can work closely with Tube Lines to ensure that what happens gives Tube Lines the best value for money and LUL the best product.

A questioner enquired about LUL's policy for using New Johnston typography as opposed to original Johnston. Mike said that the policy is for agreed heritage signs to be replaced using the typestyle contemporary to when the sign was first installed. At Snaresbrook the roundels are proper keyed-out Old Johnston rather than simplified New Johnston, but in other places mistakes are made such as Leyton's appalling small typeface roundels. Mike felt that whilst pointing the finger of blame, cost must be considered, and short of finding the person who decided to order those signs and billing them, not much can be done to remedy the situation. Some external roundels on the Central Line don't even use Johnston, which is a situation LUL is keen to avoid. As to solid red disc roundels, design policy some years ago set down that they were not original to the Leslie Green stations having been fitted several years after opening. The signage system on the Underground gives visual consistency across a very varied system, so Mike feels we should not stray too far from the norm even for historical accuracy. Contentious issues have included the proposal to put original style LMSR signs on the bench seats at Upminster Bridge, and the use of silhouette roundels on the platform walls of Leslie Green stations which would have had tea tray signs from opening, but Mike feels original styling should be used where there is a valid reason to do so.

Another question concerned the fact that train destination indicators are obscured by cameras and way out signs. Mike said that, speaking as the standard holder for station décor and design, he has a design for the ideal platform on paper.

Technically, signs should have primacy, so if this means redesigning the camera system, that should happen. The challenge lies in fitting all individual elements together in a confined space and that is difficult to police.

One audience member asked 'Considering the agonies you suffer over tile design, what requirements have you placed on the infracos for stocking spares, and do you audit it?'. Mike explained that each infraco has its own asset management department and LUL liaises with them. Tiles bought off the shelf or from a catalogue are only in the range for a year, and when they are gone, they are gone, and no spares are available. There was more of a challenge in replicating the 1980s German swimming pool tiles used at Piccadilly Circus, and which could not be matched, but it is increasingly easy to match hand made products. LUL would like the infracos to keep spares, but they consider cost of storage over time and audit of that as a real problem. In summary, Mike said, it is easier for LUL to commission its own range of tiles from a manufacturer in Stoke than to buy spares for the off the shelf designs. 'What appears initially to be the more difficult solution does lead to an ease supply much later'.

A questioner asked for Mike's opinion on North Ealing station's colour scheme and platform clutter. Mike agreed that an opportunity for closer collaboration was missed and spoke of the lunacy of lamp posts every three metres and a forest of PA speakers which 'wake people up at 03.00 when someone presses "Inspector Sands" but he said that, like at Theydon Bois, LUL now challenges design and looks closely at the size, design and bulk of fittings and at using existing structures where possible. It is seeking agreement to use bulls-eye cameras rather than Dennard square box ones. 'We need to challenge our own standards since these are what the infracos work to'. LUL needs to avoid blind adherence to its standards and ask whether work can be ramped back and whether the risks in doing so are reasonable and lead to less cluttered, intelligently managed station environments.

The final questioner asked whether LUL have a policy of eradicating the 'London Transport' legend from all signage, possibly including 55 Broadway, would this remit include the roundel at Queensbury and will there be compulsory removal of the LT branding? Mike said that TFL considers that the brand has to be consistent as part of a bigger family. It is very difficult to persuade LUL that it is justifiably correct to put 'Central Line' within the White City roundel, and each individual sign scheme has to be judged on its merits. The post on which the roundel at Queensbury stood had disintegrated and Tube Lines wanted it removed whereas LUL wanted it restored. The post through the centre was prefabricated and the shelter built round it, so it was impossible to remove the post so it has been sawn off. Tube Lines are working hard to make a 'correct' replication. One design proposal is to put a modern metal post. Mike and his team regard it as a railway heritage feature which must be returned. A further question is what should go on top of the post when it is replaced. 'There are complicated discussions ahead' said Mike, and he personally would not like to see the London Transport legend entirely eradicated from the network.

At the conclusion of the questions, the Society Chairman invited the audience to show their appreciation in the usual way.

**Donald McGarr**