ALL CHANGE AT KING’S CROSS
– URBAN RENEWAL AND TRANSPORT IMPROVEMENTS

Summary of seminar 160 held on 17th November 2010
at Mayfair Cavendish Conference Centre, London

SUMMARY
KEY CONCLUSIONS

• During the history of this 67-acre development site, the private sector had spent probably over £100m in developing schemes, but changing decisions from governments prevented progress. Planning by Network Rail, commitment by the University of the Arts London, and private sector cash came together to allow early infrastructure, supported by the decision for London 2012.

• The business case for ticketing halls was driven by the forecast of doubling of passenger numbers over 20 years. The Department for Transport had a big role in coordinating Network Rail works above those of London Underground Limited (LUL), by establishing programme governance arrangements and commercial frameworks, which led to a tripartite agreement after three years of negotiation.

• Continuity of key persons in key posts with clear organisational responsibilities was a key success driver.

• Over 320 planning policies had to be complied with. Hybrid Bills allow interference with listed buildings, but heritage structures consume time and cost.

• Maintenance of continuous underground operations resulted in very sophisticated phased constructions and approvals processes. 10-year contracts also have to allow for escalation in the cost of materials etc.

• Due to the out-of-phased construction contracts between LUL and Network Rail early contract awards carried risks. Numerous assurance requirements may have exceeded the optimum costs.

• Upgrading of the old railway buildings should have been treated as a restoration programme rather than as refurbishment, with many unforeseen problems being uncovered. Fixed priced contracts may not be appropriate.

• A deliberate decision was made to invest in a top class design of roof for the western concourse as a legacy for future generations.

• Dealing with the difficulties during the three-year negotiations for the tripartite agreement built trust, which led to much better later efficiencies.

• Take time and care with stakeholders and invest effort in the process.

• Contractors handed over ‘shared’ temporary accommodation to save costs and improve logistics. The six months spent in tagging and tracing services was a good investment.

• Be clear on the joint objectives across all parties. It is about people, relationships and trust.

These are the views of Malcolm Noyce, Executive Director, MPA
The King’s Cross area became one of the less prosperous industrial parts of London for much of the second half of the 20th century. However, it is now rapidly resuming its former position as a key commercial and transportation centre and is undergoing significant redevelopment.

The King’s Cross development currently represents the largest area of regeneration in central London, with major transport improvements alongside plans for new residential and commercial property and state-of-the-art educational facilities.

The development involves a number of interrelated projects, including:
• Refurbishment and expansion of King’s Cross St Pancras Underground station.
• The Channel Tunnel Rail Link (CTRL) and refurbishment of St Pancras station.
• Fit out of the new Thameslink station.
• Refurbishments at King’s Cross station, including a new concourse.
• New taxi, bus and cycle facilities and pedestrian areas.
• King’s Cross Central – office, retail, residential, leisure and community.

The seminar outlined the story of how this interconnected regeneration came about, and the timescale of the various projects. It looked at the key factors in making it happen, the commercial and engineering challenges, and the lessons for other developments in the future.

As part of the King’s Cross Central Limited Partnership delivery team, Argent provided some background to the King’s Cross Central area, and described the organisation’s part in the restoration programme.

The area, which covers 67 acres of brownfield development, contains many historic buildings that are listed or within a conservation area. The presentation looked at the regeneration plans for the site over the next 10 years: in all there will be 20 new streets, 50 new buildings, 10 new public spaces and a kilometre of accessible canal side. The aim is to make the area a low carbon district, through measures such as connection to a site-wide combined heat and power distribution network.

The new buildings at King’s Cross Central will be a major addition to central London, with mainly office and residential use on the upper levels, and largely retail, catering community and community use at ground floor level. 40% of the site – 27 acres in all – will be new public realm.

Current developments include transforming the old Granary complex and transit sheds at King’s Cross to create a new campus for Central Saint Martins College of Art and Design, part of the University of the Arts London. Granary Square, located on the site of an historic railways goods yard, will have access to the Regent’s Canal, which runs through the centre of the site. Due to be completed in 2012, the square will be one of the largest urban spaces of its type in Europe and will form a focal point for the King’s Cross area.
The complexity of the various transport needs at King’s Cross and St Pancras, coupled with the intricacy of land ownership issues, meant that government – in the form of the Department for Transport (DfT) – was involved in the specification and development of the works at King’s Cross from the very start.

This presentation looked at the challenge of how the DfT, with its partners and stakeholders, made it happen, and explored the contractual framework and associated funding structure.

The role of the DfT has been to set the transport policy for the King’s Cross redevelopment, and act as the sponsor/funder of specific transport projects. The background to individual development projects was outlined, such as the modernisation of the Underground station, the mainline station concourse and the Thameslink station.

It was explained that the DfT was instrumental in establishing the overall contractual framework between the different parties, and provided leadership through a strategic vision, a governance structure and commercial negotiations. This culminated in a comprehensive commercial agreement covering funding, land transference and collaboration signed by the DfT, Network Rail, London and Continental Railways and Argent. The overall governance structure involved a high-level forum between all the main stakeholders, which enabled the sharing of experiences and resolution of issues.

The presentation concluded with a summary of factors that were key to the success of the King’s Cross project, such as the importance of a shared vision between all the parties.

The session from the independent consultancy CJ Associates examined the consents and subsequent project commitments required for London Underground Limited’s (LUL’s) major redevelopment of King's Cross Underground station. It looked at how the planning and heritage approvals process worked, and the lessons learned for future projects under similar planning regimes.

The presentation also outlined the main drivers behind this complex major project: the Fennel Report into the 1987 King’s Cross Underground fire, the CTRL rail link and the serious congestion and overcrowding in the ticket halls.

The LUL work at King’s Cross was authorised under the 1996 CTRL Act and was among a number of major projects to provide one of the largest renewals of transport infrastructure in the UK. It was explained that the Act of Parliament provided a number of important powers, for instance land acquisition and the right to dig up and divert utilities. Other elements of the legislative structure included an overarching Heritage Deed between LUL, English Heritage and the London Borough of Camden, which provided a framework for approval of the detail of works to listed buildings.

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The scope of work involved in the consents process included a planning context report, obtaining over 500 necessary consents, managing interaction with adjacent developers and ensuring compliance with project commitments.

Some of the major operational challenges were outlined, such as working within an operating Underground station, with listed buildings, major utilities diversions and significant highway impacts to consider. In addition, the LUL works involved multiple interfaces with other adjacent projects.

This presentation from Transport for London outlined the details of LUL’s project to modernise King’s Cross St Pancras Underground station. Carried out in two phases, the project has doubled the size and capacity of the station, double-ended all the platforms and made the station step-free. Other benefits include two new ticket halls, improved passenger flows, upgraded CCTV and fire safety systems, and restoration of the St Pancras Grade I listed Victorian forecourt façade.

As well as looking at the overall improvements and benefits of the project, the presentation examined the delivery challenges, the complexities of the organisational structure, liaison with the numerous project stakeholders, and the lessons learned.

One of the oldest and busiest Underground stations on the network, King’s Cross St Pancras serves six of the twelve Underground lines and over 80 million passengers a year. Sitting between and below King’s Cross and St Pancras stations, it is bounded by the busy Euston Road to the south and the new commercial development site to the north, resulting in a challenging and congested work site. Carried out in two phases, the works included the construction of a five-storey underground structure, 300 metres of tunnels, ten new escalators and six new lifts. Despite being in close proximity to live mainline and underground track, the works had to be carried out without station closures.

The London Underground interchange is now prepared to handle future growth, including the increased demand expected during the London 2012 Games.

Starting with a brief history of King’s Cross station, Network Rail outlined the strategy and challenges of the redevelopment programme.

King’s Cross opened in 1852 as a two-platform station – one for departures and one for arrivals. It is now the main hub of the UK’s busiest transport interchange, but has numerous shortcomings which have resulted in a dingy and unrewarding passenger environment. In 1970 the southern concourse was built as a temporary measure to the south of the station, hiding the original Victorian façade – this will be visible once again when the works are complete.
Modernisation is difficult, and presents many logistical challenges. It is a Grade 1 listed structure, there
is no scope for shutting the station whilst the works take place and physically there is little room for
expansion.

The presentation looked at various aspects of the project, including the design options, the
procurement strategy, and relationships with the numerous stakeholders and contractors. It described
the delivery strategy, the chronology and scope of the individual work packages, and concluded with
some of the key challenges and lessons learned.

The overall strategy for the development works included:

• Securing permanent planning consent for all structures and work in order to create adequate
  further capacity for growth in passenger numbers.
• Unifying the station concourse and improving the interchanges.
• Developing a seamless transport interchange between King’s Cross and St Pancras mainline
  stations and London Underground.
• Creating a high-quality passenger environment.
• Delivering the station fit for the 21st century.

The final presentation of the day, from VINCI Construction, looked at the engineering challenges
posed by some of the projects at King’s Cross including:

• The shared service yard – a joint development by Network Rail and Argent to provide an
  underground service facility for the on-board catering and retail supplies, with a mixed use
  development above.
• The footbridge and platforms inside the main train shed.
• The western concourse and range.
• The London Underground project to expand the Tube ticket hall in front of King’s Cross station
  and the western ticket hall under the forecourt of St Pancras station, adjacent to Euston Road.

Challenges common to all the projects included the Network Rail/London Underground interfaces,
the operational stations, passengers, staff and tenants, local road networks, and other ongoing
construction projects such as CTRL.
Specific challenges were many and various, with the engineering frequently hidden from view – for instance, a gas main that occupied the footprint of the enlarged Tube ticket hall was diverted into a disused tunnel lined with a blast proof concrete lining.

Other examples illustrating the challenges and the techniques used to solve the problems included constructing the roof of the new western concourse, installing a footbridge inside the main train shed and removing the crowns of the Thameslink and Metropolitan and Circle line tunnels to accommodate the new London Underground ticket halls.

The presentation concluded with a number of general observations, for instance the importance of reflecting the business needs of the stakeholders in terms of running trains, buses, taxis, delivering supplies to retailers and passenger safety.

The day’s presentations and discussions provided a good understanding of the complexities and progress of the King’s Cross development, with a number of thoughts to take away on managing complex programmes in the future.

The seminar Chairman, Andy Mitchell from Crossrail Limited, noted that unlike the Crossrail or Thameslink projects, there is no single identified body charged with pulling all the urban renewal and transport improvement projects together – the business cases and the funding sources are quite separate and independent.
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