

IN WITH THE OLD

*As UK attention turns to refurbishment as an affordable way to create new building spaces, Laing O’Rourke is well placed to lend an experienced hand. **Mark Smulian** reports.*

WHETHER CONVERTING GRADE I-LISTED offices to homes fit for ambassadors, helping hospitals to rationalise their spaces or bringing schools up to modern standards, Laing O’Rourke has demonstrated it can rise to the refurbishment market’s challenges.

The UK economic climate now favours refurbishments, renovations and restorations as a cost-effective way of creating new building spaces. The financial and environmental merits of breathing new life into a structure, rather than demolishing and starting from scratch, translate to all sectors – from healthcare and education to retail and leisure. On the other hand, such projects often involve buildings still in use, creating new issues and requiring thorough planning.

Peter Brown, Laing O’Rourke’s north-west and West Midlands operations director, says: “Refurbishment is crucial. Given the uncertainty in securing finance for new builds, a number of our clients are exploring the option to refurbish or reconfigure existing stock and are making the most appropriate use of what they already have.”

Laing O’Rourke can expect fresh technical challenges as clients seek modern environmental standards in buildings that might otherwise have been demolished. But the company’s refurbishment teams can call on colleagues with a range of expertise to help them tackle the most complex projects.

Healthy planning

In 2009-2010, Laing O’Rourke Construction North led a refurbishment scheme at St James’s University Hospital and Leeds General Infirmary hospitals for Leeds Teaching Hospitals NHS Trust. The trust wanted to co-locate children’s services at Leeds General Infirmary and healthcare for elderly people at St James’s, rather than splitting them across both sites.

Project leader Paul Brett steered the supporting work by subsidiary company Crown House Technologies (CHT). “There were 18 separate work fronts around wards that were still in use,” he explains, “so it was very complex logistically.”

St James’s was a refurb and required re-planning of existing wards to maximise bed spaces and improve clinical functionality, but Leeds General was stripped right back to its perimeter, and some areas were a complete change of use, for example from offices to clinical areas. One notable challenge was the conversion of various non-clinical spaces into a new operating theatre, but, again, surrounded by theatres still in use.

The 18 handovers meant the project was, Paul adds, “like a jigsaw that required very careful planning, as any lateness would have a knock-on effect”.

“It takes all the usual planning, but to the nth degree for maintaining services, and because of infection control, you cannot just put up a hoarding. You need sign-off from infection control authorities for sealing off,” he adds.

Naturally, the refurbishment of premises used by mental health patients calls for special sensitivity. In Morpeth, project manager Joe Jefferson led the



TOP GRADE: Laing O’Rourke managed the renovation of Regent’s Park’s magnificent Grade I-listed Cornwall Terrace (above); the refurbishment of hospitals, such as St James’s in Leeds (left), often has the added challenge of a live environment

conversion of Northgate Villas, at Northgate Hospital, from offices to accommodation for patients with learning difficulties. Both villas were taken down to the load bearing walls and rebuilt with anti-ligature features to prevent self-harming.

A lot of Joe’s other work for Northumberland, Tyne & Wear NHS Trust is on live mental health wards. “That’s very difficult as only small sections can be screened off for work,” says Joe. “If any incident happens, we have to stop.”

Going back in time

The Grand Ocean Hotel at Saltdean, East Sussex, was completed in fine Art Deco style in 1938. It was used by the wartime military, as a Butlins resort and as a hotel, before planning permission was granted to convert it into 280 luxury apartments, with restoration of the Art Deco features.

Explore Living sales and marketing director John Inglis says: “It was a dilapidated Grade II-listed concrete frame building that had been empty for three years. It’s important for us to work closely with

the local authority conservation officers on projects like this to gain their co-operation and approval of the conservation scope of works, ultimately to ensure the programme is met.”

The facade had to be stripped, with render and guttering replaced and old Crittal windows substituted for similar double-glazed ones to meet modern environmental standards. Upper floors were gutted and Expanded constructed the concrete frames of four new wings, which complement the Art Deco design.

The project also saw the team hone its artistic skills. The main work was in the foyer, which contained the bulk of the Art Deco features. Bronze sculpture elements were repaired, while new ceiling decorations were made to replace existing ones that were covered with Artex.

“We showed we could return this building to its 1930s glory,” John concludes, “which is a rewarding aspect of restoration.”

The even more historic Cornwall Terrace – commissioned by the Prince Regent (later George IV) exactly 200 years ago – overlooks London’s





NORTHERN LIGHTS: Laing O'Rourke's UK refurbishment projects in the north include the conversion of Manchester's debating and concert venue Free Trade Hall into a Radisson Edwardian hotel (left), and Sheffield's Meadowhall shopping centre (below)

Regent's Park in an area noted for imposing Georgian architecture. It was a two-year challenge for project leader Ian Russell to convert the Grade I-listed terrace from the headquarters of property firm British Land to what developer Falmouth Developments describes as eight luxury "ambassadorial residences".

Such projects highlight the precision skills required when teams are limited by the basic structure already in place, especially the parts that are protected.

"We had to get all the floorboards up and take down all the walls apart from the exterior and the ones around the staircases, which are listed, and then rebuild," Ian says. "All but one lift shaft had to be relocated – in one case by just one metre."

A London Underground line runs beneath the terrace, causing vibration and noise. This was minimised by the creation of a floating floor and



walls, while the actual floor rests on acoustic pads. Vetter provided the marble in these homes, a particular feature of the bathrooms, and Laing O'Rourke Construction the brick and block work. Ian believes top-end refurbishment will thrive: "Very wealthy individuals will always be looking to invest in their properties, particularly their residences."

An education in refurbishment

Across London, Laing O'Rourke is in the Newham School Transformation Forum Partnership joint venture with Newham Council, Research Machines and Building Schools for the Future. The forum is working on two primary and four secondary schools, one of which, Langdon, will become the country's largest all-through school, for pupils aged 3-16.

General manager Peter Chappell says: "We are bringing premises that have not kept pace with repair and maintenance up to modern educational standards. Typical older classrooms are 35 to 40 square metres, and schools now want 60."

Newham's schools are not alone in seeing the changes, with chancellor George Osborne having announced last October a £15.8 billion budget for the refurbishment of 600 schools nationwide.

Close co-ordination with schools ensures they have enough space for teaching while work takes place, so avoiding temporary accommodation costs.

Laing O'Rourke project leader Paul Kennard says: "Pre-planning is the key with school operations, and you must do surveys to understand the building and the risks in its design."

CHt, the Design for Manufacture and Assembly (DfMA) plant in Steetley, Expanded and Select are involved in the Newham redevelopments.

"I've been surprised at how flexible DfMA can be," Peter says. "We are building a quite dramatic dining hall, which will be semicircular with a glass face. We've used DfMA to make the parts for that, and it's a great example of the company working together to solve issues at the right cost."

The new word in construction

Gavin Devine, chief operating officer at MHP Communications, a public affairs consultancy with expertise in engineering, reflects on the new political buzzword.



“A combination of sharp cuts in UK public sector capital budgets and fast-approaching deadlines for meeting climate change targets means that “refurbishment” is now one of the most popular words in Westminster and Whitehall – and not just in the Construction Unit at the Department for Business, Innovation and Skills.

The long-awaited replacement for the Building Schools for the Future programme is expected to favour refurbishment and standardisation, and pressures on health service budgets mean that more NHS trusts are also looking at refurbishment rather than new build.

In housing, the Green Deal is the flagship policy. Although the details still have to be worked out, the principle of giving property owners a loan of up to £6,500 for energy efficiency improvements has been welcomed by the industry.

The Department for Energy and Climate Change has said the Green Deal will be extended to non-residential properties, and the government is considering other ways of encouraging commercial landlords to improve the energy performance of their properties.

One idea gaining popularity is a requirement that commercial landlords report their energy usage through display energy certificates. This was endorsed in last year's Low Carbon Construction report by Paul Morrell, the government's chief construction adviser, and ministers are understood to be looking at it seriously.”

A new way in the north-west

Elsewhere, Laing O'Rourke's stamp is on improvements to three famous buildings in Manchester. It is about to start the transformation of the Grade II-listed Central Library and Town Hall Extension, which date from the 1930s and cannot cope with current demands. Upgraded internal spaces and modern systems will help the city council to reduce its carbon footprint while delivering improved services.

In 2006, Manchester United's Old Trafford ground gained an upper tier to the north-west and north-east quadrants, providing seating for an additional 7,900 fans – a particularly complex 18-month job, given the ground remained open throughout and additional seating was released in stages.

In 2004, the company completed the conversion of the city's Free Trade Hall into a five-star Radisson



GRAND DESIGN: Once known as “the honeymoon hotel”, the Grand Ocean has been converted into modern luxury apartments that retain the original Art Deco features

Edwardian hotel. All but the facade and one side wall were taken down, and the hotel was built in that space while a piled frame supported the frontage.

Laing O'Rourke's other refurbishment expertise is illustrated by the Tamesis Joint Venture, with Imtech Process at Beckton and Crossness sewage treatment works for Thames Water. The extension projects include upgrading large sections of the existing facilities to improve the quality of discharged water.

Project director Gary Crisp explains: "At Beckton, we are refurbishing 72 final settlement tanks, enhancing existing sub-stations and extending the activated sludge treatment building. We are currently restricted to working on four tanks at a time over a three-year period, but good relations with Thames Water and a detailed knowledge of how the plant operates should allow us to co-ordinate our work with their routine maintenance and have access at certain periods to up to 12 tanks at a time."

Refurbs also call on some unexpected skills. A facelift for the Meadowhall shopping complex in Sheffield, and CHt's installation of an air cooling system, had to stop in 2007 when the nearby River Don burst its banks.

Yorkshire and East Midlands director Dan Doherty recalls: "We stopped work to help with the flood relief and then built river defences for Meadowhall. The client was grateful for our help in what felt like a siege."

It's all part of the job for the refurbishment experts, who expect the unexpected in old buildings and react creatively. ●

FOR MORE INFORMATION

For information about all refurbishments projects, contact new projects leader **Paul Kennard** pkennard@laingorourke.com +44 (0)7860 293301