

Balfour Beatty

One giant leap

Centex joins the Group

Come fly with me

Exeter airport acquisition takes off



Update

The international news magazine for Balfour Beatty ♦ April 2007



Cover picture

The British and American flags fly together symbolising the recent acquisition of Centex by Balfour Beatty.

See full story pages 15-18.

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Balfour Beatty Update is
published by Balfour Beatty plc,
130 Wilton Road, London SW1V
1LQ, for Balfour Beatty
people worldwide
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Centex acquisition heralds new era

BALFOUR Beatty completed the acquisition of Centex Construction, a leader in the commercial construction industry in the US, at the beginning of April. For further information on the new arrival and an interview with its Chairman and CEO, Robert Van Cleave see pages 15-18.

On joining the Group, Centex has been renamed Balfour Beatty Construction Llc and our civil engineering business, Balfour Beatty Construction Inc has become Balfour Beatty Infrastructure Inc. Jim Moynihan President and CEO of Heery International has now also taken direct management responsibility for both Balfour Beatty Infrastructure Inc following the departure of Ed Phipps and Paul Copeland, President, Balfour Beatty Rail Inc now also reports to Moynihan.

Moynihan has visited each of the operation centres and met many of the clients. "My goal is to create respected, desirable, stable, and successful infrastructure construction and rail engineering companies in North America," he explains.

"Balfour Beatty Infrastructure is the best name for our civil engineering business because infrastructure actually describes the company's business. The new name also takes into account the need to expand the company along the lines of the things we do well," explains Moynihan. "Infrastructure will prove a much more accurate name over the long haul."

In the UK, Andrew McNaughton has been appointed Group Managing Director at Group Head



Jim Moynihan



Andy Rose



Andrew McNaughton

Office. He has taken over responsibility for Stent, Dutco Balfour Beatty and BK Gulf, in addition to Balfour Beatty Civil Engineering.

As a result changes have also been made to the responsibilities of two of the other four Group managing directors, Andy Rose and Brian Osborne.

Following the completion of the Centex deal, Andy Rose will focus entirely on our US based activities Balfour Beatty Infrastructure Inc, Balfour Beatty Rail Inc, Heery and the newly renamed Balfour Beatty Construction Llc.

His responsibilities for Haden Building Management transfer to Brian Osborne, who has relinquished his responsibilities for Dutco Balfour Beatty, BK Gulf and Stent to Andrew McNaughton. Andy Rose's involvement with Barking Power goes to Ian Rylatt, Managing Director of Balfour Beatty Capital.

The responsibilities of the other two Group managing directors, Mike Peasland and Manfred Leger remain largely unchanged, though Manfred has joined the board of Metronet to replace Jim Cohen who retired earlier this year.

Balfour Beatty Civil Engineering has been split into two new operating companies. Balfour Beatty Regional Civil Engineering, under Managing Director Marshall Scott will focus on the regional market, while Balfour Beatty Major Civil Engineering, under Managing Director

Stephen Tarr will be responsible for selected customers with a portfolio of large-scale complex projects.

Queen opens children's eye centre

HER MAJESTY The Queen has officially opened the world's largest centre dedicated to the care, treatment and research of children's eye diseases. After the opening ceremony in February, the Queen met patients, staff and key donors at the £15 million Richard Desmond Children's Eye Centre at Moorfields Eye Hospital, London.

Among the guests was Bob Clark, of Balfour Beatty Construction (BBCL), which managed this world-leading project under the ProCure21 procurement and contract framework. Work on the eight-storey building was completed in

December and the first patients walked through its doors at the beginning of February.

The state-of-the-art centre is named after Richard Desmond, owner of Express Newspapers and a former patient at Moorfields Eye Hospital, who donated £2.5 million to the fund-raising appeal that was launched in 2000.

It includes outpatients' clinics, day surgery and day care units, research facilities, the Ronald McDonald family accommodation unit, plus offices for patient records, admin and stores.

BBCL was involved with the design development and cost management of the project from

an early stage. "This included liaising with the design team, cost managers and the Trust, as well as the specialist subcontractors, many of whom already had an established working relationship with Balfour Beatty," explained Project Manager Chris Miller.

The BBCL team handled the critical process of the sequencing of the various trade contractors to make sure that the work went ahead smoothly and on schedule.

Chris and his team had to carefully 'nurse' the project, since the construction work went ahead alongside the day-to-day routine of the Moorfields Eye Hospital and the Institute of Ophthalmology.

Paradise regained!

BALFOUR Beatty has won contracts worth £111 million to help with the regeneration of Paradise!

The work on the Paradise Project in Liverpool will involve five Group companies: Balfour Beatty Construction, Mansell, Balfour Kilpatrick, Balfour Beatty Civil Engineering and Stent Foundations.

The contracts were awarded by Grosvenor, the international property group, which was appointed by Liverpool City Council to oversee the £920 scheme to regenerate an area of 42 acres in the heart of the city.

The project, which is due to be completed in 2008 when Liverpool will be the European Capital of Culture, will see the construction of shops. Including two department stores, offices, leisure facilities, two hotels, a new bus station, homes and 3,000 car parking spaces. It will also create more than 4,000 permanent jobs. It is one of the largest development schemes currently underway in Europe.

Access to the Albert Dock will also be improved, creating a much-needed link between the waterfront and the city centre.

Project Director Allan Henshall said that Balfour Beatty Construction will act as the main contractor for the development in the eastern part of the Paradise Project, consisting of 15 buildings, including more than 50 new shops,



160 apartments, commercial buildings and 550 car parking spaces.

The work being undertaken by Balfour Beatty involves giving a major facelift to other buildings, including Liverpool's oldest Grade 2 listed warehouse, so that they can be used shops. Most of the work of the work will be completed by March next year.

● The City Council has praised Balfour Beatty Civil Engineering for the "fantastic" job it is doing in building Liverpool's new £19 million cruise liner landing stage, which is due to be floated into place in May.

"Everything is on schedule," says Angie Redhead, the City

Council's cruise manager. "It is an exciting time for Liverpool. Once the new facility is in place, it will undergo a range of trials."

It is another project that is breathing new life into the city. The first cruise liner is due to dock at the 1,000 ft long berth on 29 July with 1,100 passengers and six other liners are scheduled to arrive during 2007. The big day is 21 September when the QE2 arrives in Liverpool for the naming ceremony.

Meanwhile, Carnival, the world's biggest cruise company, has announced that the *Grand Princess*, which carries more than 3,000 passengers, will be adding Liverpool to its cruise destinations and plans to call there four times in 2008.

QiC Award for Forth project

Balfour Beatty Civil Engineering (BBCEL) has won a Quality in Construction Award for Project Safety on the Forth Bridge refurbishment project.

The site team from BBCEL's Northern Division has clocked up two million man-hours with not one reportable accident – a "fantastic achievement", said Managing Director Adam Thomson.

The safety milestone was reached on a project that involves extensive scaffolding, encapsulation, steel repairs, grit blasting and painting coupled with the challenges of the Lead Regulations. In addition, the team has been working at height, over water and alongside a live railway.

He said that weekly briefings, toolbox talks and daily risk assessments, reinforced by the company's Take CARE safety initiative, were fundamental to this achievement.

"The scale and complexity of this project is awe-inspiring," commented the judges of the Quality in Construction Awards organised by *Construction News*. At the same awards, held at the London Hilton Hotel on March 21, Balfour Kilpatrick was highly commended for Safety Management Achievement for its behavioural safety initiative called 'Whatever it takes'.

Balfour Beatty Infrastructure Services also collected a highly commended award in the Excellence in the use of ICT category. The award was for its coldsnap system, which uses GPS and software to check that roads and pavements have been gritted correctly during the winter.

● BALFOUR Beatty Construction struck gold during its work on a new £42 million office building in the City of London.

The team working on the site at 40, Holborn Viaduct has been presented with a prestigious City of London Considerate Contractor gold award.

The award relates to the phase of the work that involved the demolition of the old De Beers building that stood on the site and the piling and ground-works for the new building that will take its place.

"I should like to congratulate the on-site team who are proud to have won this award. It is a tough one to win," says Project Director Andy Clarke. "The award recognises that the requirements of the Code of Good Practice have been consistently exceeded," he added.



Her Majesty Queen Elizabeth officially opens the Richard Desmond Children's Eye Centre at Moorfields Hospital.

IN BRIEF

JOHN Lewis, the department store giant, has been shopping once again with Balfour Kilpatrick's Nottingham office. The Nottingham team is supplying and installing mechanical and electrical services as part of a £60 million facelift at the John Lewis flagship store in Oxford Street, London. Work is scheduled to finish in September, well in time for the all-important run-up to Christmas. This is the third contract that has been awarded to the team, headed by Operations Manager Gary Homer, by John Lewis and its project manager, Styles & Wood.

FATHER and son Shaun and Liam Hall rescued two elderly people from a fire in a block of flats. The two men, employees of Balfour Beatty Utilities, had been repairing a burst water main and were driving past the block of flats at Morecambe, Lancashire, when a woman ran out into the street shouting that one of the flats was on fire. They jumped out of their van and Shaun, who is 40, grabbed a long, steel bar – used to open and close valves on water hydrants – to force open the main door of the flats. They warned the residents of the danger, helped one elderly woman outside, then went to the top floor flat where the fire had started and led the man who lived there and his pet Alsatian dog to safety. The man, who was in his 70s and very frail, was given oxygen by the emergency services to overcome the effects of smoke inhalation.

A NEW £26.3 million education centre being built at Brighton by Balfour Beatty Construction is set to go straight to the top of the class. Study Group, for whom the work is being undertaken, believes that the development will set a new standard for facilities provided for international students in the UK. The five-storey complex, which is due to open in September, will have 375 en suite bedrooms for students, 62 classrooms including science laboratories, art studios and IT facilities, plus a state-of-the-art library, bookshop, medical room and cafeteria.



Getting a lift from technology

GAMMON has won the HK\$2.3billion contract to build One Island East, a 70 storey office building on Hong Kong Island on behalf of Swire Properties.

Andrew Yick Wing Fan, Contracts Manager, Gammon, says, "We won this contract because we engaged with the client at the start of the development and worked closely with all consultants to carry out the feasibility study. We provided the necessary pre-construction advice and built up good working relationships with all parties involved."

Digital Project by Gehry Technologies, a pioneering 3D

software, is being used by Gammon to build up a digital model of the building.

Gammon took full advantage of the technology to generate a 4D model, designed to improve site management efficiency. "The 4D simulation is a detailed planning tool for critical elements and process checking prior to physical construction," says Andrew. "It is used to optimise the work flow and arrangements for the four day floor cycle – the construction of one typical floor takes four days. As we only have 24 months to complete this project, it will help us enormously."

Double tops for Business Bay project

DUTCO Balfour Beatty's (DBB's) \$54.3 million contract to construct a canal at the heart of the massive Business Bay development in Dubai is a double winner.

Not only did the company collect the prize for *Construction Week* magazine's Medium Size Project of the Year, but it also went on to win the overall Project of the Year award.

The DBB team of 45 staff and 660 operatives worked 24 hours a day seven days a week in the desert to extend the existing Dubai Creek waterway to link up with the Arabian Gulf 13 km away and help fulfil the dream of the Ruler of Dubai. They completed the project an incredible four months ahead of schedule.

His Highness Sheikh Mohammed Bin Rashed Al Maktoum's vision is to see Business Bay emerge from the desert sands as a new commercial and

business centre within the city of Dubai.

"With the Ruler of Dubai taking such a personal interest in progress, the profile of the canal extension project was always going to be very high," explained Project Manager Andrew Watson, who accompanied DBB General Manager Grahame McCaig and Deputy General Manager Zeyad Baker to receive the awards.

"At first, the programme was thought to be very challenging, but the fact that the initial scope of the work was completed four months ahead of schedule was a significant achievement."

At tender stage the plan was to extend the canal by 15 metres a day, a task that involved 15,000 cubic metres of excavations and then lining the canal with quay wall blocks. But the team was able to increase the rate of

construction to 25 metres a day. One innovation was the disposal of ground water which was overcome by initially using temporary ponds and later discharging the water into completed sections of the permanent works.

The team faced numerous challenges. The site project management team recognised that the rapid mobilisation and training of newly recruited labour were crucial to getting the project off to a successful start. And with a section of the work being carried out alongside a wildlife sanctuary, stringent environmental controls were put in place.

Construction Week said of its award to DBB: "By extending Dubai's famous waterway by 13km and delivering their part of the project ahead of schedule, the judges agreed that the firm had achieved something special."



Business Bay, Dubai: "the judges agreed that the firm had achieved something special."



Beating the drum for Fife

CONSORT, Balfour Beatty's specialist Public Private Partnership healthcare subsidiary, has been named as the preferred bidder for the £152 million PPP project to double the size of a hospital in Fife, Scotland.

Under the 30-year concession, Consort will provide a new wing to Victoria Hospital in Kirkcaldy, including 11 operating theatres, an emergency care centre, 17 wards, surgical and medical assessment units, maternity unit, a women and children's unit, day intervention,

critical care, coronary care and dialysis facilities.

Construction and all building services will be carried out by a joint venture of Balfour Beatty Construction and Haden Young.

Maintenance and facilities management will be provided by Haden Building Management, while Balfour Beatty Capital will invest £7.5 million of equity in the project.

Andrew Hutton, of Balfour Beatty Capital, said: "We are aiming for financial close in November this year

and for work to start on site in December." The project is due to be completed in 2010.

"We believe that our design, developed in full consultation with NHS Fife's project team and healthcare professionals, will create a first class, efficient facility with an improved environment for patients and staff," commented Balfour Beatty Chief Executive Ian Tyler.

The Fife project is Balfour Beatty's ninth major hospital scheme under the government's PPP programme.

Largest project builds on relationship

IN JULY this year the eagerly awaited fourth vehicular crossing from Hong Kong to China – the Deep Bay Link North – will officially be opened to the public.

For Gammon it represents a remarkable achievement because, in the company's 50 year history, this is the largest single civil engineering project the company has ever undertaken. Rayland Lee, project director, says, "Other projects may have been larger, but they would have been in the form of joint ventures."

Gammon competed against 14 competitive tenders, many of which were joint ventures, to win the HK1.7 billion (£110 million) project to be constructed in a period of only 28 months from the Government of HKSAR Highways Department.

The contract's main feature includes a 4km dual three lane expressway of elevated viaduct structure from Tuen Mun to Ngau Hom Shek, adjacent to the shore line of Deep Bay. During the peak construction periods, over 1,000 people worked on the project.

What sets Gammon apart, Rayland says, is that it is the only company in Hong Kong which can provide a 'One Stop Shop' construction service for its clients, as it has various construction elements of its own including a foundation department, concrete batching plants and steel fabrication departments, as well as its inhouse engineering consultancy Lambeth Associates, which provided temporary works design and other technical support.

"We had already established a working relationship with the client two years before the actual tender period," Rayland points out. "We demonstrated to them that we had a team of technically experienced staff that were capable of undertaking any large civil engineering project of this nature. We undertook a thorough internal risk assessment workshop, ensuring that our comprehensive tender document included solutions to any possible technical site difficulties."

From the start, Gammon was on top of the project and completed the foundation works in 14 months – three months earlier than expected.

IN BRIEF

A JOINT venture of Morrison Construction and Balfour Kilpatrick is working on an £80 million project to construct one of Europe's biggest onshore wind farms.

The 122 turbines being built at Eaglesham Moor, just to the south of Glasgow, will make a major contribution towards Britain's commitment to renewable energy, feeding 'green' power into the national grid.

When completed in 2009, it is estimated that Whitelee wind farm will eventually provide enough electricity for 200,000 homes.

Works valued at more than £20 million are being carried out by the Projects Unit of Balfour Kilpatrick on the design, supply and installation of electrical and control systems, including switchgear and cabling.

The team, headed by Alan McCann, Contract Manager, and Simon Lafferty, Unit Manager, is also responsible for the construction of the substation and control buildings that will harvest and feed the power into the grid.



Whitelee wind farm

BALFOUR Beatty has made it a hat-trick of street lighting concessions with the news that Connect Roads, its specialist PFI road and street lighting operation, has reached financial close on a £36 million PFI contract for Derby City Council.

Balfour Beatty will be responsible for all street lighting and highway signage services under the terms of the 25-year contract, which will be carried out by Balfour Beatty Power Networks, the Group's power and cabling specialist.

The contract covers the ongoing maintenance on 27,600 lighting columns and 3,200 illuminated signs and bollards.



The Archbishop of York, Dr John Sentamu, formally blessed the college in March

Top facilities mark York College build

THE new York College, one of the biggest building projects of its kind in the UK, is set to open its doors to some 12,000 students and 600 staff in September.

Balfour Beatty Construction won the 96-week, £46 million contract to design and build the new college with its state-of-the-art facilities that will not only bring social and economic benefits to the city but will also provide a massive boost to further and higher education in

York and North Yorkshire.

The existing campus is being replaced by a four-storey building of 30,000 square metres at a site on the Tadcaster Road some three miles to the south west of the city centre.

The centrepiece of the building is a glazed atrium and other facilities are a nursery, two-storey car park and extensive facilities for motorcycle and bicycle parking. The playing fields will include an all-weather pitch.

Emma wins first Graduate Prize

WINNER of the inaugural Chairman's Graduate Prize is Emma Garner, of Balfour Beatty Construction. She was presented with a trophy and a cash prize of £1,500 by the Chairman of Balfour Beatty plc, Sir David John, for her idea that the judges decided made the greatest contribution to innovation in the Group.

Her 'big idea' was the development of an easy-to-understand colour coded system that instantly shows the status of a project and identifies the areas that need specific attention.

"I designed an Excel program which pictorially shows at a glance the areas that are behind, ahead or on

programme," said Emma, who has worked with Balfour Beatty since 2002 when she was employed at Weavers Wharf, Kidderminster, during her year out. She has since worked on the South Birmingham and Birmingham New Hospitals projects.

What impressed the judges was that Emma's system highlighted any problem areas to both project and site managers, which means that action plans can be put in place earlier.

There were three runners-up: Chris Mayer, Haden Building Management; Alex Tollington, Stent; and James White, Balfour Kilpatrick. They each received a book and cash prizes of £500 at the ceremony at the

Group head office in London.

Chris developed a user-friendly electronic version of the standard CORGI paperwork that HBML gas engineers have to fill out. Alex's idea is to equip engineers with a Personal Data Assistant now built into many mobile phones to store procedures and data that are not always readily accessible. James developed an improved method of monitoring the progress of a project against the original programme, including a measure of overall productivity.

The 2007 award was open to those who joined the Group on a graduate development scheme in 2005 and Emma, Chris, Alex and James were shortlisted from the many applications submitted by graduates from many of the operating companies in the UK.

Chairman of the judging panel was Sir David John, and the other judges were: Mike Peasland and Brian Osborne, Group Managing Directors; Paul Raby, Group HR Director; and Tim Sharp, Head of Corporate Communications. "It was very encouraging to receive so many excellent entries," they said.

● Balfour Beatty was shortlisted in the 2007 National Work Placement Awards. These annual awards encourage and reward companies that display good practice in work experience, putting thought, time and effort into helping students develop employability skills.



Sir David John, Chairman of Balfour Beatty plc hands the inaugural chairman's Graduate Prize to Emma Garner of Balfour Beatty Construction. Runners-up were, from left to right, Chris Mayer of Haden Building Management, Alex Tollington of Stent, and James White of Balfour Kilpatrick



London Boroughs of Hounslow, left, and Lambeth, above, receive their sponsorship cheques from Ian Tyler

Grant keeps Youth Games running

BALFOUR Beatty has teamed up with radio station Capital 95.8's Help a London Child scheme to launch a £40,000 sports development grant programme that will help develop London's young sports stars of the future.

This new sports aid scheme underlines Balfour Beatty's commitment to support sport in the capital, since it comes on top of the Group's decision to continue its sponsorship, begun in 2006, of this year's London Youth Games.

Applications for grants involving 20 different sports were submitted by all 32 London boroughs and the City of London. Eight were short-listed and two – Hounslow and Lambeth – were chosen to receive awards of £5,000.

Hounslow is to use its grant on a 12-week scheme called 'Cheer up Hounslow' which will focus on coaching girls and young people with disabilities. It is also hoped to start a

Hounslow cheerleaders team.

Lambeth plans to use the money to set up the Lambeth Community Judo Club in an area which has been given a blanket Anti-Social Behaviour Order (ASBO) and which, it is believed, would benefit from the introduction of a structured sport. All the other boroughs each received a grant of £1,000.

The cheques to the two winning boroughs were presented by Mark Richardson, the Olympic 400 metre silver medalist, at a ceremony hosted by Jim Fitzpatrick MP, Minister for London, at the House of Commons on 29 March.

Ian Tyler, Chief Executive of Balfour Beatty, said that the Group was heavily involved in developing the infrastructure of London, including schools, hospitals, housing schemes, roads and the London Underground

"It is critical to a business such as ours not only that we build

London's physical infrastructure, but, while we are doing so, we add social value to the communities in which we operate. We believe this grants scheme offers a great opportunity to make this year's Games even more memorable."

Anthony Kendall, Chair of the organising committee of the London Youth Games, which was inaugurated in 1977 as part of the Queen's Silver Jubilee celebrations, commented: "The children taking part in the Games today will be the athletes of tomorrow and potential medal winners at the 2012 Olympics."

More than 25,000 children will compete in more than 30 sports in this year's London Youth Games, with the qualifying events being held in May and June. The finals for primary schoolchildren are on 28 June, while those for secondary schoolchildren take place on the weekend of 30 June and 1 July.

Volunteers go ape in Chester zoo

A TEAM of volunteers conjured up some animal magic to build a climbing frame for the new £3 million home of Chester Zoo's ten orangutans.

The apes will be able to hang around in style when the Realm of the Red Ape opens its doors for the first time in May, thanks to the efforts of the team from the Rugby-based GTBBJV, a joint venture between Balfour Beatty Rail Projects and Carillion.

Network Rail gave its blessing for the volunteers, who have been working on the multi-million pound contract to upgrade the electrification of the West Coast Main Line railway between London and Glasgow, to give the zoo and its orangutans a helping hand.

"We're delighted to contribute to such an important global conservation initiative," said Ian Davis, Safety, Health,

Environment and Quality Advisor for Balfour Beatty Rail Projects.

The work was carried out in December and was a great Christmas present from the team to contribute to what will be the finest centre in the world in the fight to save the critically endangered Bornean and Sumatran orangutans.

Chester Zoo's Michelle Duma said: "The Realm of the Red Ape is the largest project in the zoo's history and we are really grateful to Network Rail and the men from Balfour Beatty Rail Projects and Carillion for their contribution."

The members of the team and their families have been sent tickets by Chester Zoo so they can see for themselves how much the apes are enjoying their new home with its specially built climbing frame.

The work involved drilling four-metre deep holes and erecting 42 timber poles ranging in length from 12 to 22 metres. As well as



the orangutans, the Realm of the Red Ape will include a number of animal species new to the zoo, including the world's longest snake, a reticulated python, and the world's largest insect, the Giant Walking Stick.

It was the second wildlife project undertaken by the GTBBJV. Last summer it also volunteered to construct a pond-dipping platform and disabled access path to a new classroom at Cannock Chase for the Staffordshire Wildlife Trust.

Hong Kong gun marks fifty years of Gammon

CELEBRATIONS to mark the founding of Gammon 50 years ago literally began with a bang – the firing of Hong Kong's noonday gun on January 2.

The gun was fired by Chief Executive Thomas Ho, pictured, who was accompanied by directors and representatives of Balfour Beatty and Jardine Matheson, the international trading conglomerate, which each owns 50% of the company.

Over the past 50 years Gammon has become one of Asia's leading engineering and construction companies, with its headquarters in

Hong Kong and employing more than 2,000 people.

The ceremony provided echoes of the company's history. The noonday gun was reconstructed and relocated to its present site by Gammon 26 years ago for Jardine Matheson. And across the harbour from the site is Kai Tak, where Gammon's first project was to build a new runway for the airport.

"Since that time we have prospered within Hong Kong and helped shape the modern face of the territory," said Mr Ho. He thanked Balfour Beatty and Jardine Matheson for their support and said



that their complementary capabilities would contribute to the development of the business in years to come.

In addition to other events that are planned during the year for staff and business partners to mark the company's fiftieth anniversary, a donation was made to Mindset, a charity that supports mental health organisations and projects in Hong Kong and Mainland China.

"We remain committed to growing with and serving Hong Kong and the region through a constant search for excellence in all we undertake," added Mr Ho.



THE Group continued to make very good progress in 2006. Profits and earnings continued to move ahead. Operating cash flows were strong and our net cash position remained over £300 million. The order book expanded significantly to reach a new record of £9.1 billion.

Our performance in non-financial terms has also showed significant improvement with lower accident frequency rates for the fifth year running, better management of our environmental impacts and further expansion of our positive involvement with the communities which we serve. Update spoke to Ian Tyler about the last 12 months and sought his views about the current year.



Left, Anthony Rabin, Balfour Beatty's financial Director, and Ian Tyler, Chief Executive

2006 results show a promising future

UPDATE: Were you pleased with the 2006 results?

IPT: Yes. They reflect a good year all round, with a very good quality of work being won and executed successfully. We have generally strengthened our relationships with our customers and our on-going growth continues to be both disciplined and sensibly directed. By my reckoning, that's 10 consecutive years that Balfour Beatty has improved its profits and earnings by more than 10% – a record of which, I think, we can all be proud.

UPDATE: Last year we talked about the strategy you had recently set. How much progress have you made in implementing your medium-term growth plan since?

IPT: I am glad to say that we have made substantial progress in all the relevant areas. In Balfour Beatty Capital, we have continued to win concession projects under UK PPP, but we have also set up offices in Atlanta, Munich and Singapore and each of the new businesses has already submitted serious bids in its new marketplaces.

Here in the UK, we said we would move beyond PPP and invest in other types of infrastructure asset. We came second in the race for London City Airport, but were more than happy to succeed in acquiring Exeter International Airport. This is one of the fastest-growing regional airports in the UK and has great potential to become the West Country's airport of choice.

In regional contracting, we acquired Birse, which

has significantly improved our position in civil engineering markets in the north of England and the Midlands and taken us into new specialist disciplines and markets.

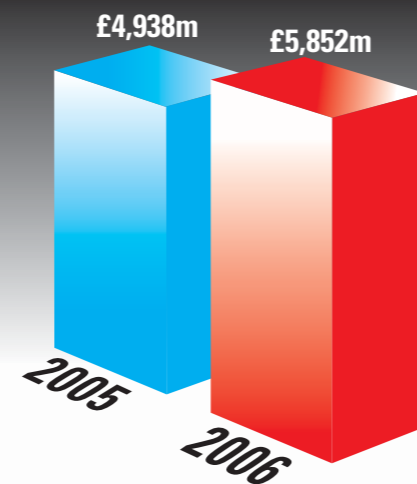
Our professional and technical services business, Balfour Beatty Management, has grown substantially, with excellent new project wins for National Grid and United Utilities, a very successful on-going major project at King's Cross Underground Station and major opportunities under development for BAA and the Highways Agency.

UPDATE: You said last year that growing outside the UK was not an immediate strategic priority and yet you have made a major acquisition in Centex in the US. What has changed?

IPT: When I said it wasn't an immediate strategic priority, that didn't mean we wouldn't take a good opportunity if we found one and Centex is a very good opportunity indeed.

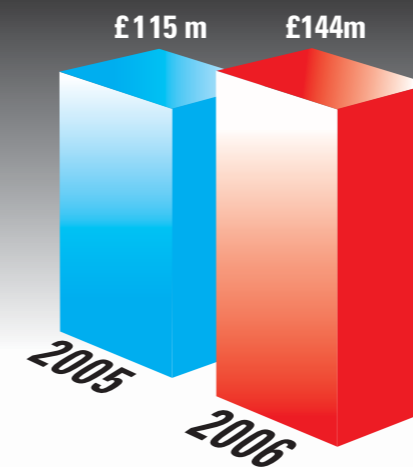
You could search for years and not find a company with so much quality, such good management and prospects and such a compatible culture. In one step, it makes us a very serious player in the US and offers us lots of new opportunities to grow in the future. At the same time, Heery goes from strength to strength and the US civil engineering and rail businesses are also on an improving trend. The US is going to be increasingly important for us in the future, which is why Group Managing Director, Andy Rose, will now dedicate all of his time to our business there.

Revenue



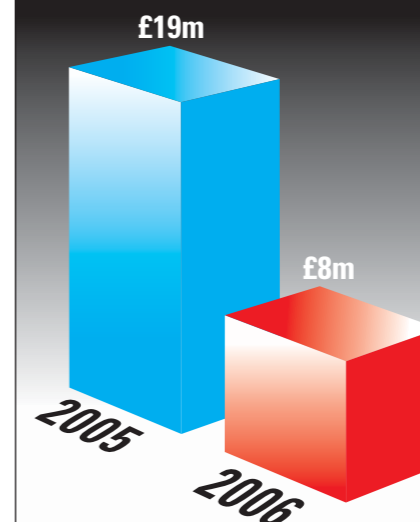
Revenue rose by 19%

Profit from operations*



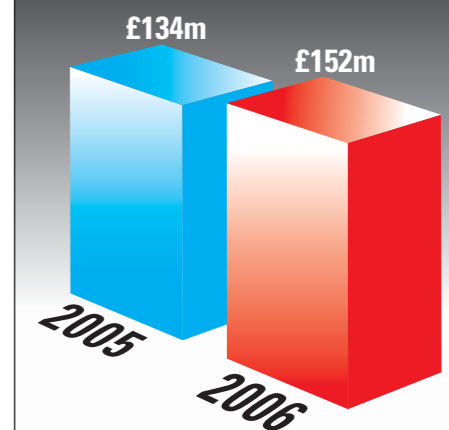
*before exceptional items and amortisation of intangible assets.

Net investment income*



*before exceptional items and amortisation of intangible assets.

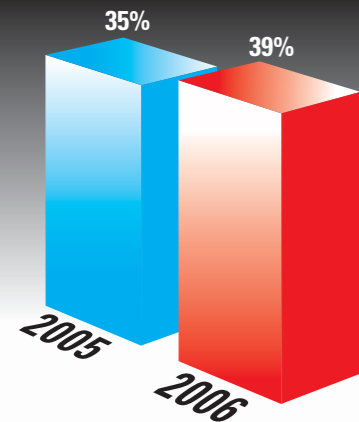
Pre-tax profits*



Pre-tax profits rose by 13%*

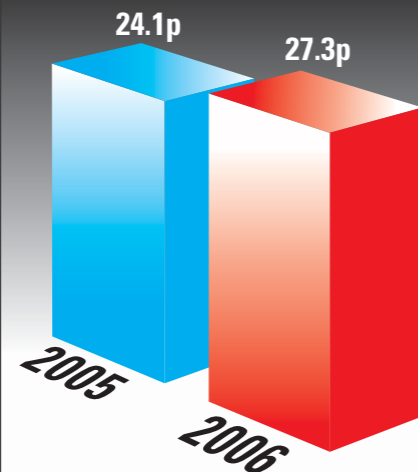
*before exceptional items and amortisation of intangible assets.

Taxation



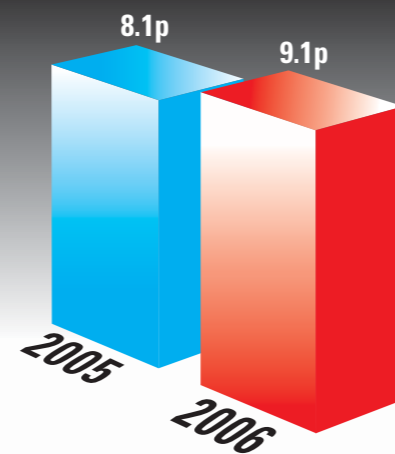
The Group's tax rate was 39% of profit before taxation, exceptional items and amortisation of intangible assets, excluding the Group's share of the results of joint ventures and associates. The increase follows the recognition of a prior year credit in 2005.

Earnings per share*



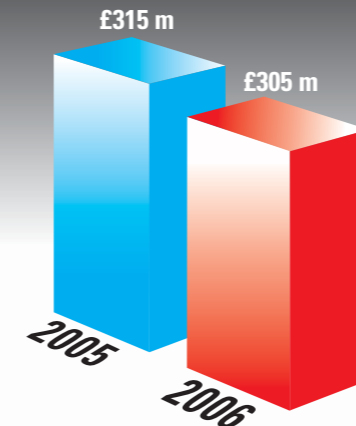
*before exceptional items and amortisation of intangible assets.

Dividends



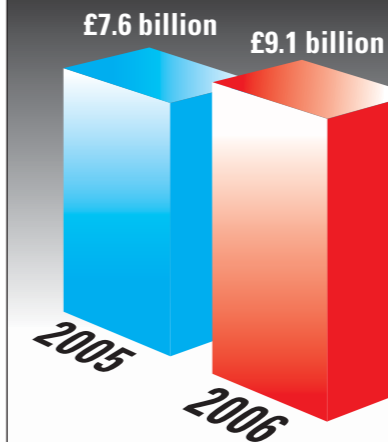
The Board has recommended a final dividend of 5.2p per ordinary share, making a total dividend for the year of 9.1p an increase of 12%.

Net cash



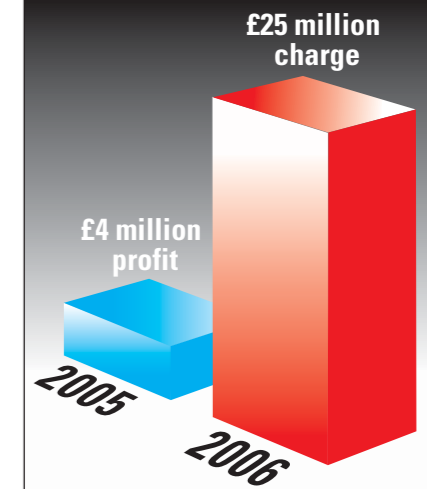
Our year end net cash position was £305 million following acquisition expenditure of £80 million and before taking account of the consolidation of £21 million non-recourse net debt held in PPP subsidiaries (2005: £14m).

Order book



The year end order book increased by 20%, with over £1.0 billion of further work at preferred bidder stage.

Exceptional items



There were a number of exceptional items, the largest of which was a non-cash asset write-down taken at the half year.

► UPDATE: What are your current thoughts on the Olympics?

IPT: Our consortium didn't get the Delivery Partner role we bid for last year and so now we are looking at individual projects as they come to the market, on their own merits. We have, of course, won the work to upgrade and extend the East London railway line, which is very much a part of the Olympic transport plans.

UPDATE: Do your main markets still give you cause for optimism?

IPT: Absolutely. Our order book, which was over £9 billion at the turn of the year, has grown since, not least through the arrival of Centex. A lot of our large-scale projects in hospitals, schools, utilities, roads and facilities management, for example, are in their early stages of development and our bidding teams have, generally, never been busier. Even in those markets which are not growing – like UK rail for example – our businesses are still strong and have good backlogs.

UPDATE: What would you say was the highlight of your year?

IPT: As you know, we put a lot of time and effort into keeping our people and members of the public safe. This year, we reduced our accident frequency rate by a further 24%, despite ever-increasing numbers of projects and employees. During 2006, I undertook detailed safety reviews with all the operating companies to discuss how we can keep on improving and to re-emphasise the targets we set ourselves.

UPDATE: How does 2007 look at this stage?

IPT: It looks very promising although, as ever, we have to execute the work in front of us faultlessly and satisfy our customers' demands. Our businesses are progressing well. Centex will add a lot to our Group in many ways and our opportunities continue to proliferate. A group as big as ours will, of course, always have challenges, but I believe we are very well placed to continue our successful progress of recent years.

Building, Building Management and Services highlights:

- Over £750 million of long-term facilities management contracts secured
- Major hospital schemes in Birmingham and Glasgow commence
- Acquisition of Charter in the US. Pictured, the Corsicana Stadium
- Another strong year of social housing growth



Civil and Specialist Engineering and Services highlights:

- Acquisition of UK regional civil engineer Birse. Pictured, a motorway bridge being moved into place
- Preferred partner for National Grid Eastern Overhead Line and Cable Alliance
- Northern Gas Networks utilities contract secured
- Improved performance in Hong Kong and Dubai



Investment and Developments highlights:

- Birmingham Hospital and Schools schemes reach financial close
- Exeter International Airport acquired for £60m in January 2007
- Preferred bidder appointments for Knowsley Schools, pictured, Derby Street Lighting and in January 2007, Fife Hospital
- PPP investment businesses established in the US, Germany and Singapore



Rail Engineering and Services highlights:

- Waterloo and City line upgrade completed on time
- East London line contract secured
- Nuremberg-Ingolstadt Line, pictured, opened on time
- Good progress on major works at Heathrow Terminal 5



Company leaps into top ten most admired

BALFOUR Beatty has been voted the sixth most admired company in the UK. This accolade, together with top spot in the construction sector, came in what are regarded as Britain's business Oscars – Britain's Most Admired Companies Awards 2006.

Management Today magazine, which runs the awards, says that Balfour Beatty "is winning orders and acclaim worldwide". The company has leapt up the league table from twentieth position in 2005.

What makes success in these awards, now in their twelfth year, so satisfying is that the votes are made by the bosses of 220 of the UK's largest companies in a survey conducted by the Nottingham Business School. Analysts at leading City investment firms also take part in the poll.

Management Today says that the company, which used to languish well down the league tables, "has had a dramatic reversal of fortune", underlined by its bulging order book.

Paul Raby, Director of Human Resources, commented: "Everyone associated with Balfour Beatty can take pride in this endorsement, because it tells us that our peers recognise both the strategies that we have in place to drive our business forward and also the efficiency and commitment with which we are carrying them out. "Equally importantly, this is a view of Balfour Beatty that is shared by our customers whose votes have come in the form of a number of excellent contract wins in the last few months and an order book that now stands at £9.1 billion."

The awards were presented at a gala dinner at Claridge's, London.

The 220 companies that vote in the awards are made up of the ten largest UK-based companies by market capitalisation across 22 different sectors, from the likes of banking and chemicals to telecommunications and retailing. Respondents are asked to rate their peers on their performance across key criteria on a scale of 0 (representing poor) to 10 (excellent).



Come fly with me...

In January, Balfour Beatty's specialist airport investment and development group Regional and City Airports (RCA) completed the £60 million purchase of Exeter International Airport in Devon. One of the UK's fastest-growing regional airports, and home of the RAF Red Arrows, it offers significant opportunities for further development

In setting up RCA and acquiring Exeter & Devon Airport Limited, Balfour Beatty has clearly signalled its intentions to build a portfolio of regional airports in the UK, Europe and the US.

Wholly owned by Balfour Beatty Capital, RCA was formed in June 2006 to acquire, manage and develop regional airports. For the Exeter bid, Balfour Beatty Capital joined with London City Airport (LCA) who became its technical airport operator partner.

Balfour Beatty Capital is one of the UK's largest and most experienced PFI investors and has raised more than £7 billion of funding for its many PFI infrastructure projects. It has a broad range of skills from project promotion and development through to financing, project execution, long-term asset management and operations.

But, as Stewart Orrell, Director of Asset Management at Balfour Beatty Capital explains, the move into airports stems from an investment strategy that is now actively seeking non-PFI opportunities that utilise the competencies of the wider family of Balfour Beatty companies and which offer the prospect of further development.

"The purchase of Exeter Airport was a perfect choice," he says. "It is currently operating at peak capacity and requires significant capital investment to improve passenger facilities. Importantly, we're now actively bidding on other airport opportunities and we believe other

regional airports will also come on the market, creating a pipeline for future investment."

Stewart pointed out that Balfour Beatty already has the necessary development skills. Balfour Beatty Management is the single largest supplier of construction services to BAA at Heathrow's Terminal 5 and the Group also has significant contracts at Glasgow and Edinburgh airports. Other major airport projects have been undertaken at Stansted, Gatwick, Hong Kong, Dubai and Miami.

"What was missing from the equation for Exeter was the operational skills," he says. "and in London City Airport we found a valuable partner.

"Exeter International Airport has a great future, representing the better, more environmentally sustainable option for local air travellers who no longer have to drive 200 miles on congested motorways to Gatwick," he said.

Devon County Council decided to sell Exeter International Airport as a way of securing its long-term future. Under the terms of the sale agreement, RCA has purchased the airport. LCA will provide management expertise through a technical services agreement to support operational function of the airport as it grows and is developed. The council retains a 'special share' and a non-executive seat on the board.

RCA was the unanimous choice of the council's all-party steering group from a shortlist of six bids. The council was particularly impressed

by RCA's vision that Exeter International Airport should become the 'airport of choice for the south west region'.

As John Spooner, RCA Director of Airport Management and now acting Managing Director of Exeter International Airport itself, explains: "The south west is more popular than ever both as somewhere to live and work, as well as a leisure destination.

"Our task is to build on the airport's already impressive growth record of recent years, deliver an efficient, high-quality service and offer excellent value for money."

Development plans include a new departures building which is expected to be constructed by 2010. The initial development phase will also include improvements to the airport's surface access, stand and apron enhancements and an increase in car parking capacity.

RCA's plans were given an unexpected boost when Flybe, the low-cost carrier based at Exeter Airport, announced its acquisition of BA Connect early in the New Year.

"This is extremely good news for the airport as well as the entire region," says John. "It effectively makes Flybe Europe's largest regional low-cost carrier. Additionally, the deal means that all training, engineering and simulations facilities will be located at Exeter Airport, bringing hundreds of new job opportunities."

John Spooner has an extensive background in airport management. Prior to taking up the new



An artist's impression of the Exeter International Airport

position at RCA he spent five years as MD of Manchester Airport and before that he was MD of East Midlands Airport.

Whilst at East Midlands, John took on responsibility for the management and development of Bournemouth and Humberside Airports. He was also Chief Executive of National Express Group's airports division and oversaw the privatisation of Stewart Airport in New York.

Since 5 January John has been working hard with the airport management team and staff to develop the company's business plans.

"At the moment development plans are focused on improving the levels of investment in terminals to create a better passenger experience," he says.

"A key part of this is to maintain the very high levels of customer service that our staff have already achieved. This is an ethos we want to encourage, and the airport's 350 staff and management have reacted extremely positively to the new RCA vision."

Before any major construction and development work can begin, RCA must first submit a comprehensive Airport Master Plan to the Department for Transport (DfT). This plan will

outline RCA's strategic vision for Exeter International Airport over the next 30 years.

Details to be covered in the Master Plan include runway and terminal capacity constraints and the factors which could affect them, such as aircraft size, scheduling, plus environmental and safety issues.

"We're aiming to make this the subject of the widest possible public consultation process in the region during the summer," says John. "Via our website we'll be encouraging feedback from local government, villages, business associations, customers and other airport users. Our aim is to demonstrate that we really want to consult with, and listen to, all stakeholders."

A final Master Plan will then be submitted to the DfT early in 2008.

By a happy coincidence, Exeter also happens to be where one of Balfour Beatty's first PFI projects, the A30/A35 DBFO Road project, began.

"This road goes right past the airport and so opened up better surface access," comments Stewart Orrell. "This played a positive role in allowing the airport to develop and so it's perhaps fitting that Exeter should also be the location of our first non-PFI project."



The RAF Red Arrows: Exeter International Airport is the airfield they use most regularly when in the South West

Exeter International Airport – at a glance

Location: Five miles from Exeter city centre

Destinations: Currently 28 UK and European scheduled service destinations with daily links to the hub airports of Amsterdam and Paris together with 23 charter summer destinations which include two weekly flights to Toronto.

Opened: 1937

Numbers:

1938 – 379 passengers

2004 – 380,000

2005 – 63% rise to 618,000 passengers

2006 – 36% rise to 842,000 passengers

2007 – More than one million passengers

Passenger numbers are forecast to double by 2016

A brief history

Exeter Airport has a history stretching back to the 1930s when it was first developed by Exeter City Council. Some 187 acres were acquired by a compulsory purchase order in 1935 for £10,470. The airport played an important role in the defence of the south west during the Second World War, acting as the base for both the RAF, including a Polish squadron, and later for the US Army Air Force. Continuing this link, every summer the famous RAF Red Arrows team uses Exeter International Airport as the most regularly used airfield from which to take their fantastic aerial displays to locations around the South West.

£10 billion at stake in BAA framework

BALFOUR Beatty has succeeded in getting through to the next round of the BAA framework. At stake is some £10 billion of work over the next ten years. The major prize is the new £1.8 billion Heathrow East Terminal project, which will replace the existing Terminal 2. The next stage is to conclude financial negotiations. Balfour Beatty are currently producing proposals for projects in Terminal 1 including: Pier 4 alterations (£9 million), arrivals and departures refurbishment (£35 million) and the Flight Connections Centre (£5 million).

The company put up an excellent performance over the framework process from September 2006 to

March 2007. The following Operating Companies have all had to demonstrate their capabilities: Balfour Beatty Construction, Balfour Kilpatrick, Balfour Beatty Management, Balfour Beatty Civils, Mansell, Haden Young and assistance from Balfour Beatty Rail.

The selection process has involved statements of experience, an extensive review of Group capability including nine supplier evaluation visits, three exemplar projects proposals and finally a commercial submission. Balfour Beatty has had a relationship with BAA going back to 1995. Currently work is nearing completion on Terminal 5, and continues at Glasgow Airport and on the Civils Framework Contract.

A Flybe aircraft refuels at Exeter International Airport



JV opens up the Greenbush corridor

WORK is on track on the Greenbush rail project in Massachusetts, US for the service to be launched later this year. The design and build contract is being carried out by the Jay Cashman Inc and Balfour Beatty Construction Inc

joint venture on behalf of the Massachusetts Bay Transportation Authority to restore a commuter rail service known as the Greenbush corridor that runs through the towns of Braintree, Weymouth, Hingham, Cohasset and Scituate.



Historic stadium tunes in to facelift contract

THE Cotton Bowl in Dallas, Texas, one of the most famous stadiums in the United States, is to be given a multi-million dollar facelift by Heery International.

Work began in January on the project that includes adding another 16,000 seats to accommodate more fans. The first phase of the \$45 million contract is scheduled to be completed in September and the second phase 12 months later.

The City of Dallas awarded Heery International the design and build contract. Heery was able to engage its colleagues at Charter Builders, a construction firm acquired by Heery in 2006, creating a single-source solution for the project responding to the accelerated project schedule and its complexity.

As well as increasing capacity at the stadium, the planned facelift should help improve amenities for the fans and generate additional revenue. The work includes the exterior façade, concourse and point of sale areas, the provision of state-of-the-art technology and better facilities for the teams and the media.

“The end result will be a facility that combines the best of the past, present and future for Dallas residents and sports fans across the nation,” said Rob Chomiak, Heery International’s Cotton Bowl project executive.

The annual Oklahoma-Texas college football game is played at the Cotton Bowl during the Texas State Fair. A number of historic music concerts have been held at the stadium, perhaps the most famous being the one which featured the 21-year-old Elvis Presley on October 11 1956. U2 have appeared there and Eric Clapton organised a huge blues festival. The stadium, which opened in 1932, was featured in a 1981 episode of *Dallas* where JR Ewing met Dusty Farlow.

Heery International has worked on more than 45 collegiate football stadiums and 225 sports facilities across the United States. “We’re excited to be working on such an historic landmark,” added Mike Holleman, Director of Sports Facilities.



The Cotton Bowl, scene of college football matches, historic concerts featuring such stars as Elvis Presley and Eric Clapton



A forest of scaffolding surrounds the Roseville treatment plant project

Roseville races through the schedule

WORK to nearly double capacity at the water treatment plant that serves the city of Roseville in California is running an amazing four months ahead of schedule. And that’s because it hasn’t gone with a bang!

Balfour Beatty Infrastructure Inc’s project team, which is carrying out the \$32 million scheme, is justifiably proud of its achievement. “We staffed up early on, developed alternatives for the excavation plan and worked with the City Council to move the project forward, comments Project Manager Chris Rutherford.

Site excavation was one area where the team was able to gain several weeks on the two-year schedule. While the plans called for blasting in all areas of the site, the team discovered through exploratory drilling that conventional excavation equipment could be used on 95 per cent of the site. That saved time and money.

Senior Vice-President and West Region Manager Bill Ogle credits teamwork and the excellent working relationships that have been established with the City authorities. “We’ve kept them up to speed on every aspect of the project,” he adds.

The project, which is due for completion at the end of this year, involves a 40 million gallons a day expansion of the treatment plant, which takes water from the nearby Folsom Lake, together with the provision of reinforced concrete sedimentation basins and filters.

ONE GIANT LEAP

The acquisition of Centex Construction makes Balfour Beatty a major player in the US. Update takes a close look at the company and its achievements



Under construction: Capitol visitor centre, one of many prestigious projects Centex has completed in Washington DC

THE Group took a big step forward in its plan to become a major domestic player in the US infrastructure market on 2 April when it completed the acquisition of Centex Construction, a high-quality, top tier US building company based in Dallas, Texas, with annual revenues which, this year, will exceed \$2 billion.

The acquisition creates a profitable critical mass in the US in a core Balfour Beatty business and brings with it substantial new business opportunities.

The map overleaf, shows the Centex Construction core footprint with its heavy concentration on Texas, Dallas in particular, Florida, North Carolina and Washington DC.

It is also a leading player in the privatised military housing market where it has recently won an order for the US Navy worth over \$525 million to add to an impressive existing portfolio. It specialises in the construction management and delivery of institutional and commercial buildings, particularly in the education, healthcare, correctional, government, transportation, leisure and office sectors.

The deal will allow its former parent company, Centex Corporation, to concentrate entirely on its leading housebuilding business.

Announcing the acquisition to the City, Ian Tyler, Chief Executive, explained that Centex offers

Balfour Beatty an excellent position in US growth markets, with approximately US\$5.6 billion of secured and committed orders.

The company seeks to be a leader in multiple market sectors, but concentrates its efforts in a narrow geographical arena. It serves a wide range of blue-chip customers such as the Federal Government, Disney Corporation, Boston Properties, Marriott, Bank of America and a range of education authorities and healthcare organisations.

Balfour Beatty has paid its owner, Centex Corporation, \$362 million for the business, although the net purchase price is significantly less as Centex Construction brings over \$200 million of positive cash bank balances with it.



Jackson International Airport

As well as its excellent market position, Centex’s management style, its key philosophies and processes and the way it thinks about its future is highly Balfour Beatty compatible. Like Balfour Beatty, Centex has a decentralised structure and a sophisticated risk management system. It has a strong bias towards long-term customer relationships and proven processes in supply chain management and strong cash management. It also has an experienced and highly successful management team, which has achieved significant growth in the business over recent years.

Fitting acquisition

It was this fit that was particularly attractive to Balfour Beatty. We know our UK business still has plenty of growth potential but we have to accept that sooner or later this room to grow may be more restricted. To keep growing, we need to establish strong businesses outside the UK, and the US is our most important target market.

Centex Construction will complement Heery, Balfour Beatty’s existing presence in the US building market. Heery is involved in upstream planning and programme management, while Centex provides a powerful delivery capability.

The two companies will continue to operate

CENTEX FAST FACTS

● CENTEX Construction has been a leader in the commercial construction industry for more than 70 years. It provides general contracting, at-risk construction management, design-build, preconstruction and turnkey services.

● The company grew through the acquisition and consolidation of several of the nation's oldest and best known regional construction firms and has operated as Centex Construction since January 2005.

● The national head office is in Dallas, Texas. Divisional headquarters are located in Charlotte, North Carolina; Fort Lauderdale, Florida and Fairfax, Virginia. Additional offices are based at Atlanta, Georgia; Fort Myers, Florida; Fort Worth, Texas; Miami Florida; Nashville, Tennessee; Orlando, Florida; Raleigh, North Carolina; West Palm Beach Florida.

● The company currently has over US\$4 billion in active contracts and over US\$5 billion in committed backlog.

● 80% of projects are with repeat clients.

● Number of employees 1,400+ .

● Winner of 14 National Eagle Awards for Excellence in Construction since 1995.

● Supports these and other local charities and community organisations.

- March of Dimes
- WalkAmerica
- Habitat for Humanity
- United Way
- Children's Medical Center
- Hearts and Hammers
- Ronald McDonald House
- Give the Kids the World
- Richardson Regional Cancer Center
- Center for Multicultural Human Services

Military housing

The US Military Housing Programme involves private companies financing builds and maintaining married status accommodation on US bases across the country. Centex partners with GMH, a leading developer and financier, and has won many substantial schemes including contracts for the Navy, and work for the world famous US military academy at West Point.

as separate entities under their existing managements but we expect there will be significant opportunity for Heery to work with Centex in future.

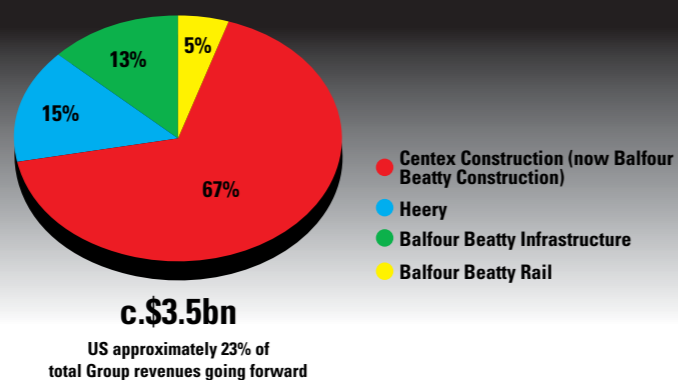
At the same time, Centex's strong presence in state markets where a PPP market is developing creates the potential for a powerful, integrated offer to help accelerate the development of Centex, Heery and Balfour Beatty Capital's PPP business, based in Atlanta.

With the transaction completed, Centex Construction has changed its name to Balfour Beatty Construction Llc.

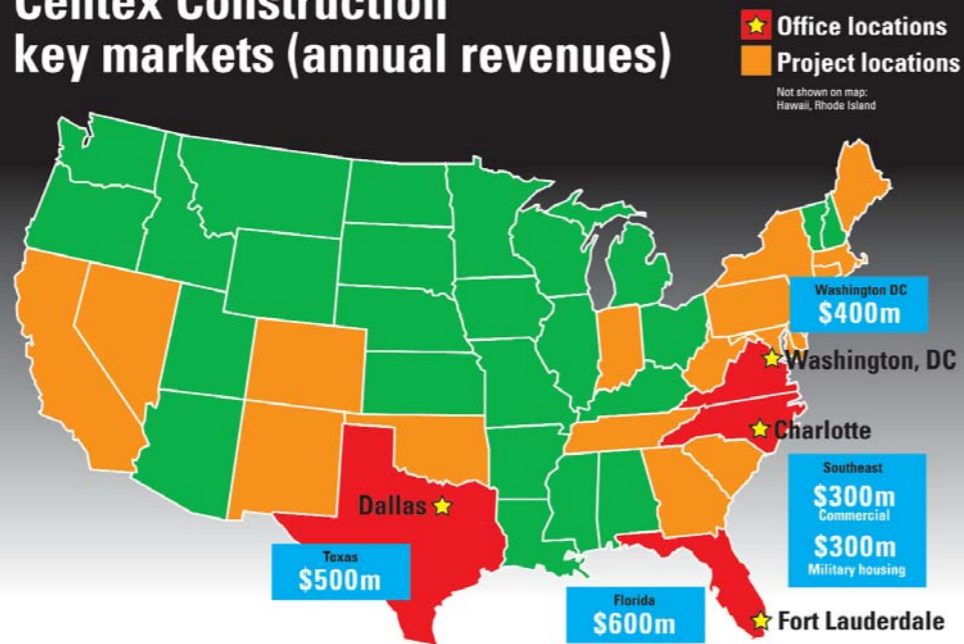
The existing US civil engineering business, which was previously called Balfour Beatty Construction has changed its name to Balfour Beatty Infrastructure Inc. Balfour Beatty Rail Inc is unaffected by the transaction.

The scope of the operations in the US is illustrated in the chart below.

Balfour Beatty US revenues (projected)



Centex Construction key markets (annual revenues)



Texas

- \$500m revenues. Over 70 active projects
- Order book of \$500m
- Average contract value of \$15m
- Education, commercial and healthcare focus
- Based in Dallas
- Key customers: Hines, UT System, Children's Medical Center, Texas Health Resources

Florida

- \$600m revenues. Over 50 active projects
- Order book \$800m
- Average contract value \$25m
- Education, government, criminal justice focus
- Based in Fort Lauderdale + 6 satellites
- Key customers: Disney, Hogan, County School Boards



Above, the extraordinary Gaylord Texan Resort and Convention Center and below, the opening of the National Museum of the Marine Corps by President George W. Bush



Washington, DC

- \$400m revenues. Over 20 active projects
- Order book \$600m
- Average contract value \$43m
- Government and transportation focus
- Based in Fairfax (Virginia)
- Key customers include: General Services Administration, Boston Properties, Dulles Airport

Southeast

- \$600m revenues. 90 active projects
- Order book of \$250m
- Average contract value of \$21m
- Education, commercial, corporate
- Based in Charlotte
- Key customers include: University of North Carolina, North Carolina State University, Marriott, Bank of America, GMH Military Housing

PROJECT PROFILE

LIKE Balfour Beatty, Centex Construction delivers a wide variety of commercial construction projects to serve its clients in both the public and the private sectors. During the seventies, eighties and nineties, Centex built some of the most recognisable landmark buildings throughout the United States. These include:

- Boston City Hall
- Texas Stadium, home of the Dallas Cowboys
- Dallas Museum of Art
- Cinderella's Castle and hotels and resorts at Walt Disney World
- Orlando International Airport
- Hyatt Regency Hotel.

In 2003, the company was chosen to build the Pentagon Memorial to honour the victims of the 9/11 terrorist attack in Washington DC. The following year, the magnificent Centex-built Gaylord Texan Resort and Convention centre opened. From the gourmet restaurants to the 2.5 acre climate controlled atrium and replica of the Alamo, this Texas-sized resort is already a landmark and a legend.

In 2006, the Air Force Memorial and the National Museum of the Marine Corps were publicly dedicated by the President of the United States.

BUILDING BETTER COMMUNITIES

LIKE Balfour Beatty, Centex has an active community campaign aimed at putting something back into the communities where it works. Whether it is paintball championships, cake bakes, fight nights in aid of cancer, marathon running or volunteering, employees are keen to raise funds for a range of local charities and community organisations including:

- March of Dimes, WalkAmerica, Habitat for Humanity, United Way, Children's Medical centre, Hearts and Hammers, Ronald McDonald House, Give Kids the World, Richardson Regional Cancer centre, and the centre for Multicultural Human Services.

In Florida, the Baker centre replacement school project was the first project to start reconstruction after Hurricane Charlie destroyed numerous schools in 2004, so it was very important for the children to be part of this event. Pete Garcia led the kids in a rendition of 'Bob the Builder' to get things started.

Looking to develop smart students, for the past five years Centex has hosted the Math Challenge barbecue at a local elementary school as a reward to those pupils who achieve maths goals set by their teachers.



Left, barbecue mums hand out the burgers. Right, Bob the Builder gets things started at the Baker centre



Our aim: to be a key part of Group

Centex Chairman and Chief Executive Officer, Robert Van Cleave, spoke to Update about his company and the acquisition

UPDATE: *Why was such a successful business as Centex Construction available for sale?*

RVC: The CEO of Centex Corporation, our previous owner, is a 35-year homebuilding veteran and his vision of Centex overall involves strategic simplification around a single core business. Centex Corporation is most comfortable with a business model which involves higher risks and higher rewards than our business offers. In addition, the current climate within the US homebuilding market put them in a position where raising cash became a high priority. And so, when Balfour Beatty approached them, they were ready to talk.

UPDATE: *How did you feel when you knew Balfour Beatty was interested?*

RVC: Flattered that we are an attractive target. But, of course, the prospect of change also breeds uncertainty and that uncertainty is exacerbated if a change to foreign ownership is involved. So, naturally there was some anxiety. I have to say, however, that we got comfortable with the idea very quickly. We liked your senior people right away. Their in-depth knowledge of our business and ongoing enthusiasm for the deal have been very positive motivators for our team.

UPDATE: *What are Centex Construction's key characteristics?*

RVC: We are, like Balfour Beatty, very decentralized, with four strong regional businesses, one of which has a military housing division. There are some core principles, however, that bind us together as a business. We are very performance driven and people are held accountable – but we are also a very caring company – looking out for our fellow workers and playing a full and positive part in the communities where we live and work.

We have a single creed – based on the tenets of Service, Talent and Choices. This creed serves as a common foundation for our business and reminds us of who we are as a company and as individuals.

UPDATE: *How does the divisional structure work?*

RVC: We believe that customers need to be 'owned' locally and looked after by people whom they know and are dedicated to meeting their needs over time. It is in such relationships that we feel we add the most value to our clients. Therefore, each of our divisions is focused on what we call 'going deep' within a particular geographic market, or in the case of our military housing and corporate accounts teams, with specific long-term key clients.

All of our divisions have a common objective



Robert Van Cleave: "I share the excitement of my 1,400 colleagues in the future."

of working with customers on a long-term relationship basis. In fact, 95% of our work is procured on a qualification – not price – basis, which means that the customer needs to be fully aware of and comfortable with our capabilities and resources. Our decentralized division structure, therefore, places a great deal of emphasis on both the quality of our people and the relevance of their local expertise and attention to client service.

UPDATE: *How do your customers regard you?*

RVC: I believe they see us as transparent, honest, and always with a focus on their best interests as a driver in all that we do. It may sound overly noble, but we truly want them to see us as being more interested in solving their problems than our own. In that way, we reinforce our continual goal of earning their trust. They see our value – including quality – and as a result are prepared to recognize and reward that value with their continued business.

UPDATE: *What impressions have you formed of Balfour Beatty in the lead up to the deal being completed?*

RVC: Like us, I see transparency, honesty and a keen interest in the truth whether it is good news or bad. Also, I see a great deal of humility. We haven't seen a lot of chest-beating and boasting by the Balfour Beatty team, but instead, always observe a quiet confidence and competence, which immediately earned our respect. In addition, we see in all of the people we've met a great business sense and a continual focus on operational success, always with a well-thought out and clearly defined strategy. And to top it all off, they are just really bright people who we really enjoy working with.

UPDATE: *What are your ambitions for your business now that it is part of the Balfour Beatty Group?*

RVC: I would like for our existing business to achieve the success we have targeted regarding performance excellence, employee engagement, and customer delight. In addition, I want Balfour Beatty to be as proud of us as it already is of its most successful businesses. I want us to be as supportive of the Balfour Beatty brand as any of the existing businesses. I would like our employees to feel that they are a key part of the Balfour Beatty Group. And finally, I'd like our business to be a contributor in finding and capitalizing upon any synergies that may exist between the Balfour Beatty businesses.

UPDATE: *Can you tell us a bit about yourself?*

RVC: I was born and educated in Texas and, although I have worked elsewhere in the United States, Texas is my home. I have a house about five miles from the office and live the urban life, but travel a lot, particularly to our division offices.

My wife, Sharon, has put up with me for 25 years, which is a credit to her, and together, we have a 16-year-old-son, Braxton, and a 10-year-old daughter, Bailey.

I've spent 25 years in the commercial construction industry, the first 15 years for Clark Construction Group, one of our key competitors in the industry. At Clark, I worked my way up through operations and preconstruction, completing my time with them as a Senior Vice President on a large \$245 million project in Pensacola, Florida.

Eleven years ago, I joined Centex in Dallas and since then, have been working with my colleagues to create the business as it is today. I share my excitement in the future with all 1,400 of our employees. Together, we are all feeling very positive about this change and are looking forward to being a part of the Balfour Beatty team.

From new interstate highways to utility water-courses the work of Balfour Beatty Infrastructure, Inc. and its associates in the US often underpins the daily life of millions of Americans. Some engineering triumphs – like the Providence CSO Tunnel – will forever lie unseen underground, so we thought you'd like to see....



...A HOLE LOTTA WORK

At three miles long and 26-feet wide it has to be said that the Providence Combined Sewer Overflow (CSO) tunnel is one heck of a hole in the ground.

It is also part of an amazing subterranean solution to an annual problem created by Mother Nature. The completion of the \$172m project on March 1 means that some of Rhode Island's prettiest Atlantic coastline will be safeguarded against one of the major sources of pollution.

For several years heavy seasonal storms created flows that exceeded the capacity of the regional drainage and sewerage system, which serves Providence, the capital of Rhode Island, known as the Ocean State.

At times more than two billion gallons of overflowing untreated water and sewage could be released into the coastal Narragansett Bay and the rivers which feed it, the Blackstone, Moshassuck, Providence, Seekonk, Woonasquatucket and West Rivers.

According to Bill Ogle, Balfour Beatty Infrastructure,

Inc. Vice President, "This is the sixth and clearly the most technically challenging underground project that the Shank-Balfour Beatty team has successfully completed in a relationship which spans nearly fifteen years. We look forward to similar success on the recently awarded Dorchester CSO project in Boston, Massachusetts."

Construction of the Providence CSO tunnel project was provided by the joint venture with tunnelling specialists M. L. Shank Company, Inc. who worked together



to upgrade the sewerage system for the Narragansett Bay Commission.

In simple terms, the storm-surge solution involved the construction of a storage tunnel, 26 feet in diameter and 16,215 feet in length, that during periods of heavy rainfall could retain the large volume of excess sewage and water for subsequent treatment.

After extensive evaluation by the Rhode Island Department of Environmental Management of the environmental benefits and impacts of the proposed underground storage scheme as well as alternatives, it was adjudged "the most environmentally sound, as well as cost-effective, means to control CSO discharges."

Apart from the huge CSO tunnel, the project also involved excavating a 60' x 60' x 120' rock cavern. Four work shafts up to 50 feet wide had to be bored down 300 feet into the ground. Overall there were 4,100 feet of drill and blast connecting adits. While most people in Providence will never see this project, when completed it will have an immediate impact on the quality of water in the area.

Taking collaboration to new heights

Partnering with clients is tried and tested for sharing risk and increasing efficiency on long-term contracts. But how about partnering with potential competitors? Strange as it might seem, that's exactly how National Grid's new Electricity Alliance contracts work.

Last October Balfour Beatty Power Networks in conjunction with Balfour Beatty Management were identified as preferred partners by National Grid for the upgrade of high voltage overhead lines and underground cables in the eastern half of England over the next five years and beyond.

Branded the Electricity Alliance East, the contract is one of two overhead line and four sub-station alliances split on a geographic basis in one of the largest procurement exercises undertaken by National Grid, representing a capital investment in the UK electricity network of around £2.8 billion.

And, according to Kevin George, Alliance Manager for the Eastern contract, which became operational in April, the alliance contracts are already producing unheard-of levels of collaboration not only between contractor and client but between all alliance partners. This extends to the embedding of alliance staff in the National Grid Asset Management Team as well as National Grid staff being integrated with each alliance.

"The idea is to build long-term working relationships so that we can all share the risks as well as the rewards," he says. "Alliance partnerships enable better financial planning, visibility of workload, and improved safety performance. They remove the uncertainty for the client and free up the partners from having to bid annually for individual project contracts.

"It was a new experience to have regular

meetings with the other five alliance managers to ensure we have a consistent approach, and the mood is genuinely upbeat. It's been a really exciting time. We're working collaboratively to ensure we can all be successful."

"We started out with an East/West split but already we've been given some work from the West Alliance and we've given them some projects in return," adds Kevin.

Balfour Beatty has proven experience of such partnerships, being two years into an eight-year alliance contract with National Grid which covers gas mains replacement in the North West of England.

"The idea is to build long-term working relationships so that we can all share the risks as well as the rewards"

"Clearly this helped us," says Kevin, "but National Grid was also attracted by the fact that our bid was put together by two of Balfour Beatty's operating companies which opens up access to a much wider potential resource right across the Group. Due to increased work volumes, we now expect to deliver around £700 million of overhead line and underground cable improvements over the initial five year period rather than the £550 million originally anticipated."

"And the option to extend the contract for a further five years following a regulatory review in 2012 means we are now working on a 10-year business plan."

At the end of February the contracts were

signed, the Electricity Alliances were officially launched, and the mobilisation phase of the project began to prepare for the official start on 1 April.

"There's a perception that Balfour Beatty has had it easy compared to other alliance partners operating as joint ventures," says Kevin. "But in reality knitting together the technical and engineering expertise of Balfour Beatty Power Networks transmission and cabling divisions with the operations, safety and commercial management resources of Balfour Beatty Management has been a real challenge. However, we now present a seamless interface to the client."

"With the bulk of our resource located within Balfour Beatty Power Networks in Derby and National Grid being based in Warwick, we decided to site our headquarters instead at Rugby, roughly halfway between the two. This ensured that we stood a chance of attracting equal interest from both parent companies."

Kevin is excited by the unique opportunities the Alliance presents for personal growth and development.

"Everyone who works for the Electricity Alliance East from within Balfour Beatty will remain an employee of their parent company and will retain their current employment conditions," he says. "However, there are fantastic possibilities to really broaden skills and experience. One area where we do need extra resources is design. We need to grow our design resource rapidly and I am now looking for structural and civil designers from across the Balfour Beatty Group," says Kevin.

Anyone who is interested in joining Kevin and his team should contact Iain Logie in the Human Resources team at Balfour Beatty Power Networks.



JV wins new East London line

A BALFOUR Beatty/Carillion joint venture has won a £363 million contract by Transport for London (TfL) to create the new East London rail line between Dalston Junction in the North and New Cross in the south.

The works are part of a major investment programme by TfL to open London's first purpose-built metro rail service – London Overground – in time for the 2012 London Olympics.

The joint venture will act as main works contractor for phase one of the contract. Scheduled for completion in mid 2010, this covers the extension of the existing East London Line northwards from Shoreditch to Dalston Junction and conversion of the Whitechapel to New Cross section to Overground operation.

As well as track, signalling, telecommunications and electrification, the contract encompasses major

civil engineering works including the construction of new stations at Hoxton, Haggerston, Dalston Junction and Shoreditch High Street; a new depot at New Cross Gate; plus the construction of major new bridges.

The first is an 84m long girder bridge which will span the six track approach of the Great Eastern main line to Liverpool Street Station.

The bridge will be installed on a 30% skew and inclined to the natural grade from Whitechapel to Shoreditch.

The second is a bridge across Shoreditch High Street at its busy intersection with Bethnal Green Road, leading immediately to Holywell Viaduct which will curve through almost 90 degrees as it swings northwards running parallel to the A10, Kingsland Road.

EU signals okay to joint venture

THE European Commission has given the green light to the UK rail signalling joint venture of Balfour Beatty and Alstom, the French engineering group.

It has ruled that the joint venture, Signalling Solutions, which will supply rail signalling projects and equipment, would not significantly impede effective competition in the European Economic Area.

Since receiving EU clearance Managing Director David Felton and his team have been progressing certain formalities that need to be finalised before Signalling Solutions can begin operations.

The new company has been set up as a 50-50 joint venture between Balfour Beatty Rail Projects and Alstom Transport Information Solutions UK to offer turnkey solutions for train control and resignalling projects from conceptual design to full delivery.

The services it can provide to customers range from early feasibility studies, design, implementation and delivery, to product supply, training and after sales support.

High wire: a Balfour Beatty Power Networks worker upgrades high voltage lines



Metro makes a mark in awards shortlist

BALFOUR Beatty Rail's first project in Chile – the construction of trackwork for lines 4 and 4A on the Santiago Metro – has been shortlisted in the International Performance category of the 2007 Quality in Construction (QIC) Awards, which will be announced in March.

The £41 million Santiago Metro project was hugely successful and was completed on time and to budget despite a number of unusual aspects. These included managing a 2,500-strong workforce from 15 nationalities, the administration of a local joint venture partner and working to an accelerated timescale.

Importantly, the new metro lines have made a significant contribution to social inclusion in Santiago, enabling access to the city in around 20 minutes.

Now in its eleventh year, the prestigious QIC Awards are run by trade publication Construction News and are highly regarded within the industry.

A team from Balfour Beatty Rail was invited to make a presentation to a panel of four judges. And



New Santiago Metro lines enable access to the city in 20 minutes

according to John Latham, Balfour Beatty Rail International Operations Director and former Balfour Beatty Rail Project Director on the Santiago Metro project, the team was determined to do something different.

"We had just 15 minutes for our presentation and 25 minutes for Q&A," he says.

"Instead of using the predictable and stilted

Powerpoint-type presentation we wanted to surprise and capture the imagination of the judges. So we used 100% graphics or photos on our slides and each had to learn our lines. This meant several rehearsals to get word-perfect but it was good fun."

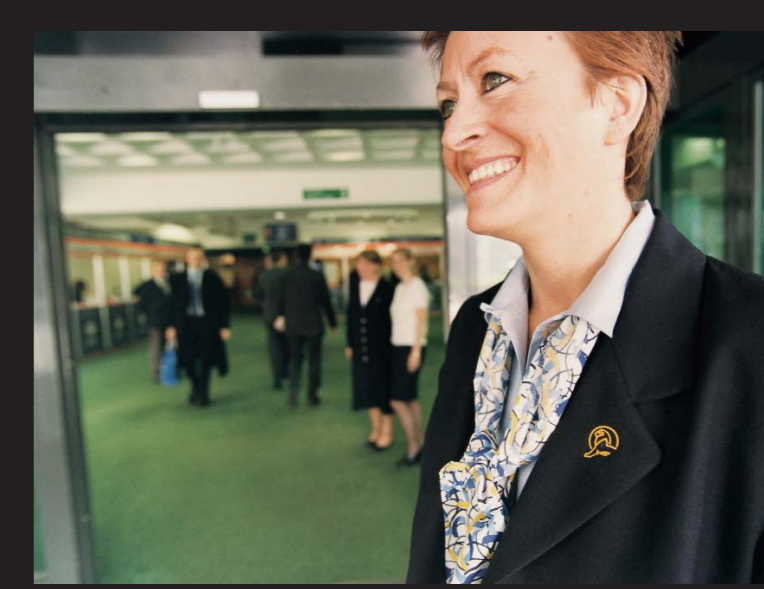
The team also had the brainwave of filming a testimonial by the British Ambassador in Santiago, Howard Drake, who was delighted to help out.

"It was very theatrical and included a nod to televised award ceremonies when during the presentation we announced 'sorry he can't be here in person' and then ran the film clip. The judges seemed quite amused."

Balfour Beatty Rail is up against Pell Frischmann for Highway 2000 in Jamaica, and Al Naboodah Laing O'Rourke for the Mall of the Emirates Snow Centre.

"It would be nice to win," says John Latham. "The team worked extremely hard to successfully deliver the project."

Haden Building Management Limited is poised for significant growth after a series of major long-term contract awards. Update caught up with newly appointed Managing Director Kevin Craven to find out what lies behind this success.



FIVE months may not be a long time, but for Kevin Craven, who only became MD of Haden Building Management Limited (HBML) in November, it is long enough to know he has joined a company with a great future.

“Haden Building Management Limited has a tremendous reputation for service delivery and I have been very impressed with the professionalism and competence of everyone I’ve met so far,” he says.

“The company has a heritage in engineering excellence stretching back 190 years. We’re now aiming to develop the same levels of excellence across a broad range of services and I’m confident that we can develop the resources and infrastructure to deliver this.”

Born and educated in Zimbabwe, Kevin originally trained as an engineer although his background is in catering management. Before joining HBML, Kevin was Managing Director of Specialist Markets at Aramark, the international support services and facilities management group, with responsibility for the education, healthcare, custodial and defence sectors.

Kevin has certainly joined the company at a very busy time. Last December the company was awarded a seven-year, £150 million contract by the Metropolitan Police Authority to provide facilities management services across 500 properties in North London including landmark buildings such as the Peel Centre in Hendon.

As well as providing building engineering and fabric maintenance services, the contract includes the delivery of such services as cleaning and laundry, waste management, grounds maintenance, reception and porters. The contract goes live on 28 April.

“Winning a contract of this length and complexity is a testament to our reputation for innovation,” says Kevin. “It’s a clear example of our strategy to build long-term, sustainable customer

relationships and follows on from the work we are doing for the Department for Work and Pensions (DWP).”

Awarded in September 2006, the seven-year, £320million DWP contract saw HBML selected as the single source supplier to deliver a comprehensive package of support services on a nationwide basis. This builds on a relationship with DWP that goes back to 1995.

“What’s interesting about this contract is that we’re not following our normal model in taking care of the client’s physical assets, we’re also looking after a whole raft of business support services such as typing, reprographics, and telephony. This frees the client to focus on their core business. It changes the business model completely,” says Kevin.

Since 1 March, when the project went live, HBML has 2,500 new employees nationwide, taking its total workforce to around 13,000 – a 23% increase.

Kevin points out that with both the DWP and the Metropolitan Police contracts, the IT team has taken on a more active role in developing and presenting the bids.

“We’ve also had to develop the capacity to achieve BS27001, which covers data security, as we’re being asked to handle highly sensitive client information. This whole experience will prove invaluable as the Government continues to outsource contracts.”

Another area where HBML has built up enormous expertise and experience is in the delivery of services as part of Balfour Beatty’s successful PFI projects in the education, healthcare and transport sectors.

One of the very first hospitals delivered under the Government’s PFI programme was Edinburgh Royal Infirmary, where HBML is delivering all facilities management and non-clinical services under a 30-year agreement.

Other major PFI projects include University Hospital of North Durham, Blackburn Royal Infirmary, 115 schools in Stoke on Trent, 14 schools in Rotherham, and four major Inland Revenue sites in the north of England and Scotland.

About 20% of HBML’s current business comes via these PFI projects and Balfour Beatty Capital has consequently become a key client as well as being a fellow operating company.

“Our key challenge is to be one of the top three facilities management providers in the UK by 2015”
– Kevin Craven

HBML’s other important long-term framework contracts are delivered via two joint venture companies – Monteray and Romec. Monteray Ltd was set up in 2000 to manage 8,500 BT facilities. Romec is responsible for the maintenance of 2,500 Royal Mail buildings.

“These joint ventures represented a significant change for Haden Building Management Limited,” says Kevin. “They have enabled us to build up valuable capabilities in business partnerships outside the normal subcontract relationship.”

HBML is in a good position to capitalise on its commercial success and strive for further growth thanks to a strategic review conducted in 2005.

This prompted a major restructure of the company, which now has three administrative offices based in Sidcup, Gateshead and Bristol. The majority of other

staff is located at client sites. Additionally, operations teams were reorganised into business streams which broadly face client sectors.

One other significant change is the reorganisation of the engineering field force which has been transformed into a mobile self-sufficient workforce managed by former HBML Technical Director, Alan Marchbank. Regional service centres have been replaced with an administrative and despatch centre in Birmingham and all engineers now receive daily work schedules via hand-held PDAs.

“This is the way of the future,” says Kevin, “with critical engineering tasks supported on site but routine and preventative maintenance supplied by mobile field force. Our smaller contracts with clients such as Sainsbury’s are almost exclusively supported this way.”

So what does the immediate future hold? Kevin is excited about a couple of potential high profile projects. HBML/Balfour Beatty Capital are on the shortlist to construct the new PFI Tyne Tunnel crossing and manage toll operations. The company is also bidding with Balfour Kilpatrick for a large British Energy lifetime contract for their total nuclear power facilities.

“Our key challenge is to be one of the top three facilities management providers in the UK by 2015,” says Kevin. “And there’s no question that winning huge long-term contracts will fuel our organic growth. Our skills and experience in extending the life of an asset over time obviously matter but clients are also impressed with our commitment.”

“For instance the director who led the bid for the Metropolitan Police contract will become the Account Director of the project as it goes forward. Clients like that sort of continuity and accountability. I believe our expertise and commitment combined with the backing of the Balfour Beatty Group will help us achieve our strategic goal.”

The Haden name: History & Heritage

1772: Britain’s most innovative engineer, James Watt, enters into a partnership with Mathew Boulton at the Soho foundry in Birmingham where he perfects his steam engine. The foreman of the machine shop is one George Haden.

1816: George Haden’s sons start their own company in Trowbridge, Wiltshire.

1825: Haden provides warm-air ventilation systems to many of the stately homes in England, including Windsor Castle.

Early 1900s: Haden becomes one of the largest heating and ventilation companies in Britain

1986: Haden joins the Balfour Beatty Group

1998: Company divides into Haden Young, specialising in commissioning and installing M&E systems, and Haden Building Management Limited, specialising in facilities management.

2006: Haden Building Management Limited is a leading UK asset and facilities management business with annual revenues of around £250million.

Taking care of business

INNOVATE OR DIE



FROM The Ridgeway, Great Britain's oldest highway, high up on the Berkshire Downs, you can see the future – an innovatory 'super microscope' called The Diamond Synchrotron.

The size of five football pitches and the largest UK-funded scientific facility to be built for over 30 years, the Synchrotron, or Diamond Light Source, is not only a world-leading scientific facility that will host up to 40 cutting-edge research stations. It also provides a tangible example of 21st century construction techniques.

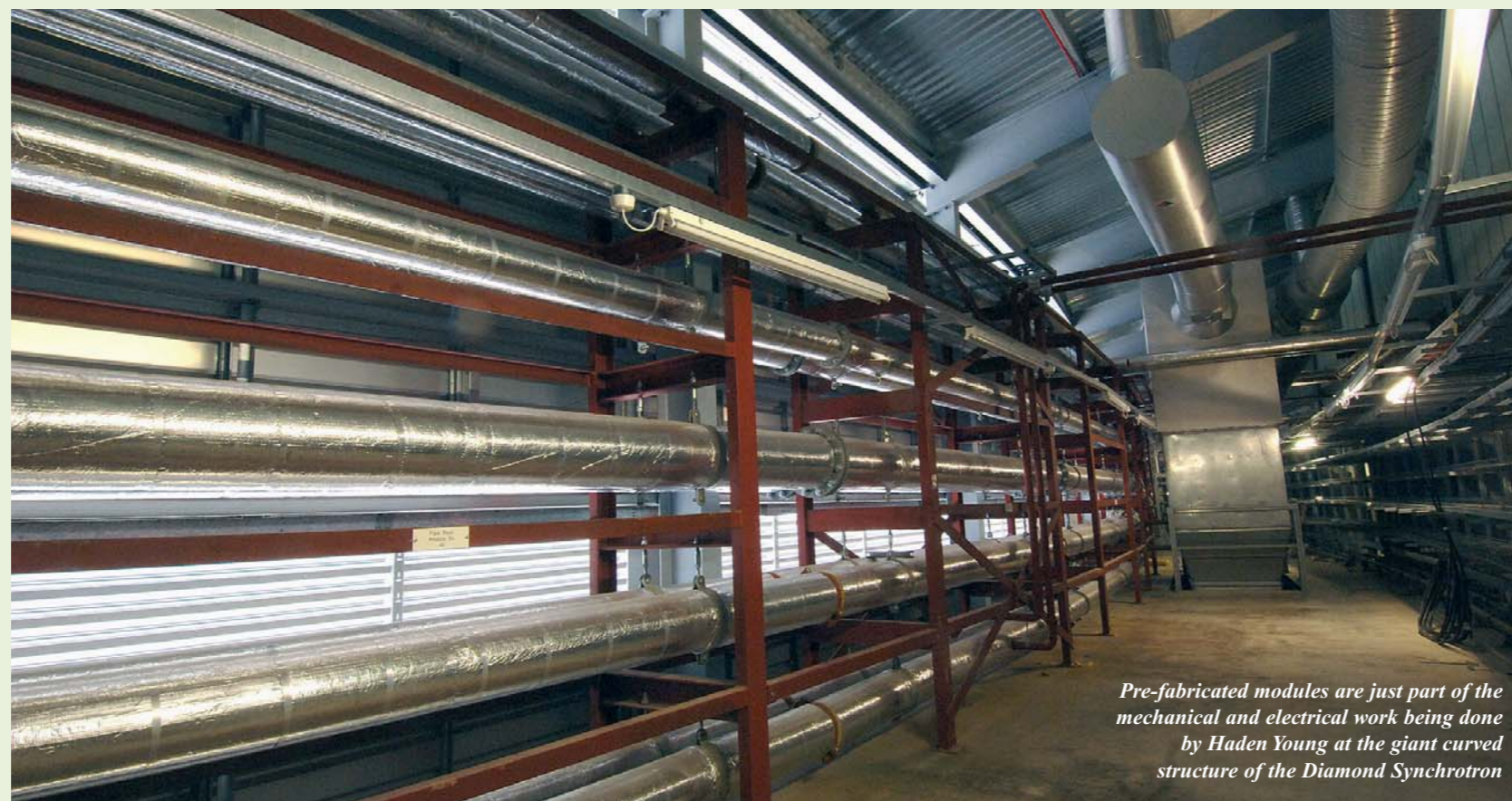
While beams of exceptionally bright light from the Diamond Synchrotron will enable scientists and engineers to see deep into the basic structure of matter and help push back the boundaries of Man's knowledge, the very existence of this futuristic facility has been underpinned by innovative mechanical and electrical (M&E) services work carried out by Balfour Beatty operating company Haden Young.

Using the latest modularisation techniques, Haden Young provided (M&E) services to support the sophisticated instrumentation that researchers from the UK and abroad will use as they access the Diamond Light Source at the Harwell Science and Innovation Campus.

The essential circular doughnut-shape of the Synchrotron meant that all the 90 half-ton services modules had to be precision-made. Each module was bespoke-built with requirements such as four-degree angles on joints and extreme tolerance specifications, to provide cooling and other services in support of the various Diamond beamline research workstations.

All the modules were pre-built off-site using Haden Young's extensive off-site building services manufacturing experience. The company has recently opened two state-of-the-art modularisation centres at West Bromwich and Rochdale. Each provides clean, bright, uncluttered and undercover working conditions for construction of the units – one of the keys to the success of modularisation.

"These factory standard conditions allow us to maintain top quality standards, minimise



Pre-fabricated modules are just part of the mechanical and electrical work being done by Haden Young at the giant curved structure of the Diamond Synchrotron

"Innovation has always been important but now it is vital in any bid for work. If we don't do this, others will and our clients will go elsewhere. Showing innovation is not now a 'nice-to-have', it is essential."
– Brian Osborne

GROUP Managing Director Brian Osborne, who is responsible for five UK operating companies of Balfour Beatty plc and three international businesses, has only ever worked within the construction industry.

With 34 years' knowledge and experience of Balfour Beatty, he recently concluded:

"We have been doing a lot of things reasonably successfully for some time, but now we have got to start thinking more laterally. It will be business-threatening if we do not innovate.

"Innovation has always been important but now it is vital in any bid for work.

"If we don't do this, others will and our clients will go elsewhere. Showing innovation is not now a 'nice-to-have', it is essential."

About a year ago Brian Osborne instigated a companywide Innovation Forum, drawing together Business Improvement Managers from operating companies to ensure that good ideas were nurtured and brought to fruition as working procedures and best practice.

Many of those ideas are now increasingly being used within the Group, says Brian, to win

contracts, satisfy clients and to make Balfour Beatty a more potent professional operation with a brighter future.

Apart from the off-site manufacturing of modules, he cites innovation such as Balfour Beatty Infrastructure Services' one-man cone-laying machine; the use of stop-tap by-pass valves and vacuum excavation within Balfour Beatty Utilities; the auditing and benchmarking of innovation by Gammon Construction; development of alternative energy projects by Mansell and Balfour Kilpatrick; and even the introduction of HR incentives such as The Chairman's Prize for graduates, as examples of how Balfour Beatty is already integrating innovation within its operations.

"We need to continue to shake off the old shackles, and get used to winning work through our ideas, rather than through our price or past performance.

"While satisfying our client, we also need to satisfy ourselves that we are fully tapping into the ideas that our people have and that we are sharing knowledge and innovation within the company," he added.



Manufacture of module units



Pre-fabricated units ready for use



Delivery at Addenbrooke's Hospital



Addenbrooke's Hospital units in position

waste, integrate services work with other construction trades and eliminate many of the on-site health and safety risks. The result is that we can get complex projects on the fast-track and achieve customer objectives," said Tim Waldram, Marketing Manager of Haden Young.

Using modularisation on complex installations such as hospitals where M&E can account for around 40% of £500m-plus projects has helped drastically cut site installation times. Traffic and storage problems associated with materials deliveries to site are also significantly reduced.

Addenbrooke's Hospital in Cambridge, Queen's Hospital in Romford, Churchill Hospital in Oxford and University Hospitals Birmingham have all benefited from Haden Young's innovative modularisation.

"We regard ourselves as at the forefront of building services modularisation in the UK, if not Europe, having some time ago taken the strategic decision to introduce off-site pre-construction to help meet the needs of our clients. The process proved itself at our Bristol centre and we have now extended our capability and include it from Day One when tendering for almost all of our larger contracts," Tim added.

Putting all those pipes, cables and heating ducts into modularised units also helps when pitching for new contracts, says Tim. "It certainly does give you an edge with the larger projects such as PFI work and those with demanding timescales. Doing modularisation in-house means we can continually improve efficiency and it also promotes further innovation, but you do have to ensure that there are strong lines of communication between the site and the manufacturing teams."

BOB Hughes, the Innovation Manager for Balfour Kilpatrick, agrees that modularisation is a key industry innovation – but the industry needs more to help solve the overall skills shortage. Modularisation allows rapid 'bite-size' production training of individuals, whose work and standards can be easily checked.

"The key to innovation is the use of technology, but anyone can have a good idea. We need to establish a culture where people are happy to put their head above the parapet and put forward their suggestions."

That's one reason Bob has formed Innovation teams throughout his eastern region drawing members from all sections and disciplines. "To really make a difference you need to involve all parts of the business.

"More and more clients are asking what innovation you can bring to the table. In the past 3-4 years in the building sector the need to show innovation has really been snowballing."

Bob is no stranger to innovation. While with MEPC Solutions he won The Innovation of the Year Award for a fast, accurate computer software package that converts 2-D drawings and technical specifications into a viewable 3-D 'virtual' building, complete with costings and construction brief. "It's a pitch-winning innovation that I aim to introduce for use in Balfour Kilpatrick very soon."

"We have been doing a lot of things reasonably successfully for some time, but now we have got to start thinking more laterally. It will be business-threatening if we do not innovate."



SafeTcone machines lay out another line of cones during tests

SafeTcone looks good in trials

THE FIRST full-scale SafeTcone machine will be tested in April after four years of research and development. This follows an initial trial of a prototype research machine on the Highways Agency network during last summer.

The machine lays cones automatically, which not only reduces the time taken to set out and remove roadworks, but also improves safety for roadworkers.

Once trials have been completed, the first production machine will be part of the Area 3 fleet of traffic management vehicles. This is the Balfour Beatty Infrastructure Services (BBIS) contract for the Highways Agency's strategic roads centred on Hampshire, including parts of Surrey, Berkshire and Wiltshire. The second production machine is expected in June this year and will be allocated to Area 2 – the InterRoute JV contract (JV between BBIS and Mott MacDonald) for the Highways Agency's strategic roads around Bristol and the surrounding counties.



John Findlay, director, BBIS, says, "We had been considering automated cone laying and retrieval for some years, but when award-winning inventor Brian Flynn approached us with an experimental machine, we could see it had enormous potential. The translation from inventive idea to operating model has only taken place because of the faith and support that BBIS has given throughout its development."

SafeTcone is the only machine that can automatically stack cones for storage and retrieve them when required. John says, "The first production machine will store some 900 cones in stacks of 30 cones – the saving on manual handling for production staff is considerable."

BBIS has demonstrated its support of innovation and invested over £200,000 in the original prototype and the first production machine, as well in kind support through the provision of production staff and engineers.

All BBIS staff using SafeTcone have been fully trained and as John says, "they have all been very enthusiastic about its introduction."

Bringing the A3 community on board

BALFOUR Beatty Civil Engineering (BBCEL) has commenced site clearance on the £371 million A3 Hindhead road improvement scheme in Surrey following government approval for this scheme. This is an ambitious project, as it involves building a 1.9km twin bore tunnel. As Paul Hoyland, Project Director, BBCEL says, "This is quite a feat as there are very few tunnels this length being built in the UK. Our job is to build the scheme, make sure there is minimum impact on the environment and to keep the traffic flowing."

The project involves moving the Hindhead section of the A3 east to avoid the town and running it underground through the tunnels and then closing the old A3 across Hindhead Common.

The Highways Agency appointed BBCEL after a competitive quality price bid. BBCEL succeeded in beating four others to win it. "Our track record got us through the first hurdle onto the bidding list," says Paul, "but the key was our quality submission – how we would manage the risk, particularly the tunnel, how we would address community issues and how we would care for the environment during the entire process. We also have experience of constructing this type of tunnel for the Highways Agency."

The project, which is expected to be completed in 2012, with the tunnel opening in 2011, will speed up the journey between Portsmouth to London by up to 30 minutes at peak times. As things stand, there is severe congestion at the Hindhead traffic lights. As Paul explains, "We are taking the existing A3 out of a protected area and putting it into a tunnel. We're uniting the two halves of Hindhead Common – an area of outstanding natural beauty."

One of the reasons Balfour Beatty won the contract is its ability to work with people at all levels. As Paul says, "We put forward a strong team – not only from Balfour Beatty, but also our designer Mott MacDonald. Part of the tender scoring for the contract was the presentation we gave to the Project Advisory Group where we explained how we would work with key stakeholders. We demonstrated that we have the systems, methodology, experience and people in place to carry out a job as extensive as this."

Another major factor in winning the business was BBCEL's ability to show how it would manage the environmental issues – especially as the Devil's Punch Bowl is a site of Special Scientific Interest (SSSI) and a Special Protection Area (SPA).

As Ian Whyte, community relations manager, BBCEL, says, "We had ecological and landscaping consultants working with us on this from the start. Surveys and preparation work were carried out to help us minimise the

"We're uniting the two halves of Hindhead Common – an area of outstanding natural beauty."



Grayshott Village Hall, where a two-day public exhibition drew over 2,500 people. Below, an artist's impression of the approach to the tunnels



impact the scheme may have on the environment. We consulted environmental bodies to determine the right precautions to protect the environment during construction."

Although the contract was won in 2002, it has

taken several years to develop the scheme and get to the construction stage. Currently the site is being cleared but this will take until the end of the year. Paul explains, "As this is during the dormouse hibernation period, we had to obtain a special licence from the Department of Environment, Food and Rural Affairs to enable us to cut down the trees to a certain level – so when the dormice wake up they will move out to adjacent trees and then we can remove the tree roots. Once the bird nesting season starts, we will have to stop site clearance until the season is over, as they are legally protected."

How is Balfour Beatty Engineering working with the community? Ian says, "We have to develop

good working relations with everyone associated with the scheme including councillors, local businesses, landowners, schools and local authorities."

One of the most successful ways of doing this was holding a two-day public exhibition in January this year. A 28 panel exhibition, wide screen visualisation and a model of the scheme were on display at Grayshott Village Hall in Surrey. "Everyone involved in the project was there and so people had an opportunity to ask questions," says Ian. "We had to open an hour early because people were queuing in the street – over 2,500 people attended during the two days which I think is a bit of a record. It was highly successful."

One year on: taking the lead on Essex roads

UPDATE takes a look at one of Balfour Beatty Infrastructure Services' newest local authority highways contracts, with Essex County Council, as it notches up its first year of operation.

Employees working for Balfour Beatty Infrastructure Services' Essex highways term maintenance contract must find their jobs almost unrecognisable from 12 months ago.

The company took over the £23.5m a year contract for the mid and eastern parts of the county in April 2006, in a complicated process which, because of new geographical boundaries for the contract, saw staff joining from five different organisations.

Then, nine months into the contract, the company re-branded from RCS to Balfour Beatty Infrastructure Services.

The new contract has had to increase efficiency without stinting on quality, following a shift to a unit cost way of working.

"We have divided the contract into three operational teams, two working on routine maintenance and the third on major schemes," explains Contract Manager Sean Miles.

"The client was sceptical at first, but we knew from previous experience that it would work, and now the council is exceptionally pleased with this system. Our people have coped extraordinarily well with all these changes to their working lives, and have been very focused. It's great to see how committed staff are at all levels to the company, and to providing the client with a genuinely first-class service."

The contract, taking in a mainly rural area but also some large towns like Colchester, Chelmsford

and Braintree, has performed consistently well from the outset. Miles believes that several factors have contributed to this success.

"As the 'new kids on the block', we have worked hard to build up a relationship of trust and understanding with the client.

"We took the lead in developing Key Performance Indicators with the county council, and the client copied our style of monthly contract reports in the west and south of Essex, where a competitor manages the county roads."

The success of the contract over the first year has been helped by the involvement of staff at all levels in working groups. Three such groups are already well-

established on the contract, looking at how to use vehicles, PPE and tools more efficiently, and their efforts will continue.

But there are fresh challenges ahead. For example, we have been tasked by the client to bring Essex's network of unclassified roads up to scratch. And Miles is keen for his team to be in a strong position when the time comes, in 2009, for the client to ponder the first in a series of potentially unlimited extensions.

"We're a strong, successful team, which is down to the hard work of everyone, and there is so much left we can do in Essex. There is no reason why we shouldn't be on the county's roads for a long time to come."

Leading on learning

Knowsley, Merseyside

TRANSFORM Schools competed against nine companies to become the preferred bidder of Knowsley Metropolitan Borough Council in Merseyside for the £157 million PPP concession to construct seven new learning centres. Under the Building Schools for the Future (BSF) programme, the innovative learning centres will replace all of the Borough's secondary schools over a three year period.

The concession, which is for 25 years, is expected to reach financial close in May. Work is scheduled to begin in July with the first learning centre expected to be a new joint-faith school in north Huyton, replacing St Edmund of Canterbury. The last learning centre will be built in 2010.

This represents a huge achievement for Transform Schools because, initially, it was up against stiff competition for the contract. This was then whittled down to three in the final stage, with Transform Schools beating Spirel (Amec) and Key Stage Solutions (Alfred McAlpine).

Tony Wilson, Bid Manager, Balfour Beatty Capital, says, "We kept education at the top of the agenda whereas the other operators focused on architecture and engineering. Our understanding of the Council's vision for education enabled us to win by a healthy margin. Knowsley Council saw that we could be trusted to assist them with the big change management issues that will go hand in hand with such a transformational agenda."

Knowsley Council's vision is to deliver a project-based approach where students study themes that cut across subject disciplines in addition to the more focused studies in traditional schools. Tony explains, "The learning centres will be nothing like an existing school – they're not even called schools. We have minimised the area dedicated solely to circulation and in doing so have removed the long corridors with classrooms on each side. This saving in area has been invested in year group bases – called Home Bases – which provide large spaces into which learning can break out of the classroom."

The learning centres will be for the whole community. They will be open from 7am to 10pm year-round and most weekends. "We have proposed various training and apprenticeship schemes which can be held at the centres," says Tony.

A key to Transform Schools' success was including the best examples of education from around the world in its proposals. Tony Wilson himself has 14 years' teaching management experience. Professor Stephen Heppell was also an important member of the bid team. A leading educationalist, he works with governments around the world on innovative forms of education. "He helped us understand how we could create physical spaces that would help the client to realise their ambitions," Tony said.



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Balfour Beatty Capital

Tony said he went on a worldwide tour of schools, recommended by Professor Heppell, to research not only the design and building of their centres, but also how they had introduced new ways of learning to teachers and young people. These included Reece High School in Tasmania, TK Park in Bangkok, Thailand, the Australian School of Science and Mathematics in Adelaide and Hellerup School in Copenhagen, Denmark.

Stoke-on-Trent

FOOTBALL Action, one of the latest initiatives in Balfour Beatty's work in local communities, was officially launched last December by Richard Caborn, Sports Minister, at Holden Lane High School and Specialist Sports College, Stoke-on-Trent.

Football Action is a social inclusion project that uses football as a vehicle to reduce vandalism, crime and truancy on school sites in Stoke-on-Trent. As Richard Lloyd, Community Football Development, Stoke City Council says, "It also



Richard Caborn MP, Sports Minister joins in at the Stoke-on-Trent Football Action launch.

provides exercise for school-age children, improves health and well-being and gives young people, who otherwise may not have it, the opportunity to play football."

The scheme is being introduced at 30 schools in the city. It is a joint initiative funded by Balfour Beatty which is contributing £90,000 (£30,000 per annum over three years), Sportsmatch £52,000 and the Football Foundation £172,418 over four years.

At the launch, Richard Caborn MP said, "Football Action is using sport as a medium to bring these people back into the community and that is what it is all about. It costs around £100,000 a year to keep one kid in sheltered accommodation, and that doesn't include the cost of the trail of disaster he may have left behind. Where sport has been embraced, you see truancy go down, expulsions go down and the schools play a much bigger part in the community."

And it works. Helen Wills, Director of Operations at Transform Schools, says, "Vandalism has reduced

month by month and year on year, which helps sustain Stoke Schools as buildings in which children and young people want to learn and achieve."

In the context of additional security measures, statistics show that in January 2006 vandalism was calculated at 116 incidents and by January 2007 this number had fallen to 74 incidents – a reduction of around 36%. In January 2006 the number of windows broken was 176, in January 2007 it was 82 – a dramatic drop.

At each school, children at risk from social exclusion, identified by agencies such as the local community police, are offered the chance to take part in football. Crucially, these sessions take place after school – when most vandalism is known to occur.

Lynn Harvey, communications manager, Balfour Beatty, says, "We build and maintain the schools in Stoke-on-Trent and so it is in our interests to make sure that vandalism is reduced. This is an excellent initiative and one we are proud to be associated with."

Manchester



On the level: one to one teaching at Manchester's first learning hub.

THE first group of 12 apprentices has almost completed the training course at Manchester's first learning hub, funded by Balfour Beatty Construction Northern, which opened last November.

Through the hub, Balfour Beatty Construction Northern aims to increase the number of people entering the construction industry, as well as improving the skills of existing workers.

Currently located on the Newall Green High School site in Wythenshawe, it is not only providing training for new entrants to the construction industry, but also on-site skills training for construction workers. The hub has been developed in partnership with Manchester City Council (MCC) and the Manchester College of Arts and Technology (MANCAT) as part of the Manchester Schools Framework. Training courses are being provided by MANCAT and trainees are recruited through MANCAT's current waiting list.

Tony Ellender, training manager, Balfour Beatty Construction, says, "The hub will assist with training of any age. It is being used for school pupils in the 14 to 16 age groups for vocational training in a site setting, for apprenticeship schemes and for improving the skills of existing site workers. All the workers on the Newall Green High School site can come here for a skills profile. We can identify what skills they need and then supply the training. The advantage is they don't have to leave the project to get the training."

A wide range of courses is being offered including bricklaying and apprenticeships in construction.

"The hub is encouraging new people to join the industry," says Tony. "People in the area will learn new skills – it will create new jobs. As an apprentice comes out of the hub, we'll link them up with a sub-contractor so they can find a job."

The hub has a ten year life span and it is anticipated that it will offer on-site skills training for up to 600 construction workers over that period. It is a demountable facility which will be moved up to four times across the city.

Labours of love

Balfour Beatty's commitment to excellence shines through in three major heritage projects

FEW projects throw up as many unexpected challenges and demand such swift innovative solutions as those surrounding restoration work on the UK's many historical treasures. Whether these structures are of major architectural importance, religious significance or historical value, such conservation and restoration projects also excite the greatest dedication and devotion in the project teams who work on them.

In the past year, Balfour Beatty operating companies have repeatedly proved their teams have the necessary sensitivity and resourcefulness to win and successfully carry out these prestigious jobs.

One such project, which was completed in March 2007, took place in and around Liverpool's vast Anglican Cathedral. Designed by renowned architect Sir Giles Gilbert Scott and completed in 1978, the towering gothic structure is the UK's largest Anglican cathedral and is considered one of the country's greatest 20th Century buildings. Great care and skill were therefore needed to convert the side-chapels into a mezzanine café and shop, as well as constructing a visitor centre extension onto the main building.

According to Henry Curtis, Mansell Northwest's Business Development Manager, Mansell's bid was selected in large part because of their track record with similar sensitive projects and their ability to meet the various challenges of doing so. "Mansell Northwest has done a large amount of work on listed buildings, including schemes for the National Trust and Liverpool City Council," he said.

"Part of this project involved installing a mezzanine – a structure within a side chapel on the left hand side of the nave. We built a new floor, which is fully aproned, with a café on top and a bookshop below. When putting together the technical bid we formulated several initiatives in terms of getting materials in and out, which was one of the major challenges. The steel structure is a substantial piece of engineering, but we found that it would all have to be delivered into the cathedral through a single window. There are very few removable windows in the cathedral, and since it is a listed monument we obviously couldn't cut new windows in the fabric of the structure."

While the cathedral is a relatively modern building it still needs to be treated sensitively, particularly given the presence of the UK's second largest pipe organ in the

choir. Once again, it was down to the ingenuity of the project team to adapt their methods to the challenge, as Henry Curtis explained. "The air quality in the cathedral was a big issue; we were going to create a great deal of dust which could have been very damaging to the organ. The team therefore came up with the solution of using negative-pressure. The works area – which was about five per cent of the cathedral area – was shrouded in a tent with air being pulled into that space. Any dust that was created within it was therefore held in the space, where it could be collected and removed. It has been done before, but this was the first time we had used it on heritage schemes and it worked very effectively."

Similar challenges arose during another restoration project this time in London. For more than 1,300 years, Fulham Palace estate has been the country retreat of Christian bishops, and was the main residence of the Bishops of London for almost 200 years. Vacated by the Bishops in 1975, the Palace now serves as a visitor attraction, hospitality venue and exclusive office space.

Large parts of the structure were recently found to be in a parlous state of repair and restoration work was commissioned with the help of the Heritage Lottery Fund. The proposed first stage of the project incorporated the complete replacement and restoration of the roof and associated brickwork at high level and a historical restoration of the famously ornate Bishop Sherlock Room, which involved joinery, hand-carving plus lime and fibrous plaster restoration. The ornate carving works required were undertaken in California by a British master carver and his team. In addition, it was necessary to bring the building up to modern standards, both electrically and mechanically, without impacting on its aesthetic beauty. A 250 metre auger bore drainage system from the Palace to Fulham Palace Road was also required, the longest in Europe.

Once again, Mansell's winning formula of attention to detail and track record of innovation helped secure the bid. Liam Duffy, Mansell's Divisional Managing Director, explained how the project quickly became a labour of

love. "We were not the cheapest bid, but during the tender process we visited the site as a bid team, and right then I fell in love with the project – I make no bones about that," he said. "There are a number of reasons why we were successful: I believe we provided demonstrable experience of working in a very sensitive environment, carrying out complex restoration processes in a sympathetic manner. Additionally elements of the Palace remained occupied and this was an extremely important issue for the client team, which was catered for in our technical submission."

These capabilities were put to the test during excavation operations, when several historical remains were discovered. Such finds require a great deal of flexibility on the part of the project team, explained Liam. "During the course of these works we found some very sensitive remains dating back centuries. Consequently, we had to cease work in certain areas to allow the archaeologists to move in. The extent of the dig was, in the end, far more extensive than anyone had envisaged but, because we are a collaborative contractor, we were able to work with the employer and their team to re-sequence our programme and minimise the delays."

Avoiding damage to the old and delicate structures during the project proved another major challenge. Before work began on the Bishop Sherlock Room, a large section of the original ornate ceiling fell down. The team therefore had to introduce a birdcage scaffold, complete with a temporary support structure to catch additional falling elements. They were then requested to restore the ceiling to its former glory as a genuine work of art.

The team's commitment and dedication paid off, and they were personally thanked by the Bishop of London at the opening of the restored Bishop Sherlock Room in November 2006. The team were still able to add one final touch, however, as Liam explained, "Once the work had been completed, the Bishop Sherlock Room still lacked a chandelier because there were insufficient funds available. Our team therefore sought the support of some of our specialists, and together we contributed to the provision of a new chandelier, which finished that element off nicely."

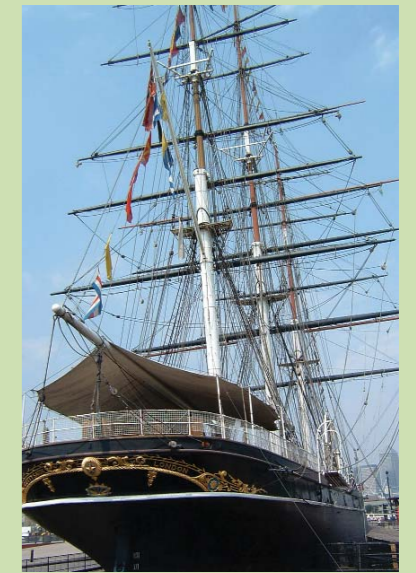
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Left, the new Mezzanine skilfully adapted to Liverpool's vast Anglican Cathedral. Above, a notable staircase at Lambeth Palace



A fully restored Lambeth Palace, main residence of the Bishops of London for almost 200 years.



Cutty Sark: tea clipper

Heery makes her ship shape

IN the nautical world there are few more famous sailing ships than the legendary Cutty Sark – the 17th Century tea clipper which ranked among the fastest ships of its age. Now standing in dry dock in Greenwich, the ship is one of the last surviving examples of its kind, and still incorporates 90% of the original iron and timber hull fabric with which it was first built.

A 1998 survey of the ship suggested that if nothing were done to conserve its structure it would become unsafe within approximately ten years, as the wrought iron was actively corroding. To ensure the survival of the ship it was therefore deemed essential that work to conserve the structure began before 2008. Balfour Beatty's building and development group Heery were among those who bid to lead the conservation project, and additional work to improve support of the ship, raise it by about a metre, and install visitor facilities in the dry dock.

Heery's Regional Director, Kevin Turvey, recalled the winning combination of experience and enthusiasm. "Heery has a significant track record with Heritage and Arts projects, so that attracted the client's attention in the first place," he said. "We needed to prove to the client that we could exercise the necessary sensitivity – obviously a head-down, bull-at-a-gate approach wasn't appropriate. After the bid, the client was very complimentary about the quality of the team and the way we seemed prepared to engage with their own people and the design team."

The project is now well under way, in close co-operation with the existing conservation team, as is the construction of a temporary visitor centre on the site to reduce the short-term impact on revenue. With a fair wind, it seems likely that the newly-restored Cutty Sark will be enchanting visitors again before the end of 2008.

Bridging past and future



Past: The old bridge is demolished

WORK to widen a 10-mile stretch of the M1 motorway between junctions 6A and 10 is a project that's important for the future – and the past.

Alongside the £300 million scheme to increase both carriageways to four lanes to relieve congestion and improve safety on one of the busiest stretches of motorway in the country, carrying 160,000 vehicles a day, an archaeological dig is taking place to save the historic artefacts that are being uncovered during the construction work.

It is planned to display the finds, which have come from the Bronze Age, Roman and medieval times, at exhibitions in Redbourn and St Albans. A series of newsletters that focus on the archaeological work being carried out along the length of the motorway improvements will also be published.

The road improvements, which are being carried out by a Balfour Beatty Skanska joint venture, began in March last year on the section between the M25 and Luton junctions, are due to be completed in the autumn of next year.

A key element of the M1 scheme is a wide-ranging community relations programme of meetings to ensure that residents, local councils, landowners, farmers (especially at harvest time), the Post Office and the emergency services are kept fully up-to-date with progress every step of the way. News bulletins are also being emailed to local councils to be posted on their web sites.

"It is important to make sure that contact is made before any work begins so that we have

the opportunity to working together to solve any issues that might arise," said Kieran McGibbon, Engineering and Design Manager.

He pointed out that the company has a great track record of working on major motorway projects, including the design and construction of a succession of the UK's major motorway widening schemes. In most recent years these have included the £97.4 million widening of the M25 Junctions 8-10, the £144 million widening of the M25 Junctions 12-15 and Heathrow Spur Road.

"Our success is down to the quality of our people, from senior management to junior site supervisors. From whatever angle you look at it, we've got strength in depth and this is positively valued by our clients," he said.

Their experience of working on such schemes is also paying off in the effectiveness

of the community in action programme which is an integral part of the M1 project. A good example of this was the demolition of the Slip End Bridge. As well as alerting local residents well in advance of when the work was to take place, 27,000 leaflets, translated into three languages, were distributed throughout the country, including motorway service stations and the ports of Dover, Folkestone and Portsmouth. And those residents living close to the

bridge were offered overnight accommodation for the night the bridge was demolished.

The work being done by the team with local schools includes making presentations, producing posters that can be used as teaching aids - and even selling raffle tickets.

Taking good care of the local communities includes ensuring that the road works don't generate too much dust during the summer months. Water collected from the site is being treated and used to keep the dust down.

When the project reached 500,000 man hours worked without any time being lost through injury, a cheque for £500 was presented to Air Ambulance which has been adopted as the project charity.

Because this is a major project which will continue for another eighteen months, *Update* will report on its progress in the next issue.



Future: the new bridge takes shape