



international building press

## **CHAIRMAN'S CATEGORY COMMENTS**

### **CONSTRUCTION/INFRASTRUCTURE JOURNALIST – Alasdair Reisner**

There was a broad range of articles with representation from many of the sectors leading titles. Our choice of shortlist was driven by those who went the extra mile, avoiding just offering straight reporting but instead giving something more for the reader.

### **Winner: Daniel Kemp, Construction News**

This was a strong offering of three very different pieces. A very timely interview with a leader of industry sat well alongside a genuinely interesting report on a world beating tower project.

The judges felt that the winners inside look into the challenges of employing ex-offenders, including securing a visit inside HMP Brixton, really got to grips with the subject.

**Daniel Kemp, Construction News**  
**Construction/Infrastructure Writer**

**1) Big apple (pp18-21, 12 June)**

One of my aims since becoming features editor last December has been to increase *Construction News'* international coverage, appealing to our readers' desire to learn about aspirational projects and innovate on their own.

While on a press trip to Boston, I arranged a side-trip on my own time, travelling to New York to visit 432 Park Avenue under construction, the world's tallest residential building and one of the new breed of super-thin towers.

I had to use my contacts and charm to convince WSP, the structural engineer, to grant me a site visit despite it being a public holiday. Overcoming my fear of heights, I was the first member of the trade press to take a trip to the top of the 96-storey building – in an external construction hoist.

Visually dramatic and structurally complex, the project report is colourful, inspirational and technically impressive.

It has been the most-read project report on CNplus.co.uk since publication, with over a third as many views as the second-most-read.



**2) Down to the nuts and bolts (pp14-16, 31 July)**



Another aim as features editor has been to increase the number and quality of high-profile senior-level profile interviews we run, in keeping with *Construction News'* editorial shift to the higher levels of management within construction.

One of my targets was Ian Lawson, chief executive of Severfield, the UK's largest steel contractor. Severfield had been hitting the headlines over faults in its work on the Cheese Grater and, on the day I was with him, news broke of a need to replace thousands of bolts on the US Embassy in London.

The stories had been making main contractors and clients nervous, and I wanted to give our readers the chance to hear directly from the man in charge.

We ran the interview as our cover feature. During our interview, Mr Lawson admitted for the first time that the reported £6m cost of fixing the bolts might not be the maximum, which I reported in a separate exclusive story in print and online.

This is the only in-depth profile interview done by any trade press with Mr Lawson, that shone light on one of the most high-profile problem contracts of recent years.

### **3) Would you hire an ex-offender? (pp22-24, 21 August)**

The construction skills shortage is the number one concern for construction. The question is what to do about it.

As part of our ongoing focus on skills, I visited HMP Brixton, where a charity is running a drylining training centre inside the prison walls.

I found out about the centre and used my initiative to push the client, Land Securities, for a site visit.

To get inside a prison is rare, so I used the opportunity not just to find out about the prison and its training programme, but also to talk to the prisoners.

I wanted to find out what life was like for them and how they had ended up inside – and crucially, how construction might help them after release from prison.

I intend for this to be the first in a series of features on how the industry is helping people in need get back to work – with articles on ex-servicemen and ex-professional footballers in the pipeline.





**RESIDENTIAL**  
**DANIEL KEMP**

We're 50 storeys above Manhattan, suspended in a construction hoist that has just shuddered to a halt.

"Who stood on the panel?"

One of the members of our tour party has stepped onto a plate next to the hoist's gate, close to the edge, activating a kill switch that has stopped dead our ascent to the top of 432 Park Avenue.

"Jesus Christ - don't do that again," our hoist operator says, a concerned look on his face.

A typically brash New York construction worker, it's his job to ferry people and materials up and down in one of the building's seven hoists every day - but even the nerves of this seasoned operator, not to mention the rest of us, were jangled by the sudden stop.

Tall buildings are not uncommon in New York City, but structures of this height and ambition aren't built every day, and bring their own unique logistics and construction challenges.

432 Park Avenue is one of a new generation of so-called pencil skyscrapers; it is, as the name suggests, tall but ever so slim. It rises from the ground as a perfect square, just 28.5 m to a side - less than three lined-up London buses.

**Project** 432 Park Avenue

**Location** New York City, US

**Client** CIM Group / Macklowe Properties

**Construction manager** Lendlease

**Concrete contractor** Roger & Sons

**Structural engineer** WSP Group

**Architect** Rafael Viñoly

The building has 85 floors, plus three basement levels below ground. However, it is marketed as being 96 storeys high, due to its ceiling heights being 4.7 m - much higher than the average for new-build apartments in New York City of 3.4 m.

**Inspired by trash**

Construction began in 2011 and the building is due to complete later this year.

It will be the tallest all-residential building in the world once finished, exceeding the height of the Princess Tower in Dubai by 13 m [see box, p20].

Designed by Raphael Viñoly and inspired by a trash can, the building sits on the site of the former Drake Hotel, famous for hosting touring rock bands like Led Zeppelin and The Who.

Developer Macklowe Properties purchased the hotel for \$440m (£289m) in 2006, demolishing it a year later, making it one of America's most valuable development sites thanks to its lucrative location.

The 93rd-floor penthouse demonstrates this value perfectly. Boasting six bedrooms, seven bathrooms, two powder rooms, a library and a floor size of around 767 sq m, it is listed on the developer's website for an eye-watering \$81m (£52.7m).

Overseeing this is construction manager Lendlease, with WSP acting as structural engineer and local contractor Roger & Sons carrying out most of the main tower construction works, including all of the concrete.

Pumping 53,500 cu m of concrete 430 m into the air, while coping with the wind that howls at that height over Manhattan, presented one of the toughest challenges - not

On an exclusive site visit, *Construction News* ascends NYC's latest skyscraper and discovers what challenges its slender shape posed to the design - and how the team overcame the difficulties of pouring concrete 430 m above Manhattan



The orange sections denote the jump floors used to reduce the effects of wind

**IN NUMBERS**

**426** Height of the building in metres

**£52.7m** Penthouse value

**650** Weight in tonnes of each damper at the top of the building

**53,500** Cum of concrete pumped 430 m up from the ground

least because the concrete was to be left exposed.

**Local experience**

Neither contractor nor engineer are strangers to high-rise construction though. "We did Tower Four at World Trade Center and a couple of other big jobs around New York City and the tri-state region - we did those, had the best number for this, and the rest is history," says Roger & Sons executive project manager Pete Rodrigues.

Mr Rodrigues worked closely with WSP on the building's design before construction began.

"We met at least once a week, if not more - we solved a lot of problems on the front end before they got out to the field," he says. "We try to do that in general, but on a job like this it's even more important."

**Against the elements**

When modelling the building early on in the design process, it became clear that its unusually slender shape could cause issues with the wind. "We found vortex shedding could be a problem,"

explains WSP senior vice-president for building structures Hezi Mena. Vortex shedding describes the oscillation of air that takes place behind a bluff body, creating low-pressure vortices behind it that the body will tend to move towards. At its most extreme, it can cause structures to fail.

To overcome it, the team used

wind-tunnel testing, altering the design to include 'jump floors' on every 12th floor. "We are effectively punching holes in the structure to reduce the effect of the wind - it

**"From top to bottom, the biggest deviation was a quarter to a half inch"**

PETE RODRIGUES, ROGER & SONS

can just pass right through," Mr Mena says.

On these jump floors, only the building's exterior concrete columns are in place (there are no interior

columns anywhere in the building). The floor is left entirely empty, with the central core containing the elevators and staircase sealed off to protect them against the elements.

The exposed concrete will be finished, but no cladding or external walls will be put around the floor, allowing the wind to blow through and minimising the risk of vortex shedding. "It's like cutting holes in a sail," Mr Mena explains. "Don't resist the wind - let it pass."

**650 tonnes on top**

Another of the building's innovations is also designed to mitigate the effects of strong wind. Standing in the penthouse hundreds of metres above Manhattan, the structure seems perfectly still - it's impossible to detect any movement at all.

"The building moves the same way as any other building does," Mr Mena says. "You just don't feel it."

To achieve this, WSP designed two enormous tuned-mass dampers to absorb the building's movement. Taking up three storeys right at the top of the building, the two 650-tonne dampers sit beside each other in each half of the floor.

As the building moves in the wind, the damper moves with it, taking the weight and reducing movement to imperceptible levels, Mr Mena explains.

The dampers are usually filled with steel to make up the mass - but here, concrete was used to fill the inside of the damper. "This was much quicker but still provided us with the mass we needed," Mr Mena adds.

Work on the foundations began in September 2011, before ▶

► the superstructure work got under way in late 2013. It took a year to complete and the building topped out in October 2014.

Once the design was in place, the major challenges centred on the practical difficulties of pumping high-strength, architecturally specified white concrete to great heights.

### Concrete order

The team poured the core walls first, two floors ahead of everything else, before constructing the exterior columns and spandrel beams. "The columns were poured, the spandrel was poured on top of that, and the core wall was tied to the spandrel beam as a fourth pour," Mr Rodrigues says.

Roger & Sons used the Doka Super Climber system for the core walls and a custom-fabricated stainless steel form on top of the Doka SKE100 climbing system for the exterior forms.

All of the concrete used is being finished and left exposed, with white concrete used for the



432 Park Avenue (right) boasts a greater roof height than the Empire State Building (left)

exterior of the building. "The stainless steel form was used to make sure there was no staining," Mr Rodrigues says.

"There was an intense cleaning process between pours - once we stripped the forms, we cleaned them every time, oiled them properly, made sure there was nothing building up on them and carrying over from pour to pour.

"We also had a separate set of slick lines for the white columns to ensure no staining from the grey concrete."

The concrete ranges in strength

from 14,000 psi at the base of the tower to 10,000 psi at the top. The high strength of the concrete also helps reduce the need for any structural walls or columns inside the building.

The external columns get thinner as you rise, from 1,670 mm at the bottom to just 500 mm on the upper floors - ensuring the

**"The building moves the same as any other building moves. You just don't feel it"**

HEZI MENA, WSP

penthouse apartment also has the widest windows.

"We could only pump that white concrete at about 18 m an hour, so it was a very, very slow process," Mr

Rodrigues says. "There was a lot of adjusting the mix to make sure we could get to top of house with it."

The team used SAS high-strength steel reinforcement bars within the columns and worked with WSP to alter the design, taking them further up the building that originally planned, as it helped decongest nodes where different sections of rebar slotted together. "We also converted all the spandrel reinforcing from grade 75 regular reinforcing to a grade 80 threaded system," Mr Rodrigues says.

"That decongested the area and allowed us to place 14 or 28 m sections of spandrel bar at a time. We had to make sure all the bars fit together - we gave the vertical bars in the columns a zone they could exist in, and the horizontal

bars in the spandrel also had a zone they could exist in, so when we dropped the spandrel onto the column they always fitted like a glove."

### Worker jam

As well as pumping concrete, moving other materials - and men - proved to be a challenge. "The higher you went the longer it took for guys to get up there and that results in lost production," Mr Rodrigues says.

"We probably need to add a slightly bigger lost production [in

future] for jobs more than 300 m in terms of people-moving. When you're running 200 guys and there's another 300 on the site, those hoists jam up pretty quick."

The team also had to take extra care to ensure the building was the correct geometric shape all the way up, using a GPS system past the 30th floor to check its narrow square form was intact.

"The system gave us real-time, to the second, where the top of house existed in space," Mr Rodrigues says. "You can imagine that as the crane starts up in the

morning and the wind starts blowing, the building starts to sway. The GPS system allowed us to know where we were at any one point in time, so when we were laying out concrete, any of that construction or wind motion was compensated for.

"We did pretty good - from top to bottom, the biggest deviation was a quarter to a half inch, something like that."

### Exhaustive plans

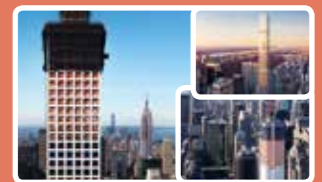
To achieve that level of accuracy on such a tall, thin building, planning was vital. Roger & Sons worked closely together with WSP from long before work started on site, ensuring no slip-ups.

The wind was taken into account, with most of the concrete layout

happening at dusk, before the wind picked up and the crane started moving. "That gave us the least amount of movement, right before the sun came up," Mr Rodrigues says.

"We planned it out pretty well so there weren't any major whoopsies - we had a pretty good grip on the job from the front end."

### EXCLUSIVELY ONLINE



Go online for a picture gallery of 432's construction and interior >>> [cnplus.co.uk/project-report](http://cnplus.co.uk/project-report)

Mr Rodrigues emphasises the collaboration needed to build something like 432 Park Avenue, stressing how the close working relationship with WSP was crucial to its delivery.

"I don't think you can build a job like this without a progressive, forward-looking engineer who is willing to work with the contractor to put it together properly. It was a friendly, team-oriented working relationship, and that's the most important

**"When you're running 200 guys and another 300 on site, those hoists jam up quick"**

PETE RODRIGUES, ROGER & SONS

thing we learned: you can't build a job that is this technical without that type of relationship."

The building is now more than 95 per cent

clad, with handover later this year. Apartments are already selling, and the building is taking its place as a part of New York City's iconic skyline. The building won't be open to the public, so after the construction teams have moved out, only the occupants of the penthouses and their guests will get to see the incredible view from the top.

With downtown Manhattan on one side, Central Park on the other and New Jersey and Connecticut stretching out as far as the eye can see, it certainly makes you feel like you're on top of the world.

And standing at the top, with all of New York City and its famous skyscrapers sprawled out beneath you, it makes you realise that buildings like this really don't come along every day.

### TALLEST TOWERS

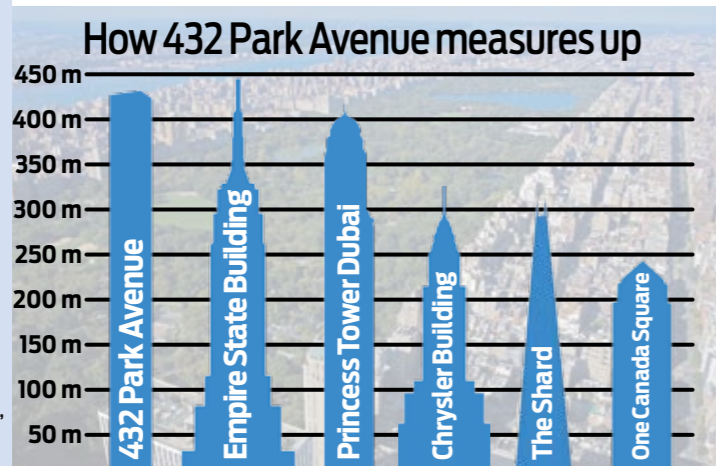
The dense borough of Manhattan is packed with tall buildings, including the recently completed One World Trade Center, the third-tallest in the world and the highest in the US.

But while 432 Park Avenue stands 425.5 m, lower than One World Trade Center's 546.2 m to its spire-topped peak, its roof level is actually 8.5 m higher.

From the 432 Park Avenue penthouse, you are also afforded the rare opportunity to look down on the 373 m observation deck of the Empire State Building. It will become the tallest residential building in the world once finished, ahead of Dubai's Princess Tower.

Only two towers in the US are officially taller - One World Trade Center and Chicago's Willis Tower.

The UK's tallest tower, the Shard, pales in comparison at 306 m.



432 passing 300 m



One of the 650-tonne dampers at the top



WSP's Hezi Mena

# Down to the nuts and bolts

Steel bolt failures at the Cheesegrater have caused Severfield to make national headlines for the wrong reasons in recent times. But chief executive Ian Lawson explains why taking an 'honest' approach is helping the specialist secure work on the UK's biggest job



## “Words like ‘partnering’ and ‘negotiation’ are returning to the vocabulary”

while it replaces the affected bolts. The work is set to last up until the end of 2015.

On the day *Construction News* visits, news has emerged about problems at another of the firm's high-profile projects at the US Embassy in Nine Elms, London. Severfield is now replacing bolts on the £650m job for Sir Robert McAlpine and US contractor BL Harbert after installing the wrong ones.

### A grating time

Mr Lawson's approach is hands-on. This has not only improved morale on the factory floor, but has been necessary to tackle problems head on.

The period from late 2012 until mid-2013 was challenging for Severfield, which suffered three successive profit warnings and undertook a successful rights issue.

After completing work for the London 2012 Olympic Games, the firm, by Mr Lawson's admission took on a number of contracts on which it lost significant amounts of money. One of those would turn out to be the ill-fated contract at

the Leadenhall Building, working for British Land and Laing O'Rourke.

The problems there have been well publicised, with a process known as hydrogen embrittlement revealed to be the cause of the failure of three specially designed steel fasteners.

Mr Lawson is quick to point out that the steel used had all of the correct certification, but that the bolts turned out to be harder than they should have been, meaning they were more susceptible to embrittlement – a problem that put the opening of the building at risk.

“We didn't want to have a building that was sitting there with bolts falling off, [so] occupation couldn't take place,” he says, talking about how Severfield came together with British Land, Laing O'Rourke and Arup to solve the problem.

All of the firms are incurring costs as part of this process, but Severfield is picking up “the lion's share”, according to Mr Lawson.

“Whilst that's going on, we're still in discussion with all the parties to determine where we think the true liability lies,” he says. The company has made a provision of £6m to cover the expected costs, but Mr Lawson cautions that it would be “wrong” to say this figure could be a maximum.

“It's very much our estimate

of what we think our final costs will be to carry out the remedial works,” he says.

A question about the potential reputational damage of the problems at the Cheesegrater prompts a long pause. Mr Lawson looks up at the ceiling while he considers this point, which has all the more resonance on a day in which the US Embassy problems emerge.

He eventually concedes that he does worry about the impact. “It's not been bloody helped by what's happened today, as it's [Leadenhall] that people are cottoning onto, thinking ‘Ah, [the US Embassy problems] could be horrific,’” he says.

“Our share price has dropped 5 per cent today because of that, but it doesn't bother me because it's wrong.”

Mr Lawson hints that the US Embassy problems are not the same as those at the Cheesegrater. The firm has not made a statement to the city, as it did when it became clear that the Leadenhall Building had faults that would cost money, he notes.

“Obviously some investors or shareholders have seen that [today] and wondered if there's another problem,” he adds.

The firm is still bidding for work with the other parties involved at Leadenhall, suggesting the remedial action taken there and the responsibility shouldered by Severfield so far has helped keep those relationships intact.

### A ‘one-off’ design

Mr Lawson concedes that “inevitably with somebody, somewhere, it will [harm our reputation]”, but most contractors and clients recognise that the Cheesegrater is a “peculiar, one-off” design. “We've handled it with integrity and honesty, and come forward with it, which is the right way to do it,” he says. “I think that's stood us in good stead.”

Severfield's share price has recovered since the day of our visit, suggesting the city backs the firm to succeed despite the adverse headlines.

Mr Lawson's previous life at Kier, where he was a trusted board-level

## TALKING POINTS

### Ian on...

**Network Rail:** “We thought there would be a lot more opportunities coming through. And if there are not as many opportunities, they'll be more keenly fought for, won't they?”

**Working in Saudi Arabia and Kenya:** “Overseas you tend to get a lot more management experience at a younger age than in the UK.”

**The collapse of Bickerton Group, where he had been a director:** “I found it sad. Nobody wants to see that happen to any company you've been involved in. Change is inevitable, but it was very sad.”

**India JV:** “We've turned the corner there, and stemmed losses we were having a year ago. The market gives us chances to create real value.”

**Potential Brexit:** “I don't think that would worry me – it's about supply and demand, and the technical capabilities we have. We might have to work with a JV [in Europe].”

**Increasing automation:** “When we put two machines in it made 10 jobs redundant – but they're still working somewhere in the factory. We upgrade machinery and it's more efficient – but we won't move to complete robotics, a car industry-type scenario.”

director, has helped prepare him for success at Severfield. He joined the firm in 2000 as MD of its PFI business, before rising to have board responsibility for the company's Property and Support Services divisions. He oversaw the consolidation of a number of divisions within the company to form those business units – with the restructure of the housing division transforming five companies into one – a process that involved “a lot of pain”.

It's easy to draw a parallel here with his work at Severfield, rebranding the business and streamlining its operations to operate more effectively as one business [see box, left].

“We now ensure the factories are full, because we share the work around,” he says. ▶



**SPECIALISTS**  
DANIEL KEMP

In Severfield's factory in Dalton, Yorkshire, Ian Lawson is shouting to be heard over a cacophony of steel cutting and welding.

The chief executive shows off enormous new machines and points proudly to each piece of steel, boasting of its final destination.

“This one's for Principal Place, a big job in London near Liverpool Street,” he says, touching a giant steel beam as he describes the work Severfield is doing for Brookfield Multiplex there. Other beams we pass are destined for Anfield, where Carillion is in the process of rebuilding Liverpool FC's main stand.

Mr Lawson appears to be a popular leader with staff on the factory floor keen to say hello. But although he has a broad smile as we wind our way around, the CEO admits he has endured a trying few months, having taken charge in November 2013.

The company has faced high-profile difficulties over steel bolt failures on the Leadenhall Building (Cheesegrater), which are expected to cost it around £6m

## Rebranding Severfield

The history of the Severfield name is a convoluted one. Beginning as Severfield-Reeve, it changed to Severfield-Rowen after acquiring a Nottingham-based fabricator.

Over the years, the firm also acquired Watson Steel Structures in Bolton, Atlas Ward in Scarborough and Fisher in Northern Ireland – with all of the names remaining intact.

In 2014, though, Mr Lawson oversaw a rebrand that dropped all names but one: Severfield.

“We needed to rebrand to bring the company closer together,” he says.

Recounting a story from his Kier

days, he describes a project where Severfield-Reeve was contracted to do the steelwork, but another firm called Fisher turned up instead and began work.

“Everyone wondered what the bloody hell this foreign company was doing, not realising it was part of Severfield,” he says.

“Really, the branding exercise was dropping the Rowen name as it didn't have any meaning to us – everyone knows us as ‘Severs’.

“It's been received positively – some still refer to us as Atlas, Fisher, there are so many damn names, but we're getting there.”

► “In the past there were clear instances where the three companies worked in isolation – for example, the one in Scarborough had an opportunity but didn’t want to take it because it was full, and it wouldn’t pass it on to anyone else in the group.”

It was this turnaround challenge that attracted him to his current role, recruited by former Kier colleague and now-Severfield chairman John Dodds.

“It was the challenge of a business that had lost its way a bit,” he says. “It was the opportunity to run my own show as CEO.”

## Notable works

It’s a show in which Severfield has played its part in a number of high-profile projects, from sports venues such as the Olympic Stadium, the Etihad Stadium and Anfield, to iconic towers including the Shard.

“We’ve just finished the Manchester City stand – that’s a phenomenal piece of engineering. At Anfield, the logistics of lifting one truss that weighs 650 tonnes up and over an existing structure, so it fits over the front of the stand, that takes a lot of expertise and I think that’s very exciting.”

“The top of the Shard was constructed here in a field – we built it all and pre-assembled it here to make sure it fitted, then dismantled it and put it on a lorry to be taken down to London.”



being beaten, and they know why as well.” Severfield will target new market sectors to grow revenue and it also has European expansion in its sights.

“Once Europe settles down, we think there’ll be more opportunity there,” he says. “Certainly for us,

the opportunity to get steel across the water is almost as easy as taking it down to London.”

The feeling around the firm is more positive now,

with a strong pipeline of work on the horizon. “There’s a good mix of contracts, with some larger ones coming through,” Mr Lawson says. “It still is competitive, but I think people are hopefully starting to be a bit more sensible. Words like ‘partnering’ and ‘negotiation’ are coming back into industry’s vocabulary.” It is negotiation that has been key to Mr Lawson navigating Severfield’s problems since taking over, particularly at the Cheesegrater.

And while it’s almost inevitable

that other problem contracts will be encountered in future, as with all contractors, the firm has a grip on its risk management, allowing it to continue working on prominent jobs.

Mr Lawson is a realist and isn’t aiming to grow beyond the company’s means. He’s relaxed throughout our discussion, unperturbed by questions on difficult subjects. But it’s when discussing the people within the business that he lights up – something that became apparent on our earlier tour.

“I think, right across Severfield, people take pride in what they do,” Mr Lawson says. “This is sexy business, the stuff we do here.”

## Spurred on

One job that he would be proud to do, as a Tottenham Hotspur season-ticket holder, is supplying steel to the club’s new stadium – a contract he has said Severfield will bid for. “They say not to do things too close to your heart, but it would obviously be great to win that one,” he says.

He’d clearly love to rebuild the home of the team he loves, and while he doesn’t shy away from the difficult questions, he’s keen to focus on these kinds of opportunities instead.

Severfield is not all about failed Cheesegrater bolts: it’s a firm with a proud heritage that’s been involved in most mega-projects you’d care to think of.

And that’s the legacy Mr Lawson wants to leave.

**“Right across Severfield, people take pride in what they do. This is sexy business, the stuff we do here”**

## A LOOK BACK AT SOME OF SEVERFIELD'S GREATEST HITS:

**Project Olympic Stadium**  
Date of construction 2010



**Project The Shard**  
Date of construction 2011



**Project First Direct Arena**  
Date of construction 2012



**Project Francis Crick Institute**  
Date of construction 2012





The charity Bounce Back is giving prisoners a chance to train for a career in construction – and contractors the chance to take them on. *Construction News* goes inside to size up the programme



**SKILLS**  
DANIEL KEMP

Dressed in casual clothes, topped with a hi-vis vest and a hard hat, Jimmy looks like any other 26-year-old working on a building site in the UK.

Except he's not your typical worker. This young man has been away from his family for two years without seeing them face-to-face, serving a two-and-a-half-year sentence for crimes which include violent disorder.

And our conversation is taking place inside HMP Brixton, rather than on a construction site.

This young man wants your business to give him a second chance – to employ him on one of your sites and let him put the skills he has learnt inside prison to the test.

I am talking to him in a corner of HMP Brixton's drylining training centre: a new facility designed to help offenders prepare to re-enter the jobs market, specifically in construction, after finishing their sentences.

"I'm using jail to my advantage – I'm not letting it use me," Jimmy says. This is typical of the attitude among the trainees: they see it as an opportunity to be grasped, a way to secure a future that doesn't involve ending up back in prison.

#### Industry partnership

The charity Bounce Back Foundation runs the facility, which sits alongside other resettlement initiatives at the prison, such as a restaurant, barber shop and a bakery.

What makes the centre different is the way in which it works closely with construction industry partners to provide a pathway to employment – a process which is paying off, with 21 per cent of participants in the programme securing jobs.

That figure may sound low, but when compared with the typical rate of less than 5 per cent of prisoners in other training programmes who end up being employed, it's remarkable.

Training is carried out in the heart of Brixton prison. *Construction News* received a rare chance to step inside and see how the programme operates.

I arrive outside the prison, making the long walk down beside its sheer outside wall to the visitors' entrance. Here, my ID is checked and I surrender all electronics before being allowed to enter. We move through the first door into a holding area, a guard watching us closely. Once the first door shuts, another into the prison proper is opened and we step inside.

It's striking how quickly we have moved from the outside world to being shut away, completely disconnected from what lies beyond the prison walls. You can't hear cars on the streets outside and feel cut off from everyday life.

The lack of noise from outside means it's quieter than I expected, almost peaceful in a way – there are no prisoners moving around, no-one to be seen except our party and a handful of prison staff.

We pass through the exercise yard next to the imposing four-storey brick building that is Brixton's A Wing, home to 215 prisoners. Monkey bars and other exercise equipment are spread around the otherwise bare grass-covered space. Each of the building's tiny windows is covered with bars. A radio blares from one

**"When I'm here, I don't feel like I'm in jail – I go back to the wing and I'm really happy"**

JIMMY, HMP BRIXTON INMATE

cell, the only audible sign that anyone is home.

The training centre itself is within a newer building next to A Wing, spread over two floors. On the upper level is the painting and decorating facility, where prisoners are able to undertake a CSkills-accredited Level 1 certificate in painting and decorating. Those who want to progress further are able to complete a Level 1 diploma and a NVQ Level 2.

The prisoners work in bays, practising painting skills, with tutors watching on. There is mobile access equipment in the corner, which candidates are also trained to use, as well as a bank of computers to allow them to undertake CSCS card exams.

"We can give them their CSCS card as they leave prison, meaning they are ready to go onto site straight away," says Bounce Back Foundation's criminal justice lead Victor Roffey.

Downstairs is the drylining centre. Amid the piles of plasterboard and bricks, part of the room is set aside for the prisoners to carry out practical tasks towards a CSkills-accredited Level 2 diploma in drylining.

Lead tutor Julian Stott is talking animatedly to the students, instructing them as they measure out a board, preparing to install it together.

#### Broad skills

He shows us the workbooks the prisoners study; the course covers a great deal, and Mr Stott says many tradespeople on UK sites will not have as broad a skillset as these prisoners. "They cover everything they'll need to do, and I throw in extras for them, too," he says.

"I always tell them, 'Let this be your plan B. You can try and go into another trade once you're out if you want.' I always say rail work is a good place to be.

"But if that doesn't work out,



they will always have this trade to fall back on as a plan B."

The incentive to provide these opportunities for the prisoners is clear on both sides. KPMG's *Skills to Build* report last year identified a potential 20 per cent shortfall of

labour in 2015, with a 51 per cent increase in training provision required to meet the demand for skilled labour up to 2017.

On the prison side, Bounce Back states on its website that it costs more than £50,000 a year to keep

someone in prison, or £29,000 to keep someone on benefits. Once the charity deducts costs, it estimates a saving for the taxpayer of £76,500 per person trained and put into employment.

The centre is unique as the only

drylining centre in any London prison, and is set apart thanks to the clear pathway to work offered by the programme's partners.

"In the past there's just been an emphasis on training in prisons," says Bounce Back Foundation



► chief executive Fran Findlater. “To date, training has not been tailored to what was needed.”

This is where the centre’s sponsors come in. Land Securities, Lendlease, Knauf and Encon work with Bounce Back to set up interviews with contractors and highlight potential project opportunities. “We start with the opportunities in place, and they are very clear and demonstrable,” Mr Roffey says.

Hoping to be one of the next to take advantage of Bounce Back’s programme, Jimmy reflects on the mistakes he’s made – but is eager to seize the opportunity. “I got mixed up with the wrong crowd – I got lost,” he says. He talks about how he “grew up” on building sites, and that as a hands-on person, a job in construction is attractive.

He echoes his tutor’s line about having plans in place. “I won’t just have a plan B – I’ll have a plan B, C and D,” he says. “The guys who don’t have those plans, they end up back down again.”

### Becoming a role model

Jimmy has completed several courses since coming to prison, including one on business administration and the painting and decorating course here at Brixton.

Following this, he had been winding down and preparing for release next month when it was suggested that he used his remaining time inside to gain a further qualification in drylining.

“I hadn’t thought about it but it made sense. I said yes, and one day I woke up and there was a slip under my cell door saying I was doing drylining.”

The course is oversubscribed and Mr Roffey says there is a 45-man waiting list, so prisoners have to show a desire to learn and

**“Part of our value is that the guys come with a Bounce Back seal of approval”**

VICTOR ROFFEY, BOUNCE BANK

## CASE STUDY

# ‘If a man doesn’t take opportunities, he’s a fool’

“I’m an Englishman – that says it all, doesn’t it?”

I’m sitting with Frank, another of the prisoners training at the drylining centre, who is telling me more about himself. At 55 years old, he’s at a different point in his life from Jimmy – more experienced, having worked in construction his whole life, but also seemingly more cynical.

Frank says he’s been “in and out” of prison since the 1970s and has

been “promised a lot” in the past. “I’ve been working on site since I was 14 – that’s 41 years of experience,” he says.

Despite all of this practical experience, however, the drylining training centre is offering him his first chance to gain a formal qualification.

“I’m a slater and tiler by trade, but I’ve never got any certificates or anything like that,” he says.

Frank acknowledges he will need his CSCS card and some other qualifications to get hired after his

release, stating quite clearly that he will “need work” once he gets out.

He seems reluctant to get too excited, even to the point of asking me if I know whether Bounce Back will truly be able to point him towards a job.

“If Bounce Back is able to deliver even half of what’s being promised, it’ll be a really good thing.

“But if a man doesn’t take these opportunities when he’s in a situation like this, he’s a fool.”

apply themselves to first win, and then keep, their place.

“I’ve got children on the outside who I haven’t seen for two years. I speak to them every day but I won’t let them come to a place like this,” Jimmy says.

“I need to work and I need to be a role model for my son and daughter when I’m released – I’m coming out a man.”

### Convincing employers

Of course, it’s all well and good to connect prisoners with job opportunities once they’re released – but Bounce Back estimates that six out of 10 employers automatically exclude those with criminal records.

Convincing contractors to take on ex-offenders may not always be completely straightforward, especially if they’ve had a violent past. Bounce Back acknowledges this and says it is all about building trust with the companies it works with.

“We work with a challenging group,” Mr Roffey says. “We do have incidents, every month, every week, as every prison across the UK does. The challenge is to work with the group and refine and select the people we put forward. Part of our value is that we can [sift through the group] – so that the guys come with a Bounce Back seal of approval.”

Val Lowman is managing director of BeOnsite, the Lendlease-founded charity that helps disadvantaged people,

**“We’ll look at the gaps in terms of skills, then at what we can do within the constraints of a prison”**

DEBBIE AKEHURST, LAND SECURITIES

including ex-offenders, back into employment. “We’ve been doing this for a very long time,” she says.

“We work closely with our supply chain partners to build that trust. If something happens here, and everyone gets locked in so a prisoner couldn’t get out to work on day release, we’re joined up with the prison so we can talk to everyone and let them know what’s happening. They don’t think the person has just decided not to turn up to work.”

### Next steps

The programme has been such a success so far that the team are now thinking about further opportunities. “We’ll take a look at where the gaps are in terms of skills, and then look at what we can do within the constraints of a prison and see what we can do,” says Land Securities head of corporate responsibility for London Debbie Akehurst.

Mr Roffey says there is a “willingness and appetite” on the criminal justice side to see the programme expanded to other prisons, with HMP Wandsworth

perhaps next in line.

He cites the example of the huge redevelopment of Nine Elms as an opportunity, as that site straddles the boroughs of Lambeth (home to Brixton) and neighbouring Wandsworth – hence the potential link-up with the much larger prison there.

Bounce Back is aiming to be “much more strategic” when preparing prisoners for life on the outside, Mr Roffey says, with the Northern line extension to Battersea identified as another opportunity. “We already know that project has certain KPIs in place around working with offenders, so we’re looking at that,” he says.

Programmes such as this won’t work out for all prisoners. But it is making a difference to the lives of some – and helping contractors fill much-needed skills gaps in the process. For people like Jimmy, the training has made a real difference – both to his future potential following release and to his more immediate life inside prison.

“This is my last stop before I go home,” he says. “When I’m here, I don’t feel like I’m in jail – I go back to the wing and I’m really happy.

“Don’t get me wrong, when I get out I’m going to enjoy my freedom for a bit. But there’ll come a time when I’ll need to get off my arse and find some work. There’s a future out there for me now.”

Prisoners’ names have been changed