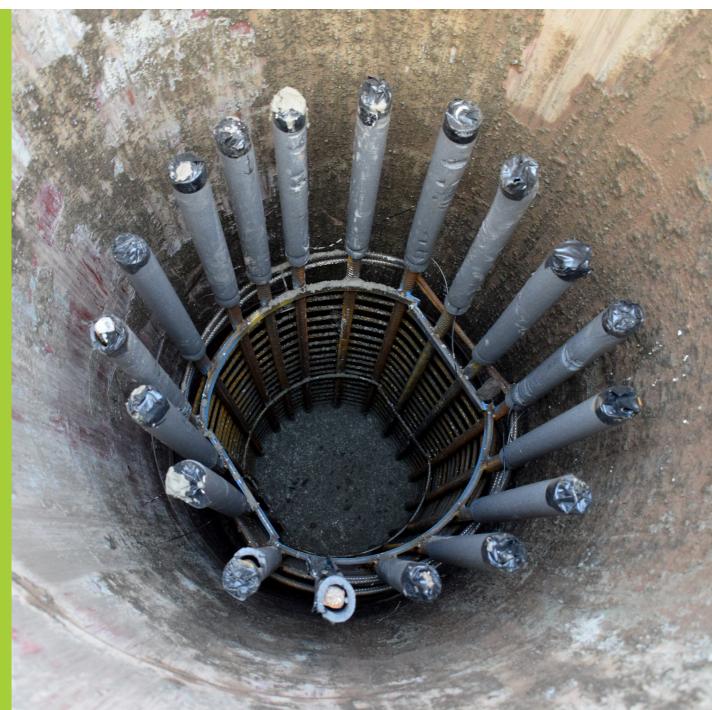
O4 DIGGING DEEP AT LONDON'S LISSON GROVE

MAKING A STATEMENT WITH ROAD MARKINGS TECHNOLOGY CENTRE SETS NEW STANDARDS



WINTER 2019/20

CONSTRUCT





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Foreword



Michael Conway MBE CEO FM Conway

OUR COMPANY HAS ALWAYS EMBRACED SUSTAINABILITY AS A FUNDAMENTAL PART OF HOW WE DO BUSINESS. NOW WE MUST BE EVEN MORE BOLD.

Looking back over the last 12 months, there are some images that really stand out: climate change activists bringing our cities to a standstill; David Attenborough showing us the plight of our planet's wildlife; and teenage campaigner Greta Thunberg challenging the world's leaders not to let her generation down.

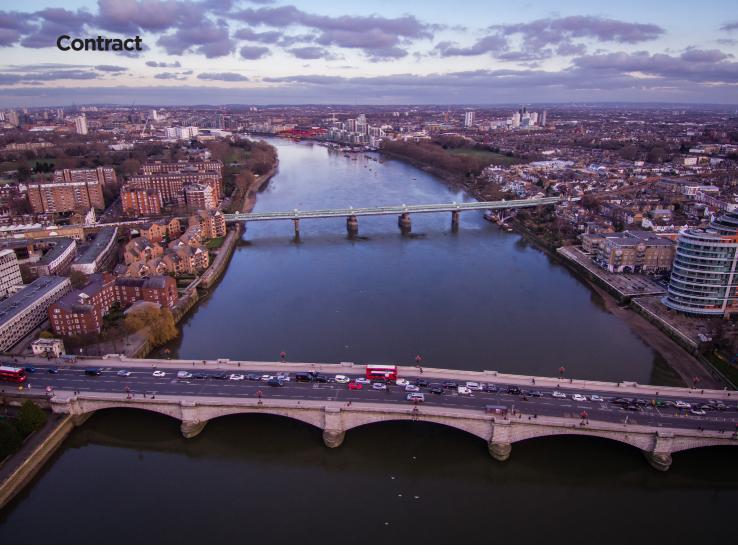
These events all reminded us how fragile our planet is, and that we all have a responsibility to protect the environment and its scarce resources.

Sustainability has been a fundamental part of our business for nearly 30 years, but with the world facing a climate crisis, being sustainable now has a much higher purpose. That's why in January we launched the FM Conway Sustainability Strategy. This strategy will provide a road map for our actions and is aligned to the 17 sustainability goals that the United Nations is working to, because this is where we can make the most positive impact and do our part to help the planet.

I am proud to announce that we are also committing our business to be carbon neutral by 2045, and are recruiting a head of carbon and the environment to work with us and our clients, and to keep us all on track to meet this challenging target.

As a business we paved the way for the use of recycled materials in construction. Now we have to go much further to support our people, our customers and our communities and to ensure that the planet of the future can sustain us.

We plan to be leading the charge, as we have always been, acting as a force for positive change to build a better tomorrow.



SHARE THE BENEFITS

Previous work in Richmond and Wandsworth includes refurbishing Putney Bridge

FM Conway has been awarded a long-term public realm and major highway contract with the London Boroughs of Richmond upon Thames and Wandsworth.

The contract began on 1 November 2019 and will run for seven years, with the option to extend for a further three years to 2029.

FM Conway will work with the two boroughs through a shared service contract worth up to £98 million to deliver highway and public realm improvements across the 3,600 streets of Richmond upon Thames and Wandsworth. The company has longstanding relationships with both boroughs, having previously delivered the Twickenham town centre regeneration and Putney Bridge refurbishment.

FM Conway's commitment to road safety contributed to the contract win, says Paul Chadwick, director of environment and community services for Richmond and Wandsworth councils: "FM Conway's demonstrable experience in road safety, coupled with their commitment to continual improvement and investment, will help us to deliver our road safety strategy, with highway and public realm improvements that contribute to the communities in both Wandsworth and Richmond boroughs."

Project

LISSON GROVE REVEAL

A COMPLEX ENABLING WORKS CONTRACT FOR WESTMINSTER CITY COUNCIL COMES WITH A WIDE RANGE OF SAFETY AND LOGISTICAL CHALLENGES

A contract that started out as a routine site investigation has evolved into a complex scheme involving large-scale service diversions, deep piling and a partial bridge demolition.

The work is enabling Westminster City Council to build affordable homes on a site containing a three-span brick arch bridge that carries Lisson Grove. Before work started, the council asked FM Conway – under its term maintenance contract – to carry out site and ground investigations.

"Our first job was to help the client understand the nature of the works and how feasible it would be to implement their plan, but it became more complicated when they saw how many services there were and the critical nature of the services across the bridge," says Adam Barnes, senior contracts manager in FM Conway's structures division. These included three sets of extra-high voltage cables that feed London's West End, a 24 inch gas main and multiple sets of communication cables.

FM Conway has moved the services from the bridge to the lower level where the new homes will be built, constructing a new

FACTS

Project Lisson Grove

Client Westminster City Council

Value £10 million

FM Conway divisions

 Term maintenance
 Structures

Contract period **2014 onwards**

Activities Piling, groundworks, service diversions, demolition service corridor with a 32-way ducting route around the edge of the site. In addition, the company is building a new sewer culvert with 800mm thick concrete walls, and moving a 1m diameter water main that supplies over 250,000 residents into a new 4m wide, 3.5m deep concrete culvert.

This was formed by installing two rows of very heavily reinforced 1.2m diameter concrete









Deep piles are required for the service culverts and retaining walls

LISSON GROVE



SAFETY

The Lisson Grove project is one of the first to be awarded an FM Conway Green Flag Award under the scheme introduced in 2019 to reward excellence in Safety, Health, Environment and Quality (SHEQ).

The scheme was created to identify exemplar projects and contracts, and applicants go through a stringent process, including up to three days of internal auditing . FM Conway senior SHEQ manager Jerry Banks says: "It was clear from an early stage that the Lisson Grove project featured many 'Big Risk' activities, including utilities, temporary works, lifting operations, subcontractor control, and plant and traffic interfaces. Audits and inspections confirmed that the project was being managed to a high level of health and safety and was an ideal early candidate for achieving the Green Flag Award." Senior contracts manager Adam

Barnes says one of the biggest safety challenges is the restricted space on site: "If you look on plan, it is a really big site, but it is on three levels and there are services running across everything."

Safety measures include building temporary bridges over the gas main to protect it from site traffic, and installing a temporary rider around the site to inhibit the flow of gas within the live gas pipe, so that work can be carried out in gas-free conditions. piles sunk up to a maximum of 22m into the underlying London clay. Many of the piles had to go through obstructions including railway sleepers, concrete structures and walls, buried up to 6m in the ground.

At each end of the culvert, more 900mm diameter piles have been installed to form retaining walls to replace those removed during the bridge demolition. These piles are fixed with 200mm diameter soil anchors angled at 35-45°.

FM Conway has now decommissioned 75% of the bridge structure using a 'bottom-up' decommissioning method that included filling the bridge arches with 1500m³ of expanded polystyrene blocks to provide structural support to the highway above.

Westminster City Council project manager Simon Tong says the scheme at Lisson Arches is integral to its plans to deliver affordable homes for local people: "We are extremely proud of the way the FM Conway team has consistently approached the challenges of this site with a collaborative and proactive attitude, in particular keeping those on site safe whilst works progress," he adds.

Term contract

FIRST YEAR IN CROYDON

CROYDON COUNCIL HAS EXCITING PLANS FOR REDUCING CARBON AND IMPROVING SERVICES

FM Conway has just completed the first year of its seven-year highway service contract with the London Borough of Croydon. Over the lifetime of the contract, up to £130 million will be spent on highways and public realm improvements, helping Croydon Council to deliver an ambitious £5.25 billion regeneration programme.

The contract includes not only planned and reactive highway maintenance, but also design, project management and technical support across the borough's 727km public road network.

Ray Milner, FM Conway's head of term contracts, says: "It's been an exciting first year



on the contract as we work with Croydon Council on maintaining and improving the road network and the services in the borough for all. Our teams have worked well together, resulting in us delivering a reliable and responsive service.

"Innovation and recycling are very big on the agenda, with a definite drive to lower CO_2 emissions year on year," he adds.

During the first year, FM Conway has delivered a wide range of highways improvements and maintenance, from gritting in winter to junction improvements. The variety of work carried out can be seen on this map of the borough.

Croydon has ambitious goals to tackle the climate crisis, so priorities for the first year included constructing new cycle paths and quietways to encourage cycling and walking, and installing electric vehicle charging points to help with the take-up of low emission vehicles.

Throughout the seven years of the contract, FM Conway plans to self-deliver services where possible, making use of the Croydon asphalt plant, and sharing management and operatives with the neighbouring boroughs of





WATER AND DRAINAGE SUMMARY OF ASSETS 30,986 8 5,119 31,000 945KM 1,414 1,187 188 10,000+ 82 DATA 8.036KM COLLECTION

66



727KM

REACTIVE MAINTENANCE

10

30%

SOCIAL VALUE AT A GLANCE

£15,000

94

"Innovation and recycling are very big on the agenda, with a definite drive to lower CO₂ emissions year on year"

Merton and Sutton to make the most efficient use of resources.

The contract has to deliver value for the local community, both in terms of better journeys and socio-economic impact. All jobs are advertised through the Croydon Works initiative, and 149 local people are already employed on the contract.

The company has also brought 26 local suppliers and subcontractors into its supply chain and is helping to fund community projects and training days for small businesses.

Other community initiatives include careers events with local schools and donations to Bromley & Croydon Women's Aid.

Year 1 has laid the foundations for a successful long-term relationship designed to provide genuine and sustainable benefits to the people of Croydon.

Utilities

THE LAUNCH OF A NEW DIVISION SEES FM CONWAY BRINGING ITS EXPERTISE AND SELF-DELIVERY MODEL TO THE HIGH-SPEED FIBRE SECTOR

Last year saw the launch of a new FM Conway service, cabling and utilities. The division is already laying ducts and constructing chambers to accommodate high-speed fibre cables in central London for internet service provider G.Network, which has a huge programme to bring fibre broadband to London's streets.

FM Conway head of cabling and utilities John Nuttall says: "There is an acute need for fibre broadband in London. The city is currently very low in the world rankings for broadband speed."

The company is using its self-delivery model to control quality and maximise efficiency.

When the new cabling and utilities division digs the trenches and lays the cable ducts, arisings from the trench excavation go to the company's Dartford recycling plant for processing into aggregates; the concrete used for backfill and the asphalt for reinstatement comes from FM Conway plants. Also, all construction equipment and lorries used in the work are supplied by the company. "We have direct control over the quality and are not relying on subcontractors or suppliers for materials," says John.

Local authorities usually insist that utilities do not dig up a road for up to two years after resurfacing or reconstruction, resulting in delays to the fibre rollout if the street has just been resurfaced. But where FM Conway is the term maintenance contractor, the company can programme the cable duct installation immediately ahead of resurfacing.

This benefits all parties: G.Network can install its cables without having to wait, the borough's roads are not scarred by trench reinstatements and there is less disruption for local communities.

G.Network chief operating officer David Sangster says: "We're pleased to be working with FM Conway on the rollout of full fibre broadband in London. It's vital that we have good communication and a collaborative approach with our construction partners to achieve good results for residents, businesses and local authorities."



The new division can coordinate work to minimise disruption for residents

SCHOOLS

The use of coloured markings for public art has developed from their use in school playgrounds. FM Conway has completed a number of projects throughout the south east to install playground markings for schools. These can be designed individually for each school to give children the best opportunities for imaginative play and creative learning. Because they can be customised, playground markings can be designed for different age groups and interests, and children can get involved in the designs. FM Conway usually gets asked to do this type of work through local authorities, however it has also completed schemes directly for private clients. The company also installs playground markings as part of its community outreach with schools in Kent.



BAUHAUS CROSSING

A new artwork was installed at a light controlled pedestrian crossing on Kensington High Street for the launch of the London Design Festival 2019. FM Conway worked in collaboration with the Royal Borough of Kensington and Chelsea and graphic designer Sascha Lobe to create the crossing. The artwork celebrates the women of the Bauhaus art movement, and is made up of artists' names. Each letter in the artwork was individually hand-cut prior to application.





Markings

MAKING AN ART OF SURFACING

SURFACE MARKINGS ARE TAKING CENTRE STAGE AS ART AND SAFETY COMBINE IN VIBRANT DESIGNS

The work of FM Conway's road marking teams often goes unrecognised by road users. But increasingly, their skills are being called upon to install complicated decorative features, including public art.

Last year, FM Conway installed three "3D" zebra crossings for Westminster City Council in a bid to slow down traffic. Since then the road marking teams have created even more elaborate designs throughout the capital, including three special pedestrian crossings in Kensington and one in Merton.

Designs for complex crossings like these can take up to a year to finalise, and have to be approved by the local authority and the Department for Transport to ensure they will not conflict with any other road markings or distract drivers.

They are made using the same material as traditional markings.

"What you see in these crossings is exactly the same thermoplastic we use day-to-day, but it comes in hard, prefabricated colour sheets, and we apply heat on top once they are positioned," explains FM Conway contract manager Oliver Scutts. "We are issued the master design by the clients, and we manufacture it in panels that are numbered to correspond with numbers we put on the drawings.

"First, we treat the entire area with primer to help with adhesion, then we lay each piece like a jigsaw puzzle and ensure the position is correct."

This requires expertise and patience as the artists assume the receiving surface is flat, whereas the carriageway often has varying cambers and undulations.

"Once we know it is all exactly right, we apply heat on top and then add aggregate to give skid resistance," says Oliver.

"We are issued the master design by the clients and manufacture it in panels then lay each piece like a jigsaw puzzle"

MERTON

Merton Council commissioned FM Conway to install a rainbow crossing on The Broadway in Wimbledon last year to celebrate the town's inclusivity, to welcome its first LGBT+ bar, and to support 2019's Pride in London events. The multi-coloured crossing was created in the design of the rainbow flag, the global symbol celebrating the LGBT+ community and its diversity.



JAPAN HOUSE

FM Conway has installed a striking artwork at a light controlled pedestrian crossing outside Japan House in Kensington. Japan House is the new cultural home of Japan in London and is part of a global initiative led by Japan's Ministry of Foreign Affairs. There are two other Japan Houses, in Los Angeles and São Paulo.



HENDON FOOTBALL CLUB

In addition to decorative crossings and public artworks, the FM Conway road marking team also designs and installs markings for car parks. At Hendon Football Club in north London the company was contracted to resurface the 2,500m² car park, and add the markings for the parking bays. "Our brief was to maximise the number of bays while maintaining enough space for vehicles to manoeuvre," says FM Conway contract manager Oliver Scutts.



Surveys



Accurate surveys are essential for understanding the condition of valuable highway assets



SURVEY STANDARD

In 2019, Highways England introduced two new standards and specifications for drainage surveys, CD535 and CS551, focusing on the quality of data capture and processing.

"Historically, surveys have been carried out as independent schemes, resulting in data duplication," explains FM Conway water and drainage management senior contracts manager Jerry McKay. "In the new specifications this has been tackled by introducing 'data round-tripping'."

This involves downloading the latest available data before a survey commences. This data is then checked, updated or added to in the field during the survey, and then it is uploaded back to the database along with any unchanged data when the survey is finished. As a result, previous versions of the data are replaced, and the master file is always the latest version.

FM Conway has invested in intensive training in WinCan VX software both for onsite CCTV operatives and the back-office processing department to ensure the company delivers FM CONWAY HAS INVESTED IN HARDWARE AND SOFTWARE TO DELIVER DRAINAGE SURVEYS TO THE LATEST SPECIFICATIONS AND STANDARDS

the highest quality surveys and reports to the Drainage Data Management System (DDMS).

The specification also calls for Zone 2 CCTV cameras in drainage surveys, and FM Conway has bought two new camera vans boasting the latest hardware and software.

The company's water and drainage management division recently completed two DDMS CCTV drainage surveys on the M4 and M5, the first to be awarded under Highways England's Technical Surveys and Testing (TST) framework.

The M4 project involved jetting and CCTV of a 150mm cross carriageway pipe to identify the extent of a blockage or collapse that had caused subsidence on the hard shoulder. On the M5, FM Conway surveyed and investigated the main highway drainage lines in the hard shoulder and central reserve between junctions 11 and 11a over three nights.

These first TST framework schemes have demonstrated that FM Conway can deliver high-quality work to fit the new specification.

Interview

ON THE VIEW FROM THE TOP

What shape is the company in right now?

We've been through a 17-year growth spurt. For 17 years the company grew by 20% a year – taking our turnover from £18 million to £317 million.

That level of growth is fantastic but it is not sustainable for any business, and now our focus is on consolidation and organic growth.

That doesn't mean we are standing still. We've just launched a new cabling and utilities division, we will be opening our seventh asphalt plant in the Spring, and we have won two new term contracts, in the London Boroughs of Richmond and Wandsworth and the London Borough of Southwark. Add to that an investment of £5,5 million in plant and equipment last year – and that was a quiet year for us.

What does the FM Conway culture mean to you?

What's important to me is the people. We're on a journey, and I want everyone to be with me on that same journey.

I want this to be a place where everyone has the freedom to speak. the freedom to say what they want to do and how they see the business.

I also believe in giving back, which is why I launched 'My Dream' last year. Often there is something that people dream of achieving, but they need support in getting there. That's where 'My Dream' can help.

I personally handle all requests and am committed to awarding this three times a year to try and make a difference to as many people as possible.

Q What is your business philosophy?

In this industry, people have a fixation that things have to be competitive that you have to win at all costs and do whatever it takes to fill your order book. But that's not the case.

Our core values of care, integrity, innovation and excellence are deeply rooted within our business. And I don't want FM Conway to be like every other construction company. We can all lay a kerb or lay some blacktop; what differentiates us is how we get there.

We set ourselves apart by having the right clients, the right payment terms and the right people to do the work.

I really believe in our self-delivery model. The more control we have over quality and efficiency, the better it is for our clients.

Q How will innovation change the business?

We are constantly innovating. We've led the way with recycled materials in asphalt, and I think we can go further with that.

The next big thing for all of us will be Smart Cities. There are some really smart technologies out there like autonomous vehicles, cameras that can count people, and LED lights that don't need to be changed for 25 years.

We're already involved in making Smart Cities a reality: we're installing electric vehicle charging points for clients throughout London: and our lighting and cabling and utilities divisions are installing the high-speed internet to make all this happen.

But for us, the biggest innovations will be new technologies to improve safety for our workforce and for members of the public.



Q What is the biggest challenge facing the industry in 2020?

The biggest challenge for the construction industry is the same as it is for all of us: the climate crisis.

A

We have all got to change the way we work if we're going to protect the environment and/stop using up scarce resources. We've always led the way when it comes to using recycled materials in construction. But that is no longer enough. Now we have to cut our carbon footprint dramatically.

That's why I announced at the end of last year that the company has committed to be carbon neutral by 2045. That wasn't just a statement to win work; it is the natural evolution of our business model and ethos.

Technical



UKAS ACCREDITATION FOR A WIDE RANGE OF TESTING METHODS MAKES FM CONWAY'S TECHNOLOGY CENTRE ONE OF THE BEST IN THE UK



FM Conway's reputation for material quality and innovation is underpinned by its in-house testing facilities. That reputation has been reinforced by receiving UKAS accreditation for a wide range of specialist tests that can be carried out at its Technology Centre in Gravesend.

The Technology Centre was initially set up In 2010 for quality testing of materials from the company's first asphalt plant at Erith. Today it supports all seven asphalt plants in the southeast of England and has an enviable inventory of specialist testing equipment and the capability for a wide range of materials testing, design to specification and research and development.

The centre also plays a vital role in FM Conway's commitment to innovation in sustainable materials, helping the company to design, manufacture and test recycled materials. It also helps the company to push industry boundaries to demonstrate that higher percentages of recycled material content can be used in surface courses.

TECHNOLOGY CENTRE CAPABILITY AND SCOPE

32 DIFFERENT TESTS HAVE RECEIVED UKAS ACCREDITATION

> ADVANCED MATERIALS TESTING

DESIGN TO SPECIFICATION

MATERIALS DESIGN

RESEARCH AND DEVELOPMENT



In turn, this contributes to reducing both carbon emissions and transport movements, helping tackle the climate emergency and supporting the company's pledge to achieve carbon neutrality by 2045.

Over the last year, the Technology Centre has received significant investment in people and equipment, as well as improvements in training and qualifications. New equipment means the company can now carry out Dynamic Shear Rheometer, Micro-Deval and LA Abrasion and wheel tracking tests. Future planned investment in specialist bitumen analysis equipment will give the centre even greater capability.

"This investment means the Technology Centre can compete as an industry leading design and test house," says Mark Flint, head of technical at FM Conway's aggregates and asphalt division. "The scope of work we can do far exceeds the capabilities of the average laboratory in the UK, and we now have key clients requesting the expertise and services the centre has to offer. "

News in Brief





FM Conway is delighted to have achieved the Silver Award in the Armed Forces Covenant Employer Recognition Scheme, in recognition of the company's great support to service personnel and encouragement for others to do the same. FM Conway is striving to become one of the top employers in the sector for veterans by encouraging service leavers to join the business and offering career pathways that benefit from the transferable skills of ex-military personnel.



FM Conway has achieved Lloyd's Register accreditation as an approved Independent Connection Provider (ICP) under the National Electricity Registration Scheme (NERS). This UK-wide accreditation means FM Conway can work on the regional electricity network without having to utilise subcontractors, enabling the company to self-deliver this service at a large cost saving to the business. The Lloyd's Register approval recognises the company's commitment to strict safe systems of work on live networks and its work to ensure that all of our operatives achieve a high level of technical competency.







The company's fleet operations have been recognised with a Productivity Award for our use of ISO 39001 at the BSI Standards Users Awards 2019. FM Conway also won the MPA Eurobitume UK Trophy for the innovative reversing sensors and auto-braking system on our road sweeping equipment at the 2019 MPA Health and Safety Awards in recognition of our success in improving the health and safety of our workforce and members of the public.

LION'S HEAD RESTORATION

– London Landmark Project

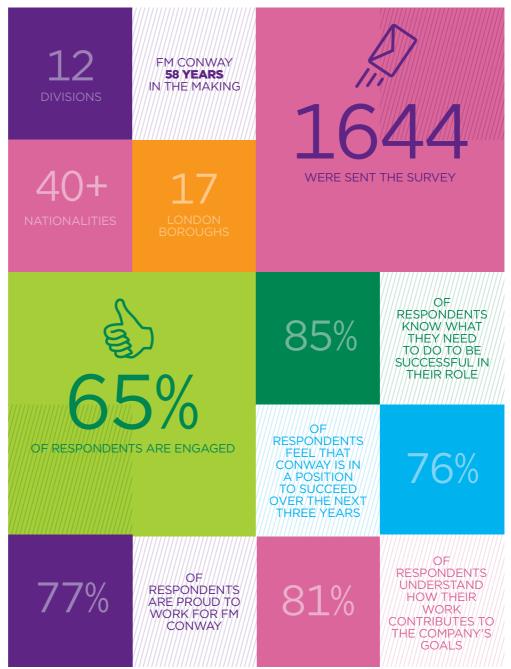
FM Conway has collaborated with specialist engineering firm CAN to remove and restore one of the 'lion head' mooring rings along Victoria Embankment as part of a trial removal and restoration project for Westminster Council. The lion heads sit above the water line of the River Thames in central London and are famously used as a superstitious flood warning system: if the water level rises high enough to touch the lions' heads, London will flood. CAN installed a small access platform beneath the lion's head to provide a stable working platform for FM Conway to begin dismantling the sculpture and cut it from the embankment fixture, before taking it to a specialist restoration company.





As a family business, FM Conway recognises that the success of the organisation is a huge team effort. "Success to us is about creating an environment where our people can grow and have a rewarding career, and are enabled to do a job well," says Wendy Bates, FM Conway central services managing director. Here are the highlights from the company's recent employee engagement survey.

HIGHLIGHTS



People

Reported by

Seamus Adams Lewisham Borough Council

Supervisor Mick John

Operatives involved

Dan Carney, Steve Hilton, Jay Young, Joss Hamilton, Dale Baldwin, Mason Baldwin, Liam Horton, Ronnie Harmel and Ian Junior Dennis Location
Laurence House Car Park

Division: Surfacing

"Thank you for completing the job within the two days. We were very impressed with the work and your operatives in terms of accommodating the staff."

Reported by Member of the public

Supervisor Tom Bett

Operatives involved **Dave Woods and Mark Fletcher**

Location Hampshire

Division Water & Drainage Management "I would like to personally thank Dave Woods and Mark Fletcher from FM Conway who did the drain clearing today. The lost drains were not on their schedule and they could have refused my request. But they were polite, pragmatic and amenable; a real credit. They obviously love what they do and take great pride in their work."

Reported by **Member of the public**

Supervisor Mike Coughlan

Operatives involved Colin Main, Gheorge Pal, Ilie Bilic and Simion Purice

Location Kensington Park Road

Division Cabling and Utilities

"Your company has recently carried out some groundwork on Kensington Park Road to install subterranean piping for a 5G network, digging up the road, laying pipes and re-tarmacking the road. Your workers have been here on

and off for about four weeks. What a good bunch of guys, and what an excellent and efficient job they've done. The guy in the mini-digger working this Saturday was an absolute pro - he worked the digger like it was part of his body and it was fab to watch. The bloke in the bigger ground breaker was awesome, too. Yes, it's been noisy; and yes, there was disruption to traffic and the pavement, but that comes with the territory. Your crew worked hard, efficiently and professionally, and many small boys walking past stopped and watched in awe at the control of the machinery. I'm no longer a small boy, but I did enjoy watching the guys work really hard and really well, and the end result is a fabulous job."



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