VolkerWessels UK



VolkerWessels UK

Annual review 2017

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14 Our strategy - we are seeing the benefits of our clear strategy and focus.



30 Rail - our position in the rail market is continually improving as we continue to deliver multiple complex rail infrastructure projects, rail systems and services.



Marine, energy, water and environmental - from delivering major port enhancements and flood alleviation schemes, through land remediation and connecting solar and wind energy fields to improving the country's water infrastructure.



42 Highways and airport - our highways maintenance contracts keep roads across several boroughs and local authorities running and our airport paving ensures quality improvements for the future.



48 Commercial, industrial and educational construction - from iconic educational facilities to improved Royal Mail buildings, distribution centres and central London refurbishment.

Introducing **VolkerWessels UK**

We deliver in challenging environments, in a challenging economic climate. At VolkerWessels UK we are committed to working in close collaboration with our clients, providing consistent levels of service, consideration and commitment, allowing clients to take advantage of growth opportunities.

VolkerWessels UK is a multi-disciplinary contractor that delivers innovative engineering solutions across the civil engineering and construction sectors including rail, highways, airports, marine, energy, water and environmental infrastructure and commercial and industrial building.

While we are constantly moving forward and continuing to grow, we are proud of our enviable pedigree.

VolkerWessels UK is part of Netherlands-based VolkerWessels, a group with 16,000 employees and about 120 companies and offices in the Netherlands, the United Kingdom, Germany, Canada and United States. We now employ more than 2,800 people in the UK.

We have a network of key office locations across the country which provides us with the ability to deliver our projects throughout the UK and flexibility in the provision of the support our clients need in order to achieve our desired results.

Marine, energy, water

and environmental infrastructure



Tidal barrier in Ipswich

The design, construction and installation of a 20m bascule tidal gate to prevent flooding within the town and control fluvial flow.





Delivering for Royal Mail Building on a long-term relationship with

Royal Mail to improve 18 sites as part of the Uplift national framework.





capacity for this key international gateway that handles 17 per cent of UK goods trade.

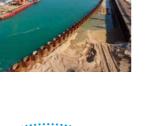




King William Street

Back-to-frame office development of an iconic London building, featuring two additional levels and increasing floor space by 26% to 82,000ft², over nine floors.







infrastructure





Highways and airport





Cambridge North Station Following months of planning, it

took two years to deliver this station with 700,000 hours of labour and 11 successful possessions.

infrastructure



Hitachi Rail Europe

Keeping the Hitachi fleet rolling with new depots, including Doncaster Intercity Express depot and Craigentinny,





ighways maintenance We maintain over 6,200km of highways network, in both urban and rural



Ely Southern BypassConnecting the A142 through a project that included design and construction of a single carriageway road, viaduct and bridge.



Forward-thinking with a long and successful heritage.

VolkerWessels UK brings together five separate and complementary business units that work in collaboration across multi-disciplinary projects. All of our UK businesses were each founded by entrepreneurs. They have gone on to achieve a long history of success through hard work, innovation and excellence

W VolkerFitzpatrick

VolkerFitzpatrick provides specialist building, civil engineering and rail expertise, delivering successful projects in a wide range of industries, including commercial, industrial, education, rail infrastructure and depots, airports, waste and energy. Civil engineering company Fitzpatrick & Son was founded in 1921 by dynamic self-starter, John Fitzpatrick and driven with ambition by his son, Patrick Fitzpatrick OBE.

S VolkerRail

VolkerRail is one of the UK's leading multi-disciplinary railway infrastructure contractors and delivers multi-million pound rail infrastructure projects by providing electrification, high voltage power distribution, signalling, rail plant, welding, metro and light rail track construction, as well as renewals an maintenance specialisms. VolkerRail has more than 80 years of experience in both heavy and light rail infrastructure sectors dating back to 1935, when John Spafford and Ellis Berman joined forces to start the business.

VolkerStevin

VolkerStevin operates in a wide variety of sectors, providing complex engineering solutions across maritime, flood risk management, water, energy, land remediation and regenerating solutions. and general civil engineering. The company was originally Harbour & General Works Ltd, established in 1932 to deliver marine works. VolkerStevin also includes the following divisions: specialist service provider VolkerBrooks, piling specialist VolkerGround Engineering, extra high voltage cabli contractor VolkerInfra and horizontal directional drilling specialist VolkerTrenchless Solutions.

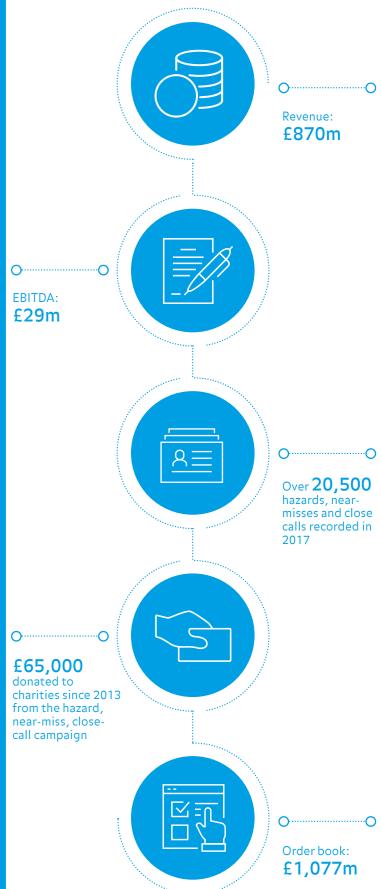
VolkerHighways

VolkerHighways is an integrated highways service provider specialising in highways term maintenance, street lighting and electrical services, surfacing, traffic management and public realm infrastructure projects. SMaRT, our Strategic Management and Recording Tool, is the result of five years of investment and development, working collaboratively with clients to develop a bespoke works order system that meets the specific needs of our clients and the business. VolkerHighways is the amalgamation of Gabriel Contractors, Mews, Crowley and the highways division of VolkerFitzpatrick.

23 VolkerLaser

VolkerLaser's specialist services include waterproofing, strengthening, concrete insulation and repair services across the built environment. VolkerLaser was originally part of the Worcestershire-based Laser Civil Engineering Ltd, formed in 1994.

Our combined force is clearly one of our strengths and provide the group with the scale and capability to deliver now and into



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Financial and performance

highlights

The delivery of margin continues to be more important than volume growth and VolkerWessels UK is very selective in taking on new projects.

Market developments in 2017

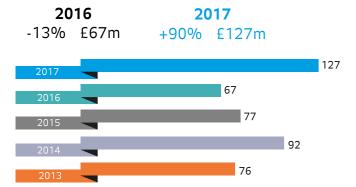
The National Infrastructure and Construction Pipeline published by the British government in December 2017 sets out over £600 billion worth of projected public and private investment in the next 10 years, including over £240 billion by 2020/21. The British government sees infrastructure as the foundation on which the economy is built, and this updated pipeline will generate significant growth across the UK within the social, energy, water, transport and civil infrastructure sectors. This provides significant opportunities for VolkerWessels UK, which is well positioned in these sectors. On average, in excess of 80% of the annual revenue of VolkerWessels UK comes from the infrastructure market. Following the UK vote in 2016 to leave the European Union, VolkerWessels UK experienced a degree of market uncertainty. Nevertheless, despite the weaker pound sterling, the impact of Brexit on our companies in 2017 was limited.

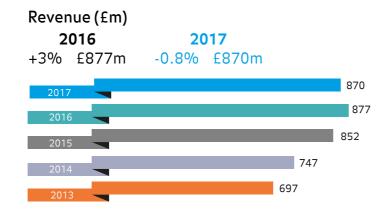
2017 highlights

VolkerWessels UK strengthened its market position in the period under review by securing, extending and renewing a number of long-term contracts. These contracts provide stability in the order book for our companies, and include the Chilterns Tunnels and Colne Valley Viaduct package C1 for High Speed 2 (as part of a joint venture), Oldbury Viaduct for Highways England and the East Anglia ONE wind farm infrastructure for Scottish Power Renewables (implemented together with VolkerWessels Dutch subsidiary Visser & Smit Hanab).

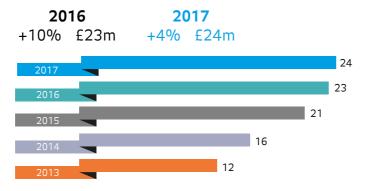
VolkerFitzpatrick has secured the Luton Airport Mass Passenger Transit (MT) project and has been appointed by Hutchison Ports to undertake the latest phase of expansion at the Port of Felixstowe. The Felixstowe project involved the design and construction of approximately 13 hectares of paved container yard directly behind berth 9.

Cash position (£m)





Operating result (£m)



Secured order book (£m)



Revenue in 2017 of £870 million is in line with 2016 (£877 million). EBITDA increased by £2 million to £29 million, with the EBITDA margin improving by 20 basis points to 3.3%. The secured order book increased by 7% to £1,077 million.



38%

Rail Infrastructure

Renewals and enhancements of mainline rail infrastructure and systems including track, signalling and electrification, plant, maintenance depots, stations, and metro and light rail track construction.



27%

Highways and airport infrastructure

Maintenance, renewals and civils for highways networks, airports, bridges and tunnels, providing surfacing, strengthening and waterproofing, term maintenance, lighting and traffic management.



25%

Marine, energy, water and environmental

Extensions to ports and harbours, flood alleviation and coastal protection, water utilities infrastructure, piling, horizontal directional drilling and high voltage cable works.



10%

Commercial, industrial and educational construction

Refurbishment and new build construction, civil engineering, design and planning for distribution centres, office and industrial buildings and multimodal, educational and community facilities.

Chief executive's review

Defining difference

It is a real privilege to be the chief executive officer at VolkerWessels UK. We have a very special organisation that makes a positive difference to people's lives, both within the company and across the UK as a whole.



A decade on from the launch of VolkerWessels UK, we are financially strong, we have a trusted brand, committed people and a market-leading position. Our growth as a business continues apace.

There is a culture of positivity that runs through everything that we do. We believe that we are strong performers as we do business differently. By that I mean we lead the way within our industry, in terms of business practices and actually defining future parameters.

Dependable delivery partner

In the current climate, clients require highly dependable delivery partners. Ours is an industry with a continuous demand for improvement and value-for-money solutions, efficient delivery of contracts and innovative approaches. I am pleased to say that we rise to that challenge every day.

We have developed a reputation for being highly proficient across all of the spheres in which we work. The key elements of our success are our commercial risk management, engineering and operational delivery as well as a very defined culture created by our people.

We have a clear and consistent strategic direction and organisational structure which allows us to focus on the future, ensuring that we keep to our principals, ethics and commercial goals.

Strengthening our market position

2017 was another strong year for us, with solid performance across all of our businesses, in line with and, in many cases, going beyond expectations. Delivered through our talented people, we never settle for second best; we always aim to deliver the highest quality work, within the safest environment and we strive to exceed expectations.

We are operating in a growing yet constantly challenging market. Our selective approach to new business drives and underpins our success and allows the clients we do work with to trust us implicitly.

We have yet again strengthened our market position by securing, extending and renewing a number of long-term contracts, providing visibility and stability in the order book. Contracts such as the Chilterns Tunnels and Colne Valley Viaduct civils work for HS2, Oldbury Viaduct for Highways England, the On-Track Plant framework for Network Rail, Port of Felixstowe expansion, the jetty at Thankes Oil Fuel Depot, the East Anglia ONE wind farm and a new rail link for Luton Airport.

"We have yet again strengthened our market position by securing, extending and renewing a number of long-term contracts, providing stability in the order book."

We achieved a strong financial performance in 2017 with underlying operating profit of £24m – an increase of 4% compared to 2016, reflecting the strength in our market positions and the diversity of our business.

Following the Brexit vote in 2016, we continue to experience a degree of wider market uncertainty. However, even with the weaker pound, the impact on our businesses appears to have been limited due to our continued strategic imperative of closely managing our cost base and operational risks, whilst still being able to respond swiftly to market developments.





We achieved a strong financial performance in 2017 with operating profit of £24m





We invest extensively in the recruitment, selection, learning and development of our people and our transition to a genuine learning organisation is well underway

£500,000 spent on training and development and 24,000 hours of personal development



We have a strong opportunity pipeline. Our order book for 2018 is in excess of £1bn

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Chief executive's review **Project: M2 Stockbury Viaduct Location:** Stockbury, Kent Client: **Highways England** 10 | VolkerWessels UK

Commitment to health and wellbeing

The health and wellbeing of everyone within the business, on site or office based, is extremely important to us. We care about our people and their families. We have an unwavering commitment to the health and safety of those working with us, and our performance in recent years demonstrates the strength of our achievements.

Our overall accident frequency rate in 2017 was 0.08. This, when compared to the industry average from the Health and Safety Executive of 0.20 for the same period, demonstrates our industry-leading safety performance. We continue to focus our efforts to prevent all injuries, not just major ones, and I am pleased to see significant reductions in minor injuries over the same period. We will continue to work tirelessly in efforts to make sure that everyone arrives home safely, every day.

In 2017, we put new plans in place to build upon our occupational health service and introduce a more detailed mental health programme of advice and support, encouraging all of our people to look out for each other as we go about our daily lives. In 2018, we will continue to invest in more support on both the physical and mental aspects of health in the workplace, working with national partners and advisory bodies, as we seek to play our role in eradicating the causes of ill health in our industry.

Attracting and retaining talent

We invest extensively in the recruitment, selection, learning and development of our people. We aspire to be the 'employer of choice' - attracting and retaining the best talent - and realise that achieving that status requires continuous effort. We recognise that there is an increasing skills shortage across our industry, but we are fully equipped with the right blend of knowledge, competence and expertise to make a real difference for all customers and stakeholders - now and in the future. Our apprenticeship and graduate programmes are great examples of what we are doing as we future proof our businesses. We are an attractive and responsible employer with a culture of providing on-going training and reviews and enhancement of technical and development skills that match the career aspirations of our people.

An inclusive place to work

Other areas of focus for our ongoing and continuous improvement, above and beyond the desire to continually deliver safely and deliver well, are learning and development and equality, diversity and inclusion (EDI). If we are to attract and retain the best people within our business, we must become the standard against which all other companies are measured in these important areas of our work. I hope you enjoy reading more about this on page 22.

Our entrepreneurial founders

Whilst there was much to celebrate, with good progress made by our people in 2017, it was also the year that we said farewell to two of our businesses' founder members. In November, we heard of the untimely death of Dik Wessels. Dik who founded VolkerWessels, was one of the most successful businessmen in the Netherlands. He died at the age of 71 following a period of illness. Patrick Fitzpatrick, son of the founder of Fitzpatrick & Sons who later sold his business to VolkerWessels UK, died in December at the age of 90.

We shall be forever grateful for their contributions and the best wishes of the entire VolkerWessels UK business are extended to Dik's and Patrick's families. By giving our people the entrepreneurial freedom of those exhibited by our founders, within a tightly managed risk and compliance framework, we continue to deliver solutions that drive performance across our business units, which gives our customers every reason to come back to us time and again.

Continuing to define difference

We are pleased with our year-end results which reflect the hard work, dedication and commitment from all of our teams who have been delivering outstanding projects. Not only have they delivered in line with or exceeded expectations by developing positive year-on-year order book growth, but they are also reporting a very strong opportunity pipeline for 2018 and beyond.

It is vital that VolkerWessels UK's people are engaged and empowered to deliver for our customers. We place great emphasis on being a place where people love to work and a business that clients want to work with. By combining our unique culture with unwavering consistency, this results in our industry-leading performance and exciting future.

In addition, thank you to our management teams and all our people who continually help to define VolkerWessels UK as a leading business within the UK construction industry and provide dependable delivery for all stakeholders on outstanding and innovative projects.

Alan Robertson Chief executive officer

Management

team

"I look around my management team and I'm really proud of the depth of expertise they embody. I have a huge amount of confidence in their abilities, judgement and professionalism. Together we have worked hard and built a stronger group of businesses, operating across the various sectors."

Alan Robertson, chief executive officer

The VolkerWessels UK management board comprises Chief Executive Officer Alan Robertson, Chief Finance Officer Naomi Connell, Group Commercial Director Matt Woods, Managing Director Richard Offord (VolkerFitzpatrick), Managing Director Steve Cocliff (VolkerRail) and Managing Director Rob Coupe (VolkerStevin).



Alan Robertson Chief executive officer

Alan joined VolkerWessels UK in September 2008 and has 30 years' experience in the UK construction and infrastructure sectors. Since joining VolkerWessels UK, Alan has led the strategic development and growth of the group.

This includes the rebranding and restructuring of the business, implementation of robust governance structures, driving operational improvements, reinforcing the safety culture and leading on the development of corporate responsibility.



Naomi Connell Chief finance officer

Naomi joined VolkerWessels UK in January 2010, bringing over 20 years' experience in focused financial management. Naomi is responsible for back-office services including finance, HR, and ICT.

Since joining VolkerWessels UK, she has led the implementation of shared services, improving systems and processes, treasury management, leading teams across the back office to deliver a quality service with a lower overhead cost base.



Richard Offord Managing director - VolkerFitzpatrick

Richard joined VolkerFitzpatrick in March 1990, progressing steadily through the ranks from an engineer to his current position as managing director. Richard is a chartered engineer with nearly 30 years' experience in the civil engineering industry.

Richard has overall responsibility for VolkerFitzpatrick and, along with his senior team, uses his vast experience and knowledge to manage high-value, complex projects from start to finish, many of which are inter-business projects.



Rob Coupe Managing director - VolkerStevin

Rob is a Chartered Civil Engineer with more than 30 years' construction industry experience leading major schemes and directing large multi-disciplinary teams. He has led VolkerStevin in the UK since early 2010 and previously held leadership positions at Alfred McAlpine and Carillion. He has broad experience of working with major clients including central government departments and private blue-chip companies.

Rob also has an active role in leading the VolkerWessels UK 'Engineering Excellence' programme, looking at new and innovative ways of becoming more efficient and effective in all aspects of the business.



Matt Woods Group commercial director

Bringing over 30 years of international and varied construction experience, Matt became the VolkerWessels UK commercial director in 2009, having joined VolkerFitzpatrick in 2002.

Matt leads on all commercial aspects across VolkerWessels UK and has developed strong pre-contract disciplines and a pragmatic approach to risk management.

Previously, Matt worked for Taylor Woodrow, Amey, Costain and Kier, both in the UK and overseas.



Steve Cocliff Managing director - VolkerRail

Steve joined VolkerRail as chief operating officer in October 2009 and was appointed managing director in 2010. Steve, who is a civil engineer, has a wealth of experience from a number of infrastructure sectors.

Before joining VolkerRail, Steve worked for Carillion as the managing director of Utility Services and has also held a number of other senior positions including managing director of Alfred McAlpine Utility Services, managing director of First Engineering Power and Civil and managing director of Jackson Civil Engineering.

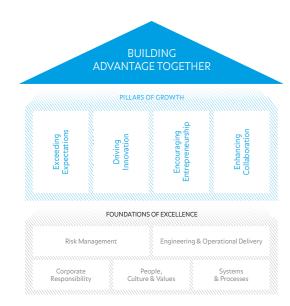
Our strategy

Building advantage together

VolkerWessels UK does business differently

We recognise that close collaboration is the key to innovation and we have strengthened our culture via our Vantage Business Model. This model allows us to streamline our working practices while focusing on what we do that has positive impacts across the business, how we work and the high standards we expect from employees and our partners. This guarantees consistency across our business and enables us to meet our own corporate goals and the high-quality standards that our clients demand.

Vantage Business Model



People, culture and values

Our people are our most important asset in building advantage in our industry. We are an attractive and responsible employer with a culture of providing on-going training and enhancement of technical and development skills that match the career aspirations of our people, however ambitious. We continually invest in our people in order to achieve the highest quality of service delivery for our clients and stakeholders. Our new learning and development strategy is already adding value in terms of our individual and collective continuous improvement.

Positivity flows through the veins of everyone involved at VolkerWessels UK. Each and every member of the VolkerWessels UK family is empowered. We take a very personal approach to our people, from senior management taking an active personal interest in colleagues, through to supporting individual activities in each business.

Our senior management team remain involved at all stages of the projects we deliver. Decision-making is very much a process of listening to experience and engaging with our people in advance of the required robust and rigorous governance that follows. The attitude of the people we recruit is infectious and instils in us a spirit of working together for a common cause. In turn, our senior management inspires our teams and partners with their hands-on, hard working ethic and commitment.

Success and rewards are shared by the entire VolkerWessels UK family. We succeed together and improve our business performance through everyone's hard work and dedication, delivering our sustainable business strategy and innovative projects for a wide range of satisfied clients.

Risk management

We recognise that managing risk is critical when delivering across the civil engineering and construction sectors. We are leaders in the industry in the manner that we actively identify and manage risks across our business. We fully scrutinise and understand every activity from pre-contract through to design, construction and delivery. We have a robust segregation of risk management duties across operations, commercial and financial. We have implemented pragmatic and contract-focussed quality risk management.

Rigorous and comprehensive risk reviews are undertaken for every potential project at precontract stage. This process ensures that clients trust us to deliver and we work closely with them throughout the entire project life cycle to ensure that risks are understood and managed.

Systems and processes

We maintain a systematic approach to improving business performance, by managing and optimising our activities, to make our processes more effective, more efficient and more capable of adapting to an ever-changing business environment. It is important that we have information, communication, and technology systems that meet the changing needs of a 21st century construction business.

Engineering and operational delivery

Operational Excellence is a continuous process, and we will launch an 'internal engineering social network' in early 2018 to link all engineers who work for VolkerWessels UK. This not only increases their social contact but also helps them share complex issues and challenges with one another, enabling them to develop solutions as a team.



"Our financial control and effective management of risk, coupled with our focus on delivering cash-backed margins, has helped us to achieve a strong cash position. We are an agile business that delivers safely and effectively because we recruit and retain the best people."

Naomi Connell, chief finance officer

Corporate responsibility

VolkerWessels UK takes its responsibility to the society in which we operate seriously, adding value wherever possible, be it the supply chain, the customer, the environment or local communities.

We are also passionate about sustainable construction, looking at new ways of working and demonstrating industry best practice when it comes to limiting our impact on the environment.

We demonstrate a commitment to the communities where we deliver our work, delivering ecological enhancement projects, raising money for charities and promoting interest in the industry.

Health and safety is of paramount importance. We take safety and compliance very seriously and have a strong safety culture across our entire business operations. We apply best practice, seek out innovative safety solutions and consistently demonstrate the right behaviours. VolkerWessels UK maintains clearly defined management systems, interfaces and responsibilities. Maintaining effective oversight and scrutiny processes, carried out with independence and impartiality, we comply with corporative, legislative and other requirements and always seek further improvements.

We promote our positive safety culture with several high-profile and engaging behavioural safety campaigns of our own across construction sites across the country. These include PALS (Plan, Attitude, Lead, Share), AIM (Attitude. Influence. Management.), Safety Ripple and Protect our People, all of which underline our commitment to safety and are positively embraced by our workforce.

Health and safety will remain at the top of our agenda. In 2017, we received independent recognition at the 60th annual British Safety Council's International Safety Awards.

We were awarded our fourth Distinction Award in recognition of our commitment to keeping workers and workplaces healthy and safe – one of the first businesses to receive consecutive recognition on four occasions.

Pillars of growth

Our 'pillars of growth' see us focus on exceeding client and stakeholder expectations, driving innovation, encouraging entrepreneurship and enhancing the ways in which we work collaboratively. Our risk management is prioritised right across operations, commercial, financial and at board level.

We want our people to look for innovations in engineering solutions and to think laterally. 'Encouraging entrepreneurship' gives our people the confidence to come up with new solutions; to be innovative and explore new lines of business and markets. Enhancing collaboration means working together internally, with our partners and supply chain to come up with the solutions our clients and the industry demand. We enjoy strong relationships with our supply-chain partners from day one and maintaining those relationships provides security in the delivery of work to time, quality and price.

We fully respect and work with the supply chain to maintain our focus on choosing collaborators with the same ethos.

VolkerWessels UK has an enviable level of stability and its business units and sub-divisions are revered in their respective markets.

The respect we have gained within the industry is down to our people, their capabilities and work ethos. This in turn translates into a very stable and experienced workforce, from board members down, who have not only built up their own knowledge, but are also in a position to share it with the next generation.





Across VolkerWessels UK we drive our performance by applying our key pillars of growth to all we do. By targeting these areas individually we are able to gain advantage for our business and all of our stakeholders in the marketplace.

Exceeding expectations

VolkerWessels UK and its people have a strong work ethic and a culture of excellence. Delivering to the highest standards is embedded in how we work. Our honest and clear approach to each project is maintained as we involve the client at every stage of the process. Taking time to understand our clients' needs and what they want to achieve is important to us.

Our building projects consistently achieve BREEAM ratings, demonstrating a commitment to sustainability.

Driving innovation

The majority of our projects are complex in nature and our project teams often have to explore innovative ways to complete works to standard and on time. We not only encourage our people to look for innovative solutions, we are taking it a step further by investing. We apply solutions identified as best practice and implement new technology to enhance our delivery.

Encouraging entrepreneurship

VolkerWessels UK has always encouraged entrepreneurship – it is in our heritage. We allow our people to step up, develop ideas that either help our clients and their experience with us, or generate additional new work through relationship management. Our ambition is to give staff the confidence to present new solutions as we explore new lines of business and opportunities in the marketplace.

Enhancing collaboration

Collaboration is key to how we operate. With five unique business units, all featuring specialist skills and expertise, we are able to offer an integrated service, increasing our ability to meet our clients' needs.

Many of our current projects include more than one of our business units. As a result, working collaboratively with our clients, partners, suppliers and teams has become second nature to us. Our expertise in delivering projects includes the ability to work closely with contractors, local businesses, councils, the general public, local community groups, environmental groups and suppliers to achieve success.



Whilst we can never be complacent, and we must continue to learn from feedback and what we receive, see and hear elsewhere, we know that our core values define our ethics and guide our decisions, actions and behaviours, which results in best-in-class delivery, quality and people.

All VolkerWessels UK operating business units share the same philosophy and core values. These are a common set of values that ensure we consistently deliver a clear set of benefits to all of our stakeholders.

They serve as a compass for our actions and describe how we behave internally and in the outside world.

Integrity

We are open and totally honest; our business is ethically and morally strong and each of us is accountable.

Passion

We are committed in heart and mind and enjoy what we do.

Innovation

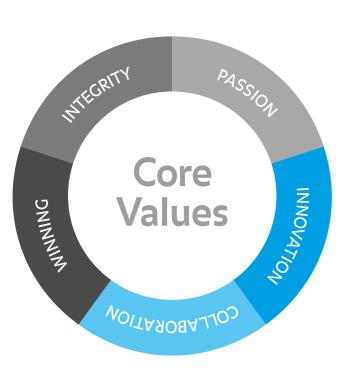
We strive to be ahead of the game by continually improving the way we do things for ourselves and our clients.

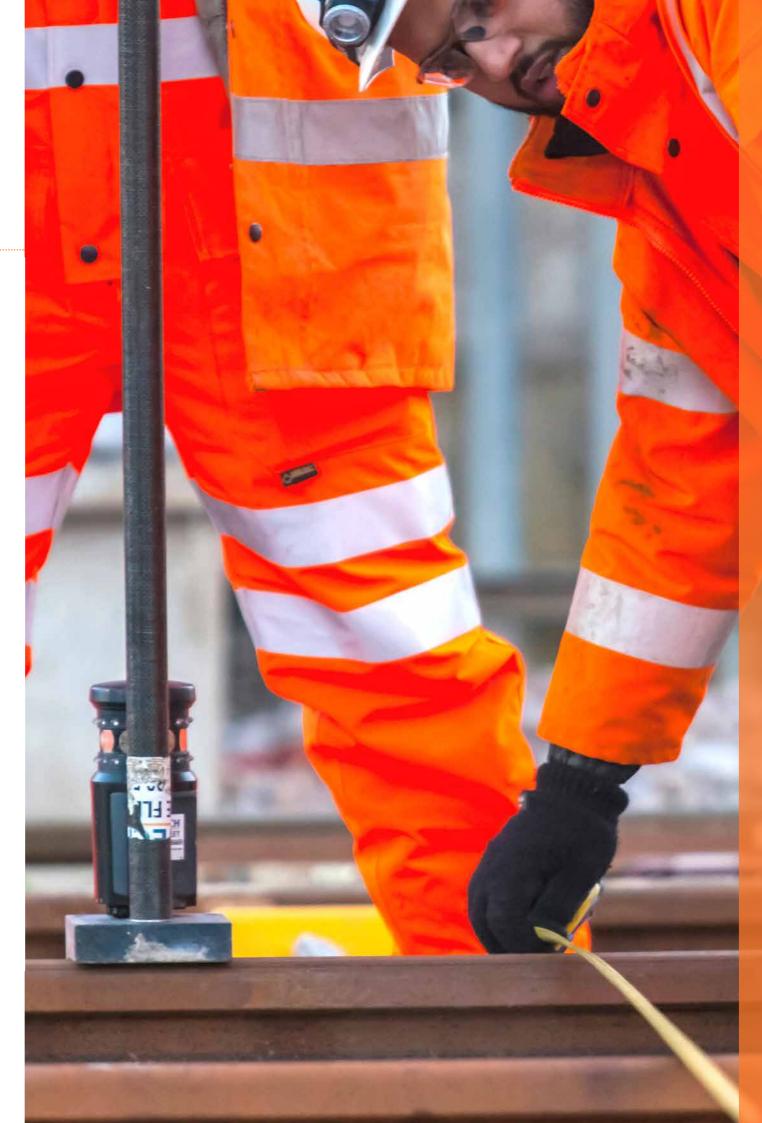
Collaboration

We collaborate in all aspects of our business, we work as a team to take advantage of our collective genius so that we succeed together.

Winning

We never settle for second best; we always deliver high-quality work and we strive to exceed expectation.







Richard Offord – managing director, VolkerFitzpatrick

How did you get here?

I have now been with VolkerFitzpatrick for nearly 30 years – man and boy. I joined as a chartered engineer, and have worked in many roles and on many projects, learning the business inside and out.

My own progression within the business is testament to the way in which talent is both nurtured and retained throughout the whole of VolkerWessels UK. We not only attract but retain entrepreneurial professionals who thrive in both our culture and environment.

What's different about VolkerWessels UK?

We are not your typical construction company in that we make it our priority to ensure that we give something back to the local communities in which we operate.

We genuinely want to make a real difference to our people and the communities in which they live and work. We look to build long-term meaningful relationships with all stakeholders

Each and every one of us, from the frontline to senior management, takes ownership of projects and that results in a tremendous level of pride in the job.

How would you describe VolkerWessels UK people?

They are vibrant, passionate, are driven to win, deliver and collaborate. They embrace a high number of challenges and get equal amounts of support.

They pick the ball up and don't drop it. The business is very matter of fact, very straight forward. We operate in a strategic, forward-thinking way, as do our people.

What comes next?

We have 2,800 employees, and more than double that number with those in the supply chain. Over the next 12 months that will increase to over 3,000 employees and we have a £1bn pipeline. More excitement and more challenges.

Developing

our people

We are proud to say that the VolkerWessels UK team comprises some of the very best people in our industry. We invest in the personal development of our employees and ensure their training and working environments are of the highest possible standard.

Career development and progression is key at VolkerWessels UK. With our ability to spot talent, we aim to recruit and develop the very best experienced professionals and, as a business that places people at the heart of all of our activities, want our talented individuals to reach their maximum potential.

Many of our construction professionals start their careers from an apprenticeship. We are committed to investing in our future workforce and run a number of apprentice schemes across the civil engineering, transport and construction sectors. The Apprentice Academy sees our apprentices working alongside experienced staff on some of the country's biggest construction projects.

Our apprenticeships take between one and three years to complete, depending on the level, skill and sector, and are tailored to suit the needs of the individual. We are committed to ensuring a minimum of five per cent of our workforce comprises apprentices, sponsored students or graduates on formal training schemes.

VolkerWessels UK's graduate programmes develop skills in people and provide professional accreditation via structured programmes, making them the leaders of tomorrow. Graduate opportunities exist in engineering, quantity surveying, construction management and corporate services. Our annual graduate conference is an opportunity for those on our graduate programmes to come together to enhance their professional development and share skills, knowledge and experience.

We are an attractive and responsible employer with a culture of providing ongoing training, reviews and enhancement of technical and development skills that match the career aspirations of our people, however ambitious.

Employee engagement

As a progressive and continuous improvement business, we undertake an annual employee engagement survey, entitled 'Your Say' which allows everyone the opportunity to share their feedback about the business.

In our most recent annual Your Say employee survey, 91 per cent of our people understand our company values and know how their work contributes to our business objectives. 88 per cent of employees are proud to work for us and plan to still be part of our workforce in 12 months time.

Industry recognition

Every year VolkerFitzpatrick nominates engineers who are showing exceptional progress in their careers for awards. VolkerFitzpatrick's training was recognised at the CECA Southern Training Awards in 2017.

Section engineer Conor Goodwin-Tindall was awarded Highly Commended, recognising outstanding progress in his role and acknowledging his promise as a trainee engineer.

VolkerRail was successful at the RailStaff Awards, receiving the Infrastructure or Plant Person or Team of the Year award for the second year running.

This award was presented to VolkerRail's On-Track Machine operatives. The project, which made significant developments in improving awareness of health and safety issues around exposure to ballast dust, was undertaken as part of the company's Supervisor Development Programme.





We are committed to ensuring a minimum of **5%** of our workforce comprises apprentices, sponsored students or graduates on formal training schemes

The methodology of our annual employee survey provides us wit a helpful framework to build an engaged workforce. **88%** of our workforce proactively state they are proud to work for



We have a strong safety culture across our entire business operations and **89%** of our people say that health and safety is always a priority in our workplace

2,500 staff and subcontractors attended 130 health and wellbeing drop-in clinics



Over **20,5**0

Over **20,500**hazards, near-misse and close calls were recorded in 2017



We are cultivating a process of continuous improvement in equality, diversity and inclusion (EDI). We are committed to creating a diverse and inclusive environment for all those we work with: our dedicated and ambitious people, our supply chain and partners, our clients and local stakeholders.

There is a need to bridge the skills gap and encourage people from a much wider range of backgrounds to come and join us in our exciting industry. We are focused on broadening the scope of candidates that want to work with us. A diverse workforce is the key to the future of our business and our focus is on building valuable, experienced teams and attracting and retaining a diverse pool of talent.

Having released our Gender Pay Gap reports for all the different business units, one of the key areas that we are focusing on to improve the Gap is in terms of promoting EDI, rolling out training that embeds our commitment to EDI. We aspire to become an exemplar in EDI and establish best practice for the industry.

We are receiving advice and guidance from independent experts in EDI and working with other like-minded organisations to support our continued journey. We work with Investors in Diversity to support our ambitions to gain accreditation in diversity and inclusion and are signed up to the Inclusive Culture Pledge for 2018.

All of our people will know and communicate why diversity and inclusion matters.

We are proud of who we are and the inclusive way we work, with a collective goal to sustain and strengthen our EDI culture, build on our good work to date and provide quality and add value to our clients.

Equality, diversity and inclusion for us is:

- Making sure every one of our current and future employees feels welcome, valued and respected and is motivated to perform at their personal best
- Creating high-performing teams by bringing together different opinions and perspectives to deliver better solutions for our clients and opportunities for our people and our organisation
- Driving continuous improvement processes to maintain and enhance a diverse and inclusive environment
- Embedding a culture of diversity and inclusion through consistent key messages across our business
- · Encouraging and attracting people of all ages and backgrounds through local and national recruitment in addition to engaging in education, graduate and apprenticeship



We intend to be known to be inclusive by everyone we work with and those that want to work with us in the future. We want to be regarded as the place to work in the industry.





Meet Hollie Woodard head of equality, diversity and inclusion

How have you broken through the barriers that discourage women from working in construction, engineering and rail?

I entered the industry with an office role before working my way up the career ladder via positions as a quantity surveyor and project manager. I'm now focused on the delivery of our EDI strategy and cultivating a cultural shift across all aspects of our business.

Has your talent been recognised?

The Women in Rail organisation named me as one of its 20 most inspirational women in the industry.

What are you trying to achieve?

I want to reach a point when I am no longer asked what being head of EDI actually means because every individual across the business understands what is meant by diversity and inclusion.

industry by ensuring that we are attracting and retaining a more diverse pool of talent. Diversity is a part of everyday life and not just confined to our industry. It is more than increasing the gender split to reflect society, it is more than employing from a wider pool of experience and backgrounds and it is more than ensuring everyone can be 100 per cent of themselves when at work, underpinning this is still about finding 'the right person for the job'.

Are you involved in any industry

Yes, including Go4Set and Teentech, as well as visiting schools to help support and promote careers in the railway industry. I mentor young women across the business who are keen to develop their roles as engineers and project managers, providing guidance and support in their studies.

"We employ fantastic people who are recognised by our customers for their positive, innovative and value-adding attributes. We listen to our people and we take their comments seriously and in return they deliver brilliantly for our customers every time."

Andrew Edge, director of human resources

Our learning environment

Our aspiration is to become a genuine learning organisation and we have developed a Learning and Development strategy to enable this. We want to grow the skills and competences of our people and provide a consistent and proactive approach to personal and skills development.

Over the next three years we will drive our transformation into a learning organisation while maintaining our position as a profitable, successful business as a result. Our ambition is to be the expert in learning and development in the workplace and to be recognised across the industry for delivering exemplary and innovative training options.

As a business, VolkerWessels UK is already building the skills in house which the industry is in need of, and in doing so developing our teams, not only for the future of the business, but also the personal development of our people, retaining the knowledge within the industry.

We strive to be a best-in-class employer that attracts, retains and develops the potential in everyone. Developing a highly trained and experienced workforce means that we maintain a breadth of knowledge across all sectors and deliver value for our clients.

We want to drive innovation through upskilling and motivating employees. Performance reviews will provide individual employees with a clear vision of their development goals and objectives and we are happy to support the personal development and career pathways of our people.

Across the group, we have the following initiatives in place to support career development:

- Consistent and systematic performance and development reviews
- · In-house training academy
- ILM management and leadership training programmes
- 'On the job' learning experiences
- Career change opportunities

We are embedding a structure that supports learning, with our people being empowered to take control of their own learning agenda.

We are developing an innovative online learning platform that addresses the fact that only 10 per cent of learning gained from classroom-based training courses is directly transferred to the workplace. Online training will contain a full menu of tailored e-learning content, tools and resources.

We will continue on our journey towards building mentoring and coaching into our day-to-day work, creating a pool of talent to deliver this. We will also develop knowledge sharing communities across the business in order to harness the skills, knowledge and expertise that exists throughout VolkerWessels UK.

We will continue to be a business that is innovative and forward looking, drawing on the knowledge and experience of our teams, promoting a learning and development culture.



£500,000 spent on training and development



24,000 hours spent on personal development



Platinum Awards

VolkerWessels UK's fifth year of Platinum Awards saw fantastic projects, talented individuals and teams from all around the country coming together to celebrate excellence across the group. It is of great importance to us to highlight the outstanding work accomplished by all our people.

The Platinum Awards give employees the opportunity to nominate the person, project or team they feel have gone the extra mile. This year we received 190 nominations in 12 different categories. Winners were announced during a celebratory award ceremony which was a streamed live broadcast in January 2018.









Over 190 nominations of exceptional standard

Corporate responsibility

Doing the right thing

VolkerWessels UK takes its responsibility to the society in which we operate seriously. At the heart of this is ensuring that we play our part in making the whole world a better place for all.

Unwavering commitment to health, safety and wellbeing

Our work across construction and civil engineering means that health and safety is of paramount importance. VolkerWessels UK maintains clearly defined management systems, interfaces and responsibilities that are understood and accepted by all. Maintaining effective oversight and scrutiny processes, carried out with independence and impartiality, we comply with corporative, legislative and other requirements and always seek further improvements.

We take safety and compliance very seriously and have a strong safety culture across our entire business operations. We consistently apply best practice, seek out innovative safety solutions and demonstrate the right behaviours. We promote our positive safety culture with several high-profile and engaging safety campaigns of our own across construction sites across the country.

These include PALS (Plan, Attitude, Lead, Share) within VolkerFitzpatrick, AIM (Attitude. Influence. Management.) in VolkerRail, Safety Ripple in VolkerStevin and Protect our People in VolkerHighways. All these programmes underline our commitment to safety and are positively embraced by our workforce and supply chain.

Wellbeing is a critical area of focus

We offer an exciting working environment, and one where our team contributes to exceptional projects of social, economic and environmental significance. We are aware of the importance of ensuring the wellbeing of our people, understand the relationship between work and health and have a commitment to the reduction of workplace stress.

We strive to raise awareness among all of our people, and offer support and guidance towards maintaining an environment free of work-related ill health. We aim to educate employees and employers in the risks to health arising from work and other factors and influence the attitudes and behaviour of employees and employers in relation to the promotion of health and wellbeing.

We have put in place occupational and health management systems, providing welcoming drop-in clinics that are open to the entire VolkerWessels UK team. An increase in attendees at these clinics is a positive sign as we all proactively work towards a healthier workplace, nurture health and wellbeing and ensure our workforce is a happy one.

We regard it as critical that we continue to invest in workplace inclusivity, health and wellbeing.

In 2018, we will build upon our occupational health service and introduce a more detailed mental health programme of advice and support, encouraging all of our people to look out for each other as we go about our daily lives. We will invest in more support on both the physical and mental aspects of health in the workplace, working with national partners and advisory bodies, and seek to eradicate the causes of ill health in our industry.







We are committed to raising money for charitable causes





In 2017, we reduced our carbon dioxide and other greenhouse gas emissions by around 11%, building on our achievements made in 2016. We have now made a reduction in emissions for three consecutive years

92% of construction waste diverted from landfill



7% reduction in total waste produced per 100,000 hours worked in 2017



Each and every member of our family, from our employees to those we work closely with, shares the VolkerWessels UK core values and culture and is accountable to our key value of integrity. Our decision making is linked to the highest ethical values; compliance to corporate, legislative and other requirements; and finding better ways of doing business and delivering work. We are proud of our strong and responsible ethics. We are committed to playing our part in making the whole world a better place for all.

Sustainability

We take sustainability seriously and for us that means embracing the efficient use of resources, stable financial growth and making continual social progress. We continually improve the energy efficiency of our activities, goods and services through a more sustainable use of electricity and fuel. This includes the promotion of alternative specifications and technologies to influence energy efficiency in the structures we design and build, and the use of more energy-efficient methods of transportation. Our commitments include a year-on-year reduction in carbon emissions by focusing on resource efficiency (energy, waste, water) across our activities, and seeking carbon reductions within our construction operations by increasing the commitment of our supply chain to lower carbon solutions.

Quality

Excellence in customer service is the hallmark of success here at VolkerWessels UK. Our customers quite rightly expect that they will always receive a quality service from us – consistently delivering well and always working safely. We work hard to meet our customers' wants, needs and expectation for high service quality and efficiency with great expertise and an uncompromising sense of commitment. We are proud of our track record, but we are not complacent – always looking for new and innovative ways to do things and where we can add more value. Our quality assurance systems ensure the way we behave and the services we deliver always match or exceed our customers' requirements and we are proud of our track record and the feedback our people receive.

Environment

We always mitigate and limit any adverse impacts on the environment. We consume energy and natural resources while at the same time producing waste and greenhouse gases. Therefore, we have a duty to minimise our impact and avoid and minimise any adverse environmental impact. We are continually improving our environmental performance through the reduction and control of waste, reusing and recycling materials, prevention of pollution, protecting local environments and conserving natural resources.

Community

We see great value in giving back to society and do so via a broad series of initiatives, actions, donations, and by creating community partnerships. We are very visible to the communities where we deliver our work and happily commit time in order to collaborate with the community; supporting schools, providing safety equipment, raising funds and inspiring young people. For those seeking our specific skills and knowledge we are happy to take on work placements from the community. Our aim is to add value to our society, inspire others and support colleagues, clients and suppliers in their own efforts to share time, skills and resources in their chosen way.

Our commitment to the community has seen us deliver everything from ecological enhancement projects, raising money for the Salvation Army and Grace House children's charity, to supporting mass cycle rides, walking bus schemes and promoting the interest of young people in the civil engineering sector. We take part in Build UK's Open Doors initiative, inviting members of the public to enjoy behind-the-scenes access to prestigious projects in order to show young people the fantastic range of careers in the construction industry.

Awards

We have received consistent recognition for our sustainable and ethical approach to business, as underlined by the following awards:

60th annual British Safety Council 'International Safety' Awards

- VolkerRail awarded fourth consecutive distinction
- VolkerFitzpatrick received two merit awards for WAML and Temple Mills depot projects
- Merit prizes to VolkerLaser for Ashton Avenue Swing Bridge and VolkerHighways for London Borough of Camden

Consecutive RoSPA Gold Awards

- Ninth Gold for VolkerFitzpatrick
- Seventh Gold for VolkerHighways
- Fifth Gold for VolkerLaser
- Fourth Gold Award for VolkerRail (and sixth consecutive year for the Fleet Safety Gold Award)
- Third Gold for VolkerStevin

VolkerLaser was awarded Gold Excellence in the National Federation of Roofing Contractors Roofing Awards. VolkerFitzpatrick's rail division achieved two Bronze Awards at the Green Apple Environmental Awards. Joint venture CVU (Colas, VolkerHighways, AECOM) was awarded a Bronze Award at the Green Apple Environment Awards. VolkerFitzpatrick was awarded 'Most Sustainable Construction & Demolition Project'. VolkerRail was successful at the RailStaff Awards for Infrastructure or Plant Person or Team of the Year award for the second year running.





Noemie Powell – graduate civil engineer

Why did you decide to enrol on the graduate programme?

I've always had a huge interest in STEM subjects and since school I've always liked the idea of construction.

Within this role there are different aspects and jobs that create a variance in what I do. I wanted to pursue a career in Civil Engineering and the VolkerRail graduate programme was right for me.

Why did you choose the VolkerRail graduate programme?

VolkerRail has always had a strong reputation.
This is one of the only graduate programmes where I have involvement from the design stages through to visiting the site – having input in all these different aspects really appealed to me.

I did look at other programmes within architecture and construction, but it was the science behind the work that appealed to me most – and the VolkerRail graduate programme encompasses that.

How have you found the programme? I've definitely enjoyed it so far – the fact that I have been given a good level of responsibility in my work, while given high-level training, mentoring and support to build my skills has been involved.

What does the future hold for you?

The graduate programme is four years long and I started late last year – so I am looking forward to the work ahead at VolkerRail over the next few years.



Rail infrastructure

2017 has been an exceptionally busy year as our business units continued their involvement in a large number of multi-year heavy and light rail infrastructure contracts across the country.

Ultimately, our approach is founded on working in partnership: with our clients and with our external partners, and on leveraging and bringing together the wide range of skills within VolkerWessels UK in order to deliver high-quality infrastructure solutions across the rail industry.

As a group we have continued to grow our share in the rail infrastructure industry working with clients that include Network Rail, Transport for London, Siemens, Hitachi Rail Europe and Transport for Greater Manchester.

The group has delivered major multidisciplinary engineering projects, including Manchester Metrolink, Rail Electrification Alliance (REAL) and East West Rail Phase 2 (EWR2), Cambridge North Station and other large project works including CP5 Panel Frameworks. These projects are delivered either direct to Network Rail, in partnership with VolkerWessels UK business units or with other construction companies.

Both VolkerFitzpatrick and VolkerRail are recognised leaders in this sector allowing us to deliver unprecedented levels of quality, safe delivery and a collaborative approach.

VolkerFitzpatrick is one of the country's leading rail infrastructure civil engineers and rolling stock maintenance depot builders, offering a consolidated and multidisciplinary approach, with specialist civil engineering and rail divisions combining to provide the best solutions.

VolkerRail delivers rail infrastructure projects by providing electrification, high voltage power distribution, signalling, rail plant, welding, metro and light rail track construction, as well as renewals and maintenance specialisms.

VolkerGround Engineering and VolkerLaser also provide specialist services to the rail industry.

VolkerGround Engineering recently installed steel sheet piling for the Thameslink Hornsey depot and VolkerLaser delivered key repair and refurbishment works for several of the UK's rail overbridges.





Cambridge North Station

VolkerFitzpatrick completed work on the new Cambridge North station for Network Rail. The station's first commuter services began on Monday 22 May 2017. The new station is expected to handle 3,000 passenger journeys a day. With a 10,000ft² footprint, Cambridge North features three platforms, along with parking for 450 cars and 1,000 bicycles. VolkerFitzpatrick began construction in 2015, starting with the realignment of the underused Chesterton sidings which opened up the brownfield site for development. Over the two-year lifespan of the project, it has taken months of meticulous planning, 700,000 hours of labour and 11 successful possessions to build the station on the operational West Anglia Main Line. VolkerFitzpatrick was supported by VolkerRail and VolkerHighways in the delivery of this project.

Doncaster Intercity Express Depot

In 2017, VolkerFitzpatrick delivered the new Doncaster train servicing, stabling and maintenance depot on Network Rail land. The depot serves Hitachi Rail's new fleet of Intercity Express long-distance trains operating on the East Coast Mainline network. Construction work included the demolition of existing buildings and the erection and commissioning of an 11,000m² 10-car rail maintenance and storage depot. Also installed on site are a two-storey office, workshop and welfare facility. The depot is equipped with a raised maintenance road, platform level access and monorail hoists.

Collaborative Improvement Solutions at Craigentinny

VolkerFitzpatrick's rail division is undertaking improvement works to Hitachi Rail Europe's Craigentinny depot in Scotland, to service and maintain its fleet of Class 385 commuter trains, as part of the ScotRail Edinburgh Glasgow Improvement Programme. Hitachi appointed VolkerFitzpatrick to deliver the works which include installing a new high-level gantry, bogie crane, bogie lay down area and new train jacks, providing flexibility to service the existing trains and also accommodating the new fleet as it enters service. VolkerFitzpatrick overcame the challenge of constructing the client's requirements around the operational train maintenance facility with open communication and a collaborative approach.

Both Doncaster and Craigentinny are exceptional examples of the way we play our part in improvement programmes for rail. We have been appointed by Hitachi Rail Europe to construct six depots. Hitachi needs to keep its new fleet of electric trains running in top condition, and continue using its existing fleet, while providing faster journeys and more seats for passengers.

HS2 Civils Contract

VolkerFitzpatrick, in alliance with Bouygues Construction and Sir Robert McAlpine, was awarded the Chilterns Tunnels and Colne Valley Viaduct main works civils contract by HS2. The scheme forms a key section of Phase One of the HS2 high-speed rail network between London and Birmingham. The joint venture, known as ALIGN JV, together with design partners Jacobs and Ingerop, will undertake the design and build of the main civils works of the 22km section of the high-speed rail line, running between the Colne Valley and the Chilterns. VolkerFitzpatrick and its partners boast an impressive track record of major project innovation, design and construction.

Manchester Metrolink

MPT, a joint venture of VolkerRail and Laing O'Rourke in consortium with Thales, is continuing its strong relationship with Transport for Greater Manchester (TfGM). Since 2007 MPT has been working with TfGM to develop the UK's largest light rail scheme: Manchester Metrolink.

The biggest infrastructure project ever undertaken in Manchester is acting as a catalyst to create new jobs and opportunities. Phase 3 of the Manchester Metrolink ended in 2017, as did the final elements of the Second City Crossing and Deansgate-Castlefield works. Work also commenced in the year on the Trafford Park Line, which extends the Metrolink route from Pomona Viaduct to the Trafford Centre shopping centre and leisure complex, and is expected to complete in 2020.

Rail Electrification Alliance (REAL)

The REAL portfolio of projects continues to progress positively. VolkerRail is working with Network Rail, Siemens, J Murphy and Sons, Jacobs and TSP to form the Rail Electrification Alliance (REAL) and deliver Network Rail's East Coast mainline power supply upgrade project.

The system will provide a more intensive timetable of train services for both the Thameslink and Intercity Express Trains and see the introduction of new, faster, quieter and more environmentally friendly trains on the route.

The upgrade is a four-year scheme that sees VolkerRail working as part of the alliance to construct new substations, install over 600km of new cabling and renew overhead line equipment (OLE) and structures over 246km of the ECML, from Wood Green in London to Bawtry near Doncaster.

CP5 Southern Multi-Functional Framework Anglia

VolkerFitzpatrick has been working with its design partner Atkins to deliver the Network Rail southern multi-functional framework – Anglia route (MFF). The collaboration to deliver these works is known as the Anglia Route Collaboration (ARC).

The team is delivering a significant number of rail infrastructure improvements and enhancements including platform extensions, station enhancements, new footbridges and upgrades to bridges and embankments along the Anglia route. The team's mission statement is: "Excellence through collaboration."





Lea Valley Rail Programme

CP5 includes the £170m Lea Valley Rail Programme, which is jointly funded by UK Government, the Mayor of London, the London Economic Action Partnership (now known as LEAP), Transport for London, and Enfield and Haringey Councils. In 2017, VolkerFitzpatrick removed an old 125-tonne bridge as part of this programme of works. The breakdown and lift-out of the bridge, spanning 30 metres over the River Lea Navigation, took place over a 49-hour closure. A new bridge will support extra track and two additional trains per hour running between Stratford and Enfield's brand new station, Meridian Water, which will replace the existing Angel Road station.

Meridian Water Station

This new station, delivered by Network Rail and designed and constructed by VolkerFitzpatrick, will replace the Angel Road station in North London and is part of the area's significant transformation. Once complete, the station will incorporate a sleek, modern design, three platforms, lift access, a footbridge and a retail space.

Hackney Wick

The installation of a pedestrian subway at Hackney Wick took place during the Easter weekend 2017. The 2,000-tonne concrete structure was driven into place during the extended weekend, following its construction on the land next to the station.

In an operation that took only four days, we removed the existing tracks and platforms and excavated the land underneath to create space for the subway. The subway was then driven into place using self-propelled modular transporters. The track and platforms were then rebuilt so that train services could run as normal on Tuesday.



125-tonne bridge spanning 30 metres over the River Lea Navigation removed during a 49-hour closure

Network Rail's Programme Framework and North Panel Framework

Network Rail is investing £38bn over CP5 to maintain and improve Britain's railway. VolkerRail is completing a series of renewal projects as part of Network Rail's £61m Programme Framework. The framework consists of a programme of enhancements and renewals to major assets within the London North Western and East Midlands routes. As part of the framework, VolkerRail will deliver multiple projects between Crewe and Gretna Green.

The framework aims to bring improved safety, whole-life cost efficiency and delivery performance through collaboration. The largest project under the framework is a 650V signalling and power supply renewals scheme.

This two-year project will see the team renew 123km of signalling power equipment between Warrington and Burton and Holme. VolkerRail expertise has also been brought to bear in the delivery of a series of railway and civil engineering enhancements and renewals as part of Network Rail's North Panel Framework, which has a combined value of £1.6bn.

The first project on the framework was delivered on the Bolton to Blackburn Line and saw VolkerRail install 4,000m of new track, extending the exiting passenger loop by approximately one mile in either side of Darwen station.

East West Rail Alliance Phase 2

Using the proven ability and strength of partners and a contracting model from Staffordshire Alliance, VolkerRail is delivering the design and construction of the East West Rail Phase 2 (EWR2) scheme in an alliance with Network Rail, Atkins and Laing O'Rourke. EWR2 is split into two phases and involves the upgrading and reconstruction of underused and mothballed sections of the railway linking the Great Western, Chiltern, West Coast and Midland main lines north of London and providing a strategic east-west route connecting key centres.

Once construction and commissioning is complete, new passenger and rail freight services will be re-introduced on 67 miles of the previously mothballed Varsity Line from Oxford to Bedford. The scheme also integrates with the proposed HS2 route in the Calvert area.

North West Electrification Project

VolkerRail completed vital improvement works on the Preston and Blackpool South to provide passengers with a better, more reliable railway. Over 11km of track has been upgraded, modern signalling equipment installed and trains running to Blackpool South are now controlled from Network Rail's rail operating centre in Manchester, helping reduce delays and keep trains running on time. Work to upgrade and electrify the railway to Blackpool North will continue in 2018 while remaining overhead equipment, tracks, drainage and signalling equipment is installed.

This project is part of the government's biggest investment in the rail network since Victorian times and means more seats, better connections, and more reliable journeys for rail passengers. The reopening of the railway to Blackpool South marked the completion of the first phase of Blackpool upgrade work.







Installing a modern signalling system across

40% of the London Underground network



Over Over of track upgraded as part of the North West electrification project

National On-Track Machine Contract

VolkerRail is undertaking a seven-year framework contract for the supply of 11 ontrack machines under the National On-Track Machine Contract. This contract will provide Network Rail with nine tamping machines, two ballast regulators, experienced machine operators and the management services of VolkerRail's plant division. VolkerRail is using its extensive knowledge, expertise and capability in maintaining rail infrastructure to help Network Rail reduce the cost of track maintenance. The contract has seen VolkerRail deliver over one million man hours of work and 20,000 machine shifts.

TransPennine Route Upgrade

As part of the Great North Rail Project,
VolkerRail is working as part of an alliance
to deliver railway enhancements on the
Transpennine Route between York and
Manchester with a value of £3bn. The
TransPennine Route Upgrade for CP6 aims to
deliver faster, longer, more frequent and more
reliable services across the north of England,
from Newcastle, Hull and York towards
Manchester and Liverpool via Leeds. As part of
the programme, VolkerRail will work alongside
West of Leeds Alliance, train operating
companies, freight operating companies and
other major stakeholders to deliver a series of
enhancements on the route.

Croydon's Tram Network

VolkerRail has been working with London Tramlink since 2012 to replace worn out sections of the Croydon Tram network. To date, VolkerRail has delivered more than 3km of renewals and re-railing across 12 different locations throughout the infrastructure on this scheme. With projects completed on time and to the satisfaction of the client, VolkerRail has been awarded a further three-year framework for embedded track renewals.

London Underground

VolkerRail is working with Thales, the global technology leader, in partnership with Transport for London, to deliver part of the Four Lines Modernisation (4LM) programme; installing a modern signalling system across 40 per cent of the London Underground network. VolkerRail is currently installing and testing signalling equipment on the two-year project, including copper and fibre cable, from King's Cross to Monument on the District and Circle lines and from Aldgate East to Upminster on the Hammersmith and City and District lines. The company's extensive knowledge of Thales' communications-based train control system and London Underground's signal engineering operations has been pivotal in ensuring a successful delivery during the scheme's lifespan.

Marine, energy, water and environmental infrastructure

VolkerWessels UK goes from strength to strength, building on our well-earned reputation across the marine, energy, water, and environmental structure sectors.

2017 saw continued growth in the extensive and varied work we deliver on behalf of central government departments, blue chip clients, major water utility companies and private sector companies.

From flood risk management, to a full range of marine engineering projects, energy solutions and the delivery of clean and wastewater infrastructure and non-infrastructure projects, this is a demanding sector with strict legislative compliance.

VolkerStevin is widely regarded as one of the UK's top maritime civil engineering contractors and undertakes a full range of marine engineering works including jetties, port and harbour infrastructure, marinas, quay walls, linkspans, and floating structures. Several high-profile projects are currently underway at some of the largest commercial ports and naval bases in the country.

VolkerStevin has significant experience in the construction of flood defence projects throughout the UK in both urban and rural areas.

We are one of three companies on National Grid's Substation Flood Defence Framework which involves designing and constructing flood defences to its most critical assets across the UK.

VolkerFitzpatrick's main focus in this area is civil engineering and enabling works for waste recovery centres that provide usable energy from household waste.

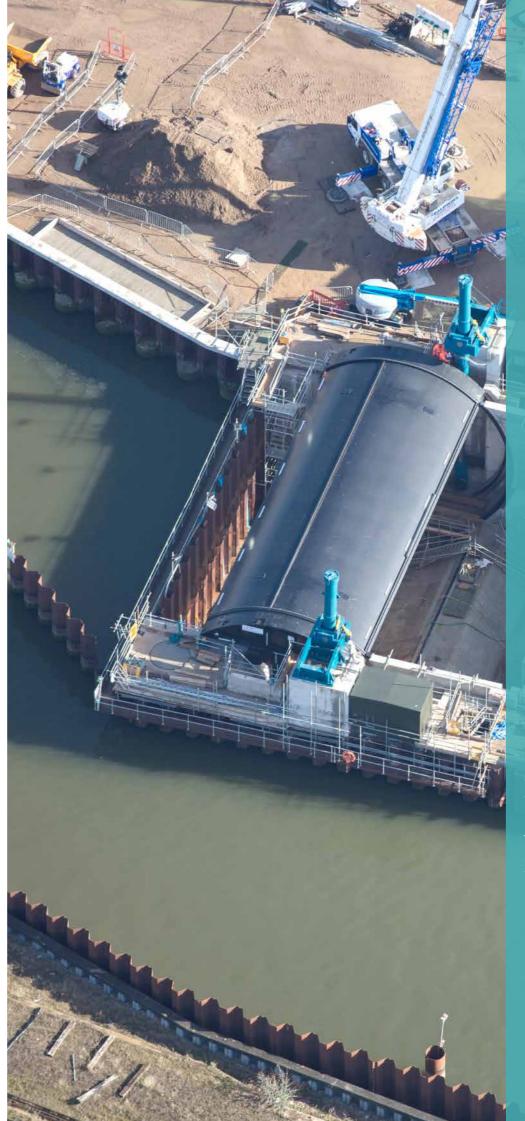
VolkerInfra and VolkerTrenchless Solutions operating as separate divisions of VolkerStevin work across the energy sector providing specialist onshore extra high voltage cable systems, switchgear and grid connection works and horizontal directional drilling.

VolkerGround Engineering and VolkerBrooks, also operating as VolkerStevin divisions, provide specialist piling and plant services through internal collaboration and external partners.

During 2017 VolkerStevin worked on a number of water sector projects, including flagship schemes at Oswestry WwTW in Cheshire, Anchorsholme Park on the Fylde coast, Morecambe WwTW in Lancashire and the Thames Tideway Tunnel.

We intend to continue our development in this sector and build on our extensive framework experience. We also apply our wide range of engineering and business capabilities and technical skills to the challenge of the reclamation, remediation and regeneration of derelict and contaminated land.







Successfully handed over the design and build contract to reconstruct a jetty at Her Majesty's Naval Base Portsmouth for the new Queen Elizabeth aircraft carrier

Designed and constructed the upgrade to the Mare Harbour roll-on roll-off jetty, as part of a 10-year regeneration plan in the Falklands



Delivering almost £100m of

marine enabling works on behalf of Thames Water in advance of construction of the Thames Tideway Tunnel

Upgrading assets
with Jacobs
as **C2V**⁺, a
joint venture
collaboration, to
deliver the AMP6
water framework for
United Utilities



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Designed, constructed and installed a **20 m** wide tidal barrier gate in Ipswich for the Environment Agency

"Delivery of numerous construction works in the City of London to enable the tackling of pollution in the River Thames."



A long association with the Defence Infrastructure Organisation (DIO) and the Royal Navy to provide critical infrastructure solutions on multiple projects. VolkerStevin has a successful pedigree in the defence sector and a long association with the Defence Infrastructure Organisation (DIO) and the Royal Navy, providing critical infrastructure solutions on multiple projects. In 2017, we successfully handed over the design and build contract to construct a jetty at Her Majesty's Naval Base, Portsmouth for the new Queen Elizabeth aircraft carrier.

The construction of the new secure tidal berth comprised upgrading the existing jetty to withstand berthing, mooring and operational forces exerted by the new carriers and included all civils, M&E and buildings. Following our strong performance, the DIO awarded us the contract to deliver significant infrastructure improvements on the adjacent quay which will be the new berth for HMS Prince of Wales, the second of the two carriers built for the Royal Navy. Construction will start in mid-2018. Our portfolio of work with the DIO, particularly with the Royal Navy, is seeing steady growth.

Mare Harbour, the Falkland Islands

Design and construction of the upgrade to Mare Harbour roll-on roll-off jetty in the Falklands for the DIO has been completed by VolkerStevin. The new facility will enable larger 20,000-tonne Point Class vessels to berth in the harbour, delivering up to 85 per cent of the military supplies needed on the Islands.

The new berthing facilities on the jetty will also allow goods to safely roll on and roll off from the Falkland Islands Resupply Ships (FIRS). In addition to the jetty, VolkerStevin also replaced walkways along the berth, lighting improvements, capstans and a PA system. Firefighting capabilities have been upgraded as well. This contract is part of a £180m overall investment by the DIO to improve facilities on the islands over the next 10 years.

Thanckes Oil Fuel Jetty, Plymouth

VolkerStevin was awarded the contract by the DIO for the construction of a new jetty at the Thanckes Oil Fuel depot which provides fuelling facilities to the Royal Navy at Devonport Naval Base in Plymouth. The scheme will deliver a jetty complete with fuelloading and firefighting facilities. The jetty will be constructed within a Special Area of Conservation on the River Tamar, and must comply with stringent environmental regulations. This is the first in a number of projects to modernise oil fuel depots in Devonport and Portsmouth to service the fuelling of the Naval Fleet in both ports, set to be operational in November 2019.

Ipswich Tidal Barrier

VBA – a joint venture between VolkerStevin, Boskalis Westminster and Atkins – is delivering a scheme to provide a new tidal barrier gate which will prevent surge tide effects and allow control of fluvial flow. The project involves the design, construction and installation of a 20m-wide tidal barrier gate, construction of piled flood defence walls on either side of the barrier, a MEICA control building, the installation of mechanical and electrical equipment, flood gates on the east and west banks within the flood walls, scour protection and landscaping works.

The main gate structure is founded on bearing piles which are up to 50m long to toe into the underlying chalk. Foundation tubes were delivered by sea to the Port of Ipswich where they were loaded on to a barge for transport to site.

VolkerStevin is delivering the scheme in collaboration with its specialist divisions VolkerGround Engineering and VolkerBrooks. Once complete, VolkerStevin will maintain the tidal barrier for a further two years.

AMP6 CDP Water Framework

VolkerStevin is currently working with Jacobs as the joint venture collaboration C2V+, delivering the AMP6 Construction Delivery Partner (CDP) water framework for United Utilities. It is a design and construct framework covering the full spectrum of works for both water and waste water across the North West, where United Utilities has responsibility.

VolkerStevin is delivering a range of multidisciplinary services including design, project management, construction, testing, commissioning and maintenance of water and wastewater treatment works, pipelines, pumping stations, reservoirs and mechanical and electrical installations to sites in Oswestry, Chorley, Anchorsholme, Carnforth, Hesketh Bank, Preston outfall and Allonby, helping to deliver a cost-effective water system in the North West for years to come.

Under AMP6, major improvements at a wastewater treatment works in Morecambe Bay are being delivered. The works are part of a £70m upgrade of United Utilities' Schola Green Wastewater Pumping Station (WwPS).

The scheme sees the construction of two large storm water storage tanks and new pumps at the Schola Green Pumping Station, upgrading of Morecambe wastewater treatment works at Middleton and laying a 7km sewer pipe between the two sites. The project started in March 2017 with completion scheduled for 2020.



Thames Tideway Tunnel

VolkerStevin has been heavily involved with enabling works associated with the planned Thames Tideway Tunnel (TTT). New floating piers at Blackfriars and Victoria Embankment were officially opened to the public facilitating access onto the Thames Clipper water taxi service. Meanwhile, progress has continued on the tunnel's east section, where we have been constructing temporary works that reclaim areas of the river to accommodate the reception and drive pits for the tunnel sites. The works, principally along the river front at Chambers Wharf and King Edward Memorial Park Foreshore, Wapping, involve heavy civil engineering in the river to allow access for the main construction works to follow.

Environment Agency's WEM Framework

VBA, a joint venture comprising VolkerStevin, Boskalis Westminster and Atkins, is in its third term as a framework contractor to the Environment Agency and demonstrates our industry-leading position in the flood and coastal sector. We currently have numerous projects on the ground from feasibility studies through to construction and in 2017 we were awarded the Lincolnshire Lakes flood defence scheme for North Lincolnshire Council. The project is being undertaken to increase flood defence protection and improve existing barriers to defend homes in the Isle of Axholme areas. Work, forming part of the council's £1.2bn plans to build six new villages to the east of the River Trent, is taking place on site to reinforce the existing earth embankment and install 3.5km of sheet piles along the east bank of the river Trent from the M180 to Keadby Bridge.

Dover Western Docks Revival

VolkerStevin is at the forefront of one of the largest port development projects to be constructed in the UK. VSBW, a joint venture between VolkerStevin and Boskalis Westminster, is responsible for the delivery of the £115m marine structures and bridge contract for the Port of Dover's flagship Dover Western Docks Revival (DWDR) stages 1 and 2.

The project, which is due for completion in December 2018, includes the design and construction of two new berths, including quay walls and land reclamation as well as a new marina pier, the marina curve, navigation channel and new lock gates, bascule bridge and capital dredging work.

VolkerFitzpatrick was appointed by the Port of Dover to deliver the paving, utilities and infrastructure contract for the DWDR development. The programme is a mix of heavy-duty port paving, interconnecting roads, power and lighting, landscaping, street furniture, reefer gantries, fencing and access gates and border control facilities to approximately 10 hectares of the Western Docks.

DWDR will deliver long-term capacity for this key international gateway, handling trade to the value of £119bn and representing up to 17 per cent of UK trade in goods. DWDR is the single biggest investment ever undertaken by the Port of Dover.

East Anglian One

VolkerTrenchless Solutions, a new division of VolkerStevin, was recently awarded a contract by ScottishPower Renewables to deliver land-based horizontal directional drilling solutions as part of the East Anglian One wind farm project off the coast of Suffolk. The electricity generated from the wind farm, which is located some 30 miles off the coast, along a 37km route between Bawdsey and Bramford, will cross under waterways and other infrastructure at 21 locations, and will power around 600,000 homes.

Moray East wind farm

VolkerInfra, VolkerStevin's specialist high voltage cable installation division, was appointed by Siemens to design, supply and install the onshore cables for the Moray East wind farm project in Scotland. The works include geotechnical surveys to establish the route and the development of key design features to support applications for local and statutory authority permissions.

Further growth across the marine, energy, water, and environmental structure sectors is expected in 2018 and beyond.







Highways and airport infrastructure

VolkerWessels UK offers clients extensive experience and expertise in highways and airport infrastructure, working collaboratively and using innovative working practices to deliver complex projects.

We work across a range of projects in these sectors, both as a main contractor and specialist subcontractor, delivering high-profile projects for repeat clients.

In the last 10 years we have laid in excess of 2 million m² of pavement-quality concrete at UK airports. Airport infrastructure works are a core part of our business and our teams are experienced in providing the engineering skills and technologies necessary to deliver both airside and landside support facilities. VolkerFitzpatrick paving teams also deliver pavement-quality concrete for commercial and industrial projects including container ports and harbours.

VolkerFitzpatrick completes major highways infrastructure projects and airport rehabilitation for both civil and military clients. Our market-leading concreting expertise dates back over 70 years, when we began constructing wartime airfields across the UK. We continue to invest in plant, equipment, the latest technologies and designs to deliver a high-quality service that is ahead of the market.

VolkerHighways specialises in public and private sector highways and lighting term maintenance contracts, civil engineering and civil engineering/public realm projects. Specialist divisions provide surfacing, traffic management and street lighting services to both the highways and lighting term contracts as well as our business units and external private and public sector clients.

VolkerHighways

VolkerFitzpatrick

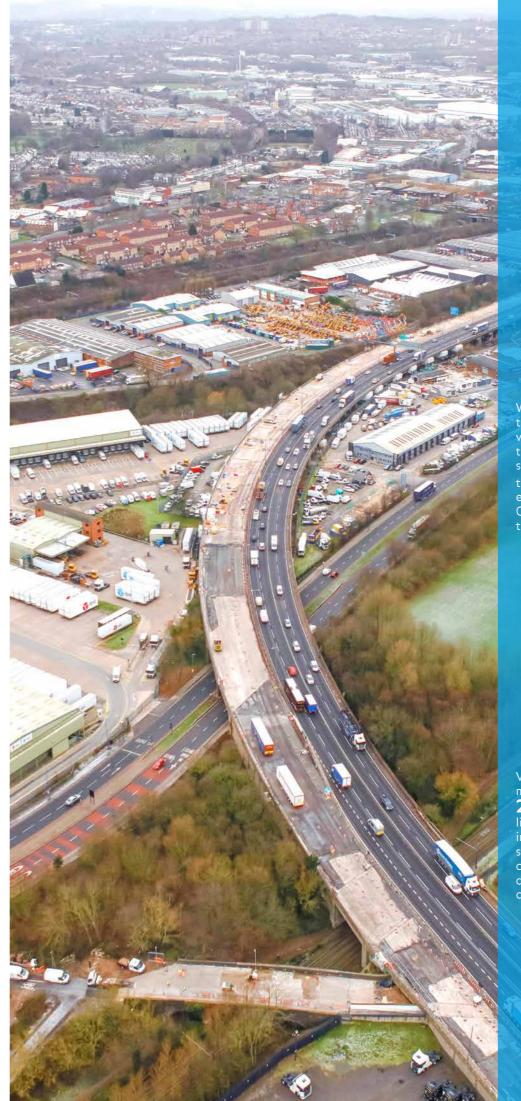
VolkerStevin

VolkerLaser

VolkerHighways has delivered a solid performance in 2017, continuing to work in partnership with its clients to deliver on its highway maintenance contracts. Medway Council continues its collaboration with VolkerHighways, with repeated yearly extensions awarded to its Highways Term Maintenance Contract (HTMC) and a new five-year HTMC contract that began in August 2017. Our highways maintenance expertise sees many local authorities turning to us, with HTMCs in place with Luton Borough Council, West Berkshire Council, Camden Borough, the Royal Borough of Windsor & Maidenhead and Hackney Council.

Our other business units help us deliver a range of highways and airport infrastructure projects. VolkerStevin provides design services and earthworks for bridges and carriageways and works on the construction of large-scale landmark structures. VolkerLaser delivers a range of strengthening and waterproofing solutions to bridges, tunnels, and structures across the highways network.

We harness the expertise of our dedicated and long-established supply chain and work together to develop solutions that deliver the best value. Together, we deliver high-performing services, buildings, concrete surfaces and lighting that improve communities, cities and towns and the lives of people.





Through our highways term maintenance contracts we maintain in excess of **6,200km** of highways network





Delivered highways maintenance projects as part of the

1,278km urban and rural highways network for Luton Borough Council, West Berkshire Council and Camden Borough





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VolkerFitzpatrick delivered 71,000m² of concrete surfacing at UK international airport London Stansted

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Extensive contract awarded with Medway Council

Renowned for our delivery of extensive highways maintenance, we were awarded a new highways term maintenance contract with Medway Council, running for five years from August 2017, with a possible extension up to a further five years. The contract comprises both planned and responsive maintenance, including carriageway and footway resurfacing, winter maintenance, drainage cleansing and road markings.

VolkerHighways will maintain Medway's 26,000 street lighting columns and introduce professional services and consultancy support during the term of the contract. The company will also deliver maintenance and inspections in the Medway Tunnel, which accommodates approximately 40,000 vehicle journeys each day.

VolkerHighways has collaborated with Medway Council to provide highways maintenance services since 2007. In this period the company has resurfaced approximately 650,000m² of carriageway and 145,000m² of footways and completed 9,000 emergency response incidents.

Highways Maintenance

Through our highways term maintenance contracts we maintain over 6,200km of highways network, in both urban and rural environments. This includes A roads, principal urban traffic routes, as well as local residential and rural roads.

Our responsibilities include the maintenance of all associated footpaths, lighting and highways structures. This service includes all aspects of the highway network management, from emergency response managed through our own call centre, to planned infrastructure enhancement and safety works.

Continued Local Authority Trust

VolkerHighways' integrated highways servicing capabilities and wide-ranging expertise in multiple highway disciplines allow the company to continue to work closely with local authorities throughout the lifespan of a contract.

In 2017, VolkerHighways was awarded highways maintenance projects with Luton Borough Council, West Berkshire Council and Camden Borough. In Luton, the contract spans a large range of multi-disciplinary works, including highway maintenance works to carriageways, footways and street lighting, together with winter maintenance and gully cleansing as well as 24/7 cover for emergency repairs. The deal combines the Department for Transport's HMEP contracting model with an innovative approach to work, and commenced in January 2017, running for 10 years with a possible five years of extensions. The development of a strong client relationship with West Berkshire Council will continue as, through competitive tender, we have been awarded a new maintenance contract for a further 10 years. The new contract will cover approximately 1,278km of urban and rural highway network. As part of the contract, the VolkerHighways team will carry out inspection and maintenance works to roads, street lights and pavements. It will also carry out improvement schemes, salt the roads and provide a full emergency response service.

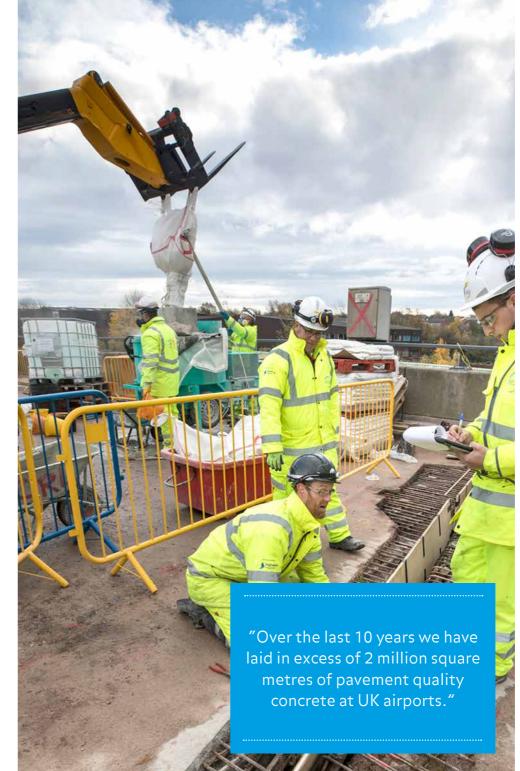
Our new four-year public realm maintenance improvement contract with Camden Borough incorporates highways and lighting maintenance services across the borough until 2020, with extension options to 2023. Other highways maintenance contracts awarded in 2017 include a five-year contract with a possible two-year extension with the Royal Borough of Windsor and Maidenhead and ongoing highway maintenance services for Hackney Council.

LED Lighting Conversion

VolkerHighways provides a wide variety of street lighting and electrical services as part of its integrated highways delivery approach. The business continues to build up its street lighting capability through the National Electrical Registration Scheme (NERS), which allows us to deliver power connections to metered and unmetered power sources. This brings enhanced programme certainty to clients, as we are not reliant on power network contractors for connections.

This investment has helped us deliver further light-emitting diode (LED) conversion programmes including recent awards for the London Borough of Barking and Dagenham. The existing LED contracts in Poole, Bournemouth, Slough, Wokingham and Reading have continued through the year with enhanced environmentally friendly lighting now in place across these boroughs, saving many thousands of pounds in electricity consumption.





Cranfield University MUEAVI

Cranfield University MUEAVI (Multi User Environment for Autonomous Vehicle Innovation) and AIRC (Aerospace Integrated Research Centre) car park in the village of Cranfield, Bedfordshire, and the site of a former RAF airfield, is a project by VolkerHighways. This is our second project for Cranfield University having successfully completed the university sports centre car park. The main works comprised the MUEAVI road, which is the proposed main entrance to the university and AIRC car park, landscaping and cycle shelter. The road was prepared and then surfaced by VolkerHighways, while other works comprised road and car park lighting, kerbing, drainage and ducting. VolkerHighways has helped Cranfield University transform a large brownfield site from unused airside land into a new and exciting development area. The now accessible land will enable significant growth at the university for years to come.

M5 Oldbury Viaduct

VolkerFitzpatrick is working in a three-way joint venture with BAM and Morgan Sindall to replace the waterproofing system on the Oldbury Viaduct in the Midlands. The 3.2km of elevated viaduct requires significant deck repairs to increase its lifespan. To achieve this, the team, along with specialists from VolkerLaser, has removed the viaduct's surface and carried out a series of tests to establish where repairs are required.

Work began on the southbound carriageway to investigate the condition of the concrete underneath. Once repaired, a new waterproofing layer was applied. The process is to be repeated on the northbound carriageway. The scheme has required a range of specialisms including hydrodemolition, concrete repair, verge construction works and waterproofing operations.

Carrying 120,000 vehicles a day, the elevated section of the M5 motorway between junction 1 and 2 is one of the busiest routes in the country. The scheme is part of an investment from Highways England that will support economic growth locally and in the wider West Midlands. The project is expected to be completed in autumn 2018.



For Medway Council we have resurfaced approx 650,000m² of carriageway

Stansted Airport Works

VolkerFitzpatrick has delivered two projects as part of the development and expansion of UK international airport, London Stansted.

At the Echo-Cul-de-Sac, an apron where aircraft will park and passengers enter and disembark the aircraft, the team laid $61,000 m^2$ of concrete, at a location with eight aircraft stands and associated taxi lanes.

The VolkerFitzpatrick team also facilitated the movement between runways and parking areas for aircraft with 10,000m² of concrete to the hotel taxiway at the airport, the fourth busiest in the UK.

Ely Southern Bypass

The Ely Southern Bypass will connect the A142 at Angel Drove with Stuntney Causeway. The project includes the design and construction of a 1.7km-long single carriageway road, a viaduct crossing the River Great Ouse and a bridge over two railway lines. Previously, the area around Ely station has suffered from heavy congestion, with lorries and other vehicles unable to use the low underpass and queue for the level crossing. The bypass diverts lorries and through traffic away from the crossing.

Before beginning construction of the road itself, the team needed to construct embankments. Due to the nature of the ground beneath the embankments, a period of time was required for them to settle before construction could continue. Once settlement was complete the team prepared the west embankment for road construction.

Large pre-cast concrete sections, measuring 2.7m in height and width were designed to carry water within the ditches beneath the bypass embankment. These were placed to form the culvert between the north and south sides of the west embankment. As part of the larger project, the team is also delivering structural works, including permanent piling for the river viaduct and railway bridge.

The construction of the reinforced concrete 'V-Piers' within the river floodplain is a challenge due to the extremely complex temporary works required to form the architectural 'V' form in the confines of a cofferdam within the river.

The cofferdams consist of interlocking sheet piles, which are watertight to allow construction to take place below the river's water level. Works to lift the steel structural elements of the bridge deck will take place through 2018.

The Future

The long-term goal to improve and enhance the nation's motorways and major roads and build a better future for all road users is an opportunity for us to deliver complex engineering projects. We intend to extend our area of operational capability while developing value-driven solutions.

SMART, our bespoke works order management system, integrates some of the best technologies available to support the business's end-to-end works order process and workforce management.

SMART uses graphical planning and programming tools to automatically schedule works based on client response priorities and a geographically efficient programme that reduces travelling time and therefore our environmental impact.

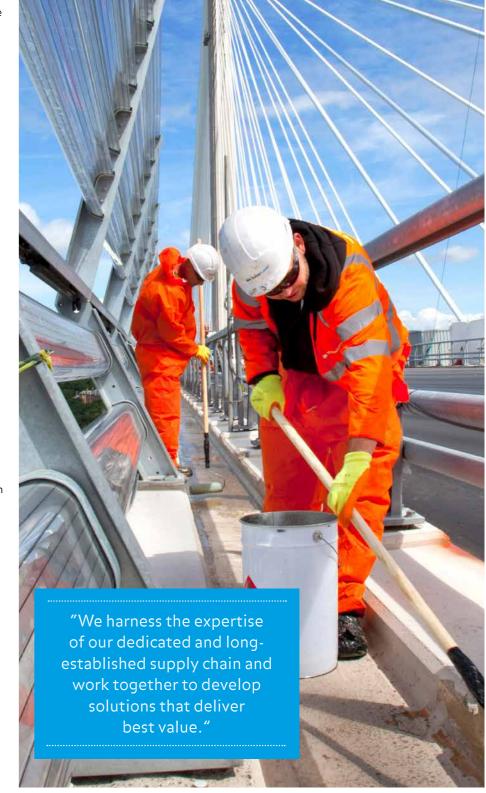
VolkerHighways continues to strive to become the UK highways service provider of choice. Our aim is to meet the needs of road users and the public in ways that are economically, socially and environmentally sustainable, both now and in the future.

New Forth Road Crossing

VolkerLaser has carried out niche main works for Forth Crossing Bridge Contractors (FCBC, comprising American Bridge International Corporation, Dragados, Hochtief and Galliford Try) on the world's longest three-towered cable-stayed bridge. The new Forth Road Crossing, Queensferry, also has the tallest bridge towers in the UK (210m) and the bridge has taken in excess of 19 million man hours to complete. Works included surface preparation by enclosed grit blasting and 90,000m² of waterproofing.

This was a challenging project and the VolkerLaser team had to be innovative in its approach when faced with delays that included inclement weather, difficult access and release of areas.

While bridge construction commenced in 2011 and had an original completion date of December 2016, VolkerLaser's niche main works commenced in January 2017. The Queensferry Crossing was officially opened to traffic by Her Majesty The Queen in September 2017.



Commercial, industrial and educational construction

In the commercial, industrial and educational construction sector we provide a range of specialist skills in order to deliver high-quality projects, often to fasttrack programmes and in challenging environments.

We have a very strong delivery model and exceptional reputation within the industry and have experienced a very strong year.

We integrate the specialisms of our individual business units; VolkerFitzpatrick, VolkerHighways and VolkerLaser in this sector. The talent and commitment of our people and a collaborative approach are crucial to the success we enjoy with a wide range of clients in this sector.

The specialist design and build services of VolkerFitzpatrick allow us to deliver major building projects in some of the busiest and most restrictive urban environments across the UK. These include multi-modal logistics centres, industrial and commercial buildings, modern warehousing, large-scale commercial office developments and educational facilities.

VolkerHighways has five specialist divisions that, working in close collaboration with our other business units, allow us to deliver the often complex highways, lighting, electrical services and public realm solutions required across commercial, industrial and educational projects. We combine directly employed labour and specialist supply chain partners in order to deliver.

VolkerFitzpatrick

VolkerHighways

VolkerLaser

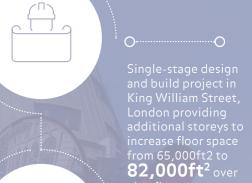
Likewise, as a leading specialist contractor and multi-disciplinary business unit, VolkerLaser's expertise provides any project in this sector with the essential wide breadth of services. Working across the built environment, we are adept at putting in place the integrated, multi-functional teams required to manage and deliver projects of varied logistical challenges and solve complex problems in all kinds of diverse environments.

We understand the challenges, needs and demands of our clients. Our work in this sector is ever expanding and we rise to the challenges faced with this type of work. With a strong pipeline, we anticipate increasing our portfolio in this market sector.

The importance of the construction industry in supporting the UK economy is not in any doubt. The future delivery of projects of this nature relies on us encouraging new entrants such as graduates and apprentices to the industry and our workforce via a number of programmes with considerable support, training and development for the future.







ne Battle of Britan Bunker in Uxbridge 40-week period



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New **55,000ft**² delivery office and 67,000ft² multi storey car park for the Royal Mail



152,000ft² new-build industrial unit in Tamworth ove 24 weeks for Logicor

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Battle of Britain Visitor Centre Uxbridge, Middlesex

VolkerFitzpatrick handled the design and build of a new Visitor Centre for the Battle of Britain Bunker in Uxbridge, Middlesex, built to commemorate the legacy of World War II's Battle of Britain. We worked in close collaboration with the client, the London Borough of Hillingdon, and in partnership with architects Pattern Design Ltd and Norder Design Associates.

The new building houses an exhibition space with model aircraft, model-making and workshop rooms for school visits, meeting and conference facilities as well as a café and seating area. The site is located within woodland close to the historic bunker. An archaeologist was on site due to the possibility of finding historical items.

The design embraces the dynamics of flight, with sleek, juxtaposed lines almost mirroring the sharp, sudden shifts of aerodynamic prowess shown by the Spitfire and Hurricane which protected the skies of the United Kingdom.

The dark façade against the treeline and sky create a stealth-like, omnipresent appearance. Thanks to VolkerFitzpatrick's collaborative work, visitors will have a vista onto the suspended planes from the moment they enter the building. The 40-week project was handed over in November 2017.

Central London, 24 King William Street

VolkerFitzpatrick delivered a single-stage design and build project in King William Street, London. The back-to-frame office development featured two additional storeys to increase floor space from 65,000ft² to 82,000ft², over nine floors.

The project began in January 2016 and commenced with the removal of the existing façade, followed by the extension of the floor plates with the construction of a steel frame two-storey extension. The installation of a bespoke unitised curtain walling system completely transformed the external look of the building. Internally VolkerFitzpatrick delivered a high-quality Category A fit out, including new building services and lift installations. The creation of an impressive double-height entrance has produced an eye catching reception from street level. The project has been one of the building division's most logistically challenging to date.

The building is situated on one of London's busiest junctions, between London Bridge and Cannon Street, with Monument tube station directly opposite. An underground shaft for the Bank Station Enhancements Project was in use immediately next to the site and another major office development is adjacent. With two construction projects situated directly next to VolkerFitzpatrick's site, all three sites coordinated their scheduling and traffic management.

London's tube network added another level of complexity, with underground train lines directly below the site. Spider cranes and a monorail were used to construct the eighth and ninth stories of the building. Our logistics team dealt with a tight delivery booking schedule on a daily basis and also managed high volumes of pedestrians making their way over London Bridge.



Delivering for Royal Mail

Royal Mail has selected VolkerFitzpatrick to improve 18 of its sites across the South of England as part of its Royal Mail Uplift national framework.

Since privatisation, Royal Mail has embarked on a programme of continuously improving the efficiency and sustainability of its properties across the country and VolkerFitzpatrick's work will deliver improvements on both fronts.

The broad spectrum of projects include small works, refurbishments of existing buildings and fit outs to newly acquired premises.

The framework requires Early Contractor Involvement (ECI) to encourage a whole-team approach. Close collaboration with Royal Mail, consultant partners and our supply chain ensures that all design and build solutions are cost effective, time efficient, delivered with minimum disruption and meet the highest standards of safety and quality.

Our ongoing work with Royal Mail builds on an existing 16-year relationship with VolkerFitzpatrick.

South Shields

Our work with Royal Mail saw the completion of a 23-week design and build project to construct a new 1,200m² delivery office in South Shields.

The structure comprises an industrial unit and office space, with an external yard for Royal Mail vehicles. There are also kitchen and welfare facilities, along with staff car parking spaces and a bicycle shelter.

Piling work began on the brownfield site in March 2017, followed by the construction of the building's steel frame. The unit was then clad and photovoltaic panels were fitted to the roof as part of the BREEAM requirements. The team also delivered hard and soft landscaping to the areas surrounding the delivery office.

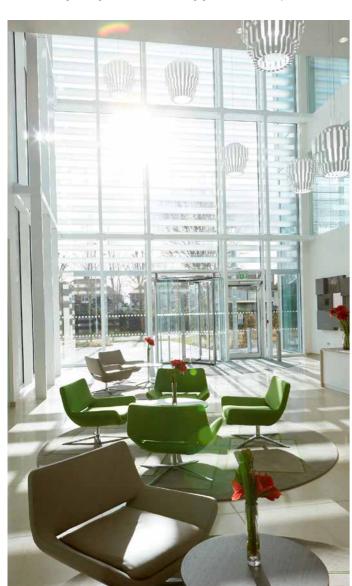
The principal challenge on this project was delivering the facilities to a high standard, within a limited time period. The site team liaised closely with both the client and the local planning officer to maintain the challenging project programme.

The works were successfully completed in September 2017, allowing Royal Mail a higher degree of flexibility when planning their move into the new space.



Nine Elms

Royal Mail has relocated its Nine Elms delivery office to a new site approximately two-thirds of a mile from its existing site in Vauxhall. VolkerFitzpatrick demolished existing buildings before constructing a new 55,000ft² delivery office and 67,000ft² multi-storey car park in a two-stage process. Construction of the two-storey delivery office used a series of steel portal frames clad with a mixture of grey brickwork and Trespa panels to the top levels. The three-storey car park consists of structural steel frame with high pressure laminate panels and features a removable top deck. Logistics were a key project challenge, with the site divided in half by a service road providing access to surrounding businesses. Accompanying this was the need to divert a main Victorian brick sewer running under the two sites. The new sewer diversion involved careful planning with local residents, businesses and two separate local councils. Our site team were able to deliver a successful project achieving a BREEAM Outstanding rating whilst maintaining good community relations.



Fast-track delivery for Logicor

VolkerFitzpatrick constructed a 152,000ft² new-build industrial unit in Tamworth over 24 weeks for Logicor. The project allowed Logicor to combine three units into one larger warehouse space for single occupancy. We worked in close partnership with other delivery partners, in this case UMC Architects, Quantity Surveyors and Project Managers Evason Projects and Engineers Cameron Darroch Associates. We appointed our own design team for this project, which saw the unit constructed between two large occupied units. As well as constructing the new building's steel framework and exterior façades, the works included relocating and increasing car parking facilities as well as the installation of foul and storm water drainage. The team also adapted all incoming utilities for the building and provided soft and hard landscaping across the site.

When underground obstructions that had not been identified by third-party site surveys were discovered prior to the start of the project, the team worked closely with the mechanical and electrical designer and structural engineer to make the necessary design adaptations and ensure the programme remained on schedule. The original building's roofline was notably lower than the two units on either side, so part of VolkerFitzpatrick's remit was to increase the overall height of the new build in line with its neighbours. With tenants operating out of the two adjacent units throughout the duration of the project, continuous liaison with tenants was essential and we enjoyed good, open communication with Logicor and the warehouse's end users throughout. VolkerFitzpatrick successfully delivered this unit on a fast-track programme.



Close collaboration ensures that all design and build solutions are cost effective, time efficient, delivered with minimum disruption and meet the highest standards of safety and quality.



A landlocked site was the key project challenge at LAMDA. Ongoing neighbour liaison maximised safety and minimised disruption for all.

London Academy of Music and Dramatic Art

VolkerFitzpatrick has transformed LAMDA's west London campus into a world-class centre for drama training and performance.

This two-stage Design & Build project involves construction of a three- and four-storey drama complex. This includes 10 teaching studios, a media recording suite, library and study centre plus the 230-seat Simon Sainsbury Theatre and the 120-seat Carne Studio. Site preparation included demolition of existing buildings followed by extensive earth remediation. The substructure solution uses 211 CFA piles at a depth of 25 metres, plus ground floor slab.

The superstructure of the four-storey theatre uses a steel frame with slim deck flooring and the three-storey building uses an RC frame with pre-cast floors. Acoustic bearing pads help protect against structural-borne noise and vibration. The envelope combines traditional brickwork to the lower levels and rain screen cladding to the upper levels.

Logistics were a key project challenge. The island site is landlocked between the busy A4 highway, Barons Court underground station and a UKPN sub-station. We developed and agreed a detailed logistic strategy with TfL, LUL and LB Hammersmith and Fulham prior to starting on site. Our ongoing neighbour liaison maximised safety and minimised disruption for all.





For more about VolkerWessels UK, visit: www.volkerwessels.co.uk

VolkerWessels UK brings together five separate operating businesses in collaboration across multi-disciplinary projects, whilst also providing commercial and back office support. All of our UK businesses: VolkerFitzpatrick, VolkerRail, VolkerStevin, VolkerHighways and VolkerLaser have a long and successful heritage, each founded by entrepreneurs. They have gone on to achieve a long history of success through hard work, innovation and excellence.

Credits

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