

BRITPAVE NEWS

ISSUE 51 - SPRING 2026

SOIL STABILISATION SEMINAR REPORT

NEW BRITPAVE INDUSTRY FORUMS

BRITPAVE AWARDS 2026

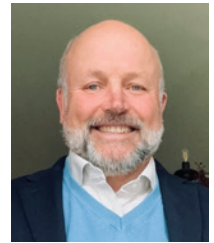
BRITPAVE MEMBERS' PROJECT NEWS

CONCRETE BARRIERS PROGRAMME
FALTERING

CANALS NEED CEMENTITIOUS SOLUTIONS

NEW RIS3 ANNOUNCED

***Holcim strides on
with new Tilbury cement plant***



CHAIRMAN'S WELCOME

IN THIS ISSUE:

New Britpave industry forums	2
Britpave John Ferguson Awards 2026	3
Infrastructure Pipeline updated Stonehenge Tunnel consent revoked	4
Road Investment Strategy 3 announced	5
Delivering UK defence infrastructure	6
Airports expanding	7
Britpave soil stabilisation seminar report	8
UK port expansion	12
North Hykeham Relief Road underway A4130 contract awarded	13
Major road scheme gets the go-ahead	14
Stabilisation meets the challenge of saturated soils	15
Advances in new Tilbury cement works	16
Canal solutions for a changing climate	17
Programme of concrete barrier installation faltering	18
Members' news	19
Britpave member directory	

The updated Government's Infrastructure Pipeline reveals 734 planned projects worth £718bn. The Pipeline is to be welcomed. Also covered in this issue of Britpave News is the new RIS3 outlining National Highways projects for the next five years plus expansion plans for ports and airports. There is an important consideration: how will all this work be delivered?

Delivering infrastructure needs more than just ambitious pipelines, it requires government and industry collaboration, industry product and process innovation, development and implementation, investment in training and the next generation and promotion of best practice and sharing of knowledge. Above all, it requires a mindset of asking: 'Is there a better way?'

As the focal point for the infrastructure industry, Britpave and its members are well-placed to forward all of the above. New initiatives such as the new Britpave Forums announced in this issue will facilitate industry networking, collaboration and knowledge sharing. The Britpave John Ferguson Civil Engineering Graduate and Apprentice Awards underlines the investment in the next generation. Britpave industry events such as the recent soil stabilisation seminar bridge the gap between academic research and commercial delivery. Plus, the examples of Britpave member product and project case studies covered by Britpave News show how commercial delivery can successfully balance cost efficiencies and sustainable solutions.

The Infrastructure Pipeline and plans of infrastructure clients are ambitious but Britpave and its members have the ambition, experience and expertise to deliver them with solutions that prove that there is a better way.

Al McDermid
Britpave Chair

Britpave, the British Cementitious Paving Association, promotes the better and greater use of cementitious and concrete infrastructure solutions. Members include major contractors, specialist equipment and material suppliers, consulting engineers and interested trade associations. Together, Britpave provides a single industry voice for the in-situ cementitious and concrete infrastructure sector.

For further information visit: www.britpave.org.uk

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➤ NEW BRITPAVE INDUSTRY FORUMS

Britpave is to set up new industry forums aimed at forwarding cementitious and concrete infrastructure solutions. These Forums will provide industry focal points to examine and address present and future challenges and issues.

The Forums will undertake specific initiatives and, importantly, will facilitate industry networking, encourage dialogue with clients and forward liaison with universities. The first of the new Forums will be the Cementitious Bound Materials Forum, the Carbon Forum and the Innovation Forum.

The Cementitious Bound Materials Forum will forward cementitious bound mixtures including HBMs, RCC, CRBM and Readymix pavement manufacture and installation solutions plus the development of best industry practice and review of standards. The potential number of R&D projects will be examined including RCC trials with other recycled/secondary aggregates, CBGM trials with increasing secondary aggregate content to address mixture upper sulfate limits and CBGM low carbon options incorporating carbon sink additives.

The Carbon Forum will examine and forward low carbon infrastructure solutions including the provision of carbon calculator tools, new cement manufacture developments, progress of pan-industry carbon roadmaps and a new report forwarding the potential of concrete infrastructure carbon sequestration.

The Innovation Forum will link to the Carbon Forum in that it will examine and forward innovative cementitious low carbon initiatives and whole life case studies. In addition, it will cover water management and flooding, tunnelling innovation including slip forming, concrete spraying and stabilisation plus concrete maintenance and repair with a focus on material and procedures.

Industry networking will be facilitated by both teams and face-to-face Forum meetings at which industry challenges will be discussed and solutions forwarded. Industry and academic presentations will be encouraged.

Membership of the Forums is primarily for Britpave members. Non-members to be invited by request. Contact the Britpave office to register your interest for any - or all - of the Forums by emailing the Britpave office: info@britpave.org.uk



> THE BRITPAVE JOHN FERGUSON CIVIL ENGINEERING GRADUATE AND APPRENTICE AWARDS 2026

Entries are now open for the Britpave John Ferguson Civil Engineering Graduate and Apprentice Awards 2026. The Awards are designed to recognise and reward the next generation of civil engineers and cover both graduates and apprentices covering the annual period of 1st April 2025 to the following May 31st 2026.

In particular, the Awards are designed to recognise and reward outstanding graduates, apprentices and trainees who demonstrate those top characteristics that will allow them to thrive.

These include: curiosity; creativity; ability to problem-solve; being a team player; good interpersonal skills; attention to detail.

All nominees must be working for a Britpave member. There will be one overall winner and two runners-up who will be expected to attend the Britpave annual conference in October to celebrate and receive their award.

TO ENTER

Entries are welcomed from Britpave member employers. They are invited to nominate graduates or apprentices/trainees who demonstrate:

- > Contribution to industry innovation or best practice delivery
- > Strong communication and interpersonal skills that build effective working relationships,
- > In-depth curiosity and problem-solving abilities that allow challenges to be meet and resolved,
- > Capacity to be methodical and organised with attention to detail,
- > Ability to manage several priorities at a time and to work under pressure,
- > Ability to work both on own initiative and as a team member and build effective working relationships.

Britpave members should forward their nominations as a written appraisal of no more than 700 words that covers the characteristics above and includes working and project examples.

Any special mention with regards to central issues affecting the civil engineering industry such as achieving net zero, digital working, the impact of AI, introduction and implementation of innovation and best practice should be included.

The appraisal should also include up to 500 words from the nominee graduate/apprentice on why they chose the civil engineering industry for their career.

Entry nominations should be sent as a Word Doc and include the name, job title email and telephone contact details for both the Britpave employer and graduate/apprentice/trainee. Nominations to be forwarded to Britpave at: info@britpave.org.uk by 1st June 2026

WHY ENTER?

The Awards aim to celebrate the civil engineering industry. They aim to forward a sense of pride and motivation. Enter a graduate/apprentice/trainee to underline opportunities of working in the civil engineering industry and the talent of the next generation.

Entering the Awards will help to raise the profile of your company's involvement in and programme for forwarding and supporting young professionals. Entering the graduate/apprentice/trainee will recognise their ongoing work and achievements. In particular, it will showcase their achievements and celebrate their success to a wide industry audience. Furthermore, the overall winner will receive a prize of £500.00. Each runner-up will receive £250.00



INFRASTRUCTURE PIPELINE UPDATED

The UK's Infrastructure Pipeline that reveals 734 planned projects worth £718bn in public and private investment over the next decade has been updated.

Published in July 2025 by the National Infrastructure and Service Transformation Authority (NISTA), the latest update introduces new analysis on regional workforce and skills demand to help better align infrastructure delivery with the government's Industrial Strategy and wider skills agenda.

Delivering projects within the Pipeline will require a significant expansion of the workforce. Estimates suggest an average annual construction and infrastructure workforce of between 629,000 and 706,000 will be needed over the next five years.

The expanded Pipeline dataset also provides investors and contractors with greater visibility of future opportunities, including project timelines, investment models and the types of funding sought. In total, the £718bn investment pipeline represents a substantial increase on the value of projects included when the Pipeline was first published.

The update responds to feedback from industry calling for clearer data to support planning and investment decisions across the construction supply chain. It is planned that the Pipeline will be updated every six months.

For further info, see: <https://pipeline.nista.grid.civilservice.gov.uk/introduction>

STONEHENGE TUNNEL CONSENT REVOKED

One project that is not included in the Infrastructure Pipeline is the Stonehenge Tunnel. The Department for Transport (DfT) has withdrawn the Development Consent Order (DCO) for the A303 Amesbury to Berwick Down project.

The project included a proposed tunnel beneath the Stonehenge World Heritage Site, two new junctions and a bypass. Transport Secretary Heidi Alexander said the project "no longer aligns with current strategic policy objectives," reflecting a shift in government priorities.

The revocation reflects broader concerns over affordability and policy alignment, with ministers indicating that major road schemes must demonstrate value for money and meet environmental and cultural considerations. £179m has already been spent on the project prior to its cancellation.

The decision means the scheme can no longer proceed, and any future attempt to revive it would require a completely new planning application and approval process.

The scheme, first proposed in the 1990s, aimed to address congestion on the A303 by placing part of the road in a tunnel to reduce traffic impact near the prehistoric monument. Supporters argued it would improve journey times and the setting of the site, while critics raised concerns about potential damage to the surrounding archaeological landscape.

Planning consent for the project was granted most recently in 2023 following earlier legal challenges, but it was paused in 2024 amid rising costs, estimated at up to £1.4bn–£1.7bn.



Artist's impression of the Stonehenge tunnel. Image: National Highways

ROAD INVESTMENT STRATEGY 3 ANNOUNCED

The Government has announced the third Road Investment Strategy (RIS3) which runs from 2026 to 2031 and pledges £27 billion to improve England's road network over the 5-year period.



The new RIS3 has been announced.

RIS3 marks a shift towards maintenance, renewal, and completing existing, rather than starting new, enhancement projects. There only five major enhancement schemes due to start during the five-year RIS3 period. They include:

- A38 Derby Junctions
- A46 New Bypass
- A66 Northern Trans-Pennine
- M54 – M6 Link Road
- M60/M62/M66 Simister Island Interchange.

The enhancement budget is £3.85 billion whilst the budget for renewals is £8.44 billion. This is in line with Department for Transport and National Highways focus on maintenance and renewal rather than new build. On top of previously confirmed schemes, the budget assures the go-ahead for 16 schemes (both renewals and enhancements) on the major road and local road networks. These include bypasses and junction improvements that local authorities could not deliver without central support.

There are also “large” renewals to “significant structures” in the plans. Notable projects include:

- M6 Lune Gorge structures: Refurbishment of eight bridges in a 10km stretch on the motorway between junctions 37 and 38

- M62 Goole and Airmym interchange bridges: These two bridges “both show long standing structural deterioration” and must be refurbished
- M32 Eastville Viaduct: “Significant renewal” to this 1.1km elevated section of the M32 between the M4 and Bristol that was built in the 1970s
- Six sections of legacy concrete roads will be renewed including the M180 and A180.

Alongside the strategic network, ministers have also cleared around £1bn of funding for 16 local authority-led major road schemes, covering bypasses, junction upgrades and new links aimed at unlocking housing and regional growth. However, this is less than half the 42 local authority-led schemes put under review as part of spending cuts last July.

Over the months ahead, National Highways will finalise its Strategic Business Plan and Delivery Plan for 2026-31, outlining its response to RIS3, how it will deliver the RIS3 and its final route strategy reports.

To download a copy of RIS3, visit: <https://bit.ly/4tdKtxs>

WHAT IS THE ROAD INVESTMENT STRATEGY?

In 2015, the Infrastructure Act 2015 (Infrastructure Act) established a new arm's length body, National Highways (then Highways England), to manage the SRN and a statutory process for setting and funding a Road Investment Strategy (RIS). The RIS is Government's multi-year investment plan for operating, maintaining, renewing and enhancing the SRN. To date, there have been two previous road investment strategies:

- RIS1 – covering 2015-2020, known as the first road period;
- RIS2 – covering 2020-2025, known as the second road period;
- RIS3 – covering 2026-2031, known as the as the third road period

These five-year funding settlements aim to provide stability to both National Highways and its supply chain, allowing a renewed and long-term focus on customer outcomes and efficient delivery.

DELIVERING UK DEFENCE INFRASTRUCTURE

Reforms are necessary to Ministry of Defence infrastructure procurement models if planned UK defence projects are to be delivered. The current model is not suited to deliver the scale of work that is planned.

Consultant Gleeds has partnered with strategic business network the D Group to launch a new report setting out the structural, financial and cultural changes required to ensure the UK's defence infrastructure is fit for an increasingly volatile global environment.

Defence infrastructure spending is expected to rise sharply as part of wider plans to increase defence budgets towards 2.5% of GDP, unlocking tens of billions of pounds of work across bases, training estates and secure facilities over the coming decade. The Strategic Defence Review has already committed £1.5bn to deliver at least six new UK munitions and energetics factories, underlining the scale of the pipeline coming forward.

The report, 'Building defence for the long term', asserts that achieving the ambitions of the SDR will depend not only on policy direction, but on the UK's ability to translate intent into delivery at pace. It calls for a fundamental shift in how defence infrastructure is planned, funded and delivered and calls for a more sustained, system-wide approach.

The report highlights the need to address the challenges of affordability, productivity and the current lack of alignment between government and industry. Together, it says these factors risk constraining the UK's ability to build and maintain critical defence capability at the required pace. In particular, the report underlines how rigid business case processes and duplicated requirements are adding years to delivery timelines and argues that without a shift to

long-term programme pipelines, standardised delivery models and proper risk allocation, defence will struggle to compete with sectors such as energy, transport and data centres that offer clearer pipelines and more commercially attractive terms to contractors.

A series of recommendations to address these issues and support long-term readiness are set out. These include recognising defence infrastructure as part of the UK's critical infrastructure framework; adopting standardised delivery models; strengthening long term demand signals to enable investment in skills and capacity; improving coordination between government and industry; and

embedding infrastructure resilience as a key component of warfighting readiness.

Delivering defence capability at pace requires more than just ambition, it demands a step change in how we approach infrastructure, investment and collaboration. Our paper shows that the barriers to progress are not just financial

and technical, but structural and cultural - we offer many recommendations where industry can play its part. By aligning the government and industry's long-term priorities, standardising delivery and creating clearer demand signals, we can unlock the capacity and capability needed to support the UK's defence infrastructure objectives.

The download 'Building defence for the long term', visit: <https://bit.ly/4uXM8J8>



Britpave member, Lagan Aviation & Infrastructure Ltd, has on behalf of the Defence Infrastructure Organisation (DIO) and Royal Air Force (RAF), undertaken the airfield refurbishment 01 - 19 runway of RAF Valley in Anglesey.



UK AIRPORTS EXPANDING

The Government is considering a number of proposals to expand UK airports as part of efforts to increase economic growth. In particular, it is focused on major hubs such as a third runway at Heathrow, a second runway at Gatwick and increased capacity at Luton.

The need for airport expansion is underlined by the UK Civil Aviation Authority's latest aviation trends report that confirms 2025 was the busiest ever year for UK aviation with 302 million passengers passing through UK airports. The increase in passenger numbers looks set to continue with Heathrow reporting that January 2026 was its busiest January ever with 6.5 million passengers using the airport in that month alone.

The UK government and Heathrow Airport Limited (HAL) are pressing forward with long-debated plans to construct a third runway at London Heathrow. However, delivering the project remains complex. The Government has set the timetable to secure planning permission by 2029 and bring a third runway into operation in a decade. Heathrow's shareholders continue to strongly support expansion and the project will only proceed once the necessary regulatory and policy frameworks are firmly in place. Decisions on these key issues are expected throughout 2026.

In spring 2026, clarity is required from the Civil Aviation Authority on how early costs can be recovered. Over the summer, the DfT will publish the draft Airports National Policy Statement ('ANPS') and the CAA will decide on the long-term regulatory model which will determine if private investment will be forthcoming. In the autumn, Parliament

will be asked to decide on the final ANPS – a decision which will set the planning framework for the project and put the UK on course for first flights from a third runway in a decade.

Regional airports are also experiencing significant passenger growth. Newcastle Airport has commenced a £60 million, 15-year expansion plan designed to significantly boost its capacity and economic impact on the North East. Ryanair, easyJet, and Jet2 are increasing their flight offerings from the airport, with easyJet reopening a three-aircraft base and launching 11 new routes from March 2026. The plan aims to serve 9 million passengers annually by 2040 and add more than 20 new aircraft stands. Infrastructure developments include a three-storey terminal extension and a review of long-standing ambitions to extend the runway.

Whilst in Liverpool, the John Lennon Airport is on course to grow passenger numbers to 7.8 million by 2030. These increases will require a planned investment of around £100m over the next 10 years, in a proposed expansion of the terminal building, additional car parking and passenger facilities, and a potential extension of the runway.

BRITPAVE SEMINAR SOIL STABILISATION SPOTLIGHT

Opening the recent Britpave industry seminar 'Soil Stabilisation Spotlight' Stefan Stansfield, Chair of the Britpave Soil Stabilisation Task Group, explained how it aimed to bridge the gap between academic research and industry practice.

Stefan outlined the environmental and cost benefits of soil stabilisation and highlighted that these benefits are not just about improving soil strength but are also about resilience, sustainability and efficiency. The seminar presentations examined a range of research and industry developments with the potential to forward those benefits still further.

Dr Ana Heitor, Lecturer in Geotechnical Engineering at the University of Leeds, used her presentation 'Opportunities for low carbon soil stabilisation' to discuss research into soil stabilisation's use of low-carbon alternatives to Portland cement and lime. Portland cement and

stabilisation to improve the properties of expansive clay such as improve plasticity and improve strength. The use of incinerator bottom ash (IBA) offers good performance in terms of swelling and small strain stiffness. The use of IBA promotes waste recycling and reduces landfilling. Ana concluded that as the construction sector transitions towards net-zero adopting low carbon alternatives can significantly reduce carbon emissions and enhance material efficiency.

Enhancing material efficiency was the theme of the next presentation given by Isafan Ghani, Doctoral Researcher at Loughborough University, and Dr Ashraf

Dr Ana Heitor forwarded potential innovative binders

BRITPAVE SEMINAR: SOIL STABILISATION INSIGHTS 19th February 2024

One possible solution

- Numerous sources of calcium carbonate wastes (CCW), e.g., 19kT of eggshells and 5kT of seashells produced p.a. in the UK

Source: Recycling 2016, 1(2), 242-253; <https://doi.org/10.3390/recycling1020242>

lime carry significant embodied carbon. In contrast, emerging low-carbon alternatives such as alkali-activated materials or industrial by-products and ashes provide significant CO₂ saving. In particular, Ana focused on the potential of eggs shells and incinerator bottom ash. The UK produces 19kT of eggshells and 5kT of seashells per annum. Crushed and powdered shells can be used in soil

El-Hamalawi, Reading in Engineering Modelling and Group Leader, Geotechnical and Geomatics Group, Loughborough University. The presentation forwarded the results of a study into the use of quicklime stabilisation to improve the performance of Mercia mudstone for embankment construction. The research simulated real construction conditions by applying

incremental loading to lime-treated soil layers representing staged embankment build-up. Soil samples were treated with 0%, 1%, 2% and 3% quicklime and tested, under sealed, unsealed and full saturated conditions. A 2% lime content was found to provide the most effective balance between performance and efficiency. Higher dosages provided only minor additional improvements. UK specifications have historically set the minimum quicklime addition at 2.5%. The proven performance of just 2% offers significant cost and carbon savings. Isafan concluded the study proved that low-level lime stabilisation can improve the performance of deep embankment layers.



Steve Dunn examined use of soil stabilisation for embankments and earthworks on HS2

The use of soil stabilisation for embankments and earthworks was examined by Steve Dunn, Director at Combined Soil Stabilisation. Referencing the use of soil stabilisation undertaken for the permanent and temporary works for HS2,

he explained how it maximised the re-use of soils. A key learning point was the importance of early planning and collaboration from initial concepts, through to detailing and implementation.

Steve outlined the how the selection of binders, soil suitability, and site trials maximised the re-use of site materials for greater sustainability and provided a wide range of lesson learnt for future soil stabilisation projects. In particular, he highlighted how soil stabilisation offered an alternative to imported stone for temporary works. Steve concluded that soil stabilisation played a crucial role in the HS2 project especially for improving the performance of site-won materials for the earthworks. Lime stabilisation enhanced the condition of site materials to ensure that they met the required stiffness for high-speed rail embankments. Innovative techniques reduced the lime content and so increased the cost savings and sustainability benefits.

Dr Paul Beetham, Associate Professor at Nottingham Trent University and Technical Principal at Mott Macdonald, also examined the efficacy of lower optimum lime dosages as part of his presentation 'Reframing lime treatment carbon calculations'. Believing that lime stabilisation is disproportionately penalised in carbon assessments, Paul called for consideration to be given to new carbonation evidence, the use of lower lime dosages and whole-project earthworks optimisation. He drew upon recent HS2 research and embankment case study where 8000,000m³ of fill was required for a complex junction sequence. The evidence proved that durable stabilisation could be achieved with a lime

Benefits of soil stabilisation

**The UK landfills >25million tonnes inorganic soil each year (we need to do better!)
EU landfills 25% of excavated soil / rock = 444mil tonnes**

Soil stabilisation up-cycles into an engineering material.

Benefits:

- **Lower cost** (avoid landfill tax and high cost of imported aggregate)
- **Reduced road haulage** and impacts (road wear, accidents, traffic, air pollution)
- **Enhanced fill performance** durable to water immersion (climate resilience)
- **Reduce land-use restrictions** from landfilling



Side from Dr Paul Beetham's presentation outlining the benefits of soil stabilisation

content as low as 1.5%. This reduced embodied carbon by up to 40%. This, when combined with realistic lime carbonation rates of 33-50%, significantly reduces the assumed carbon footprint of lime stabilisation. Furthermore, optimising the lime dosage at 1.5% cut emissions by 45-59% compared to granular import, avoided 1.84 million tonnes of quarried aggregate import and saved over £10 million. Given this evidence, Paul concluded that when resource preservation, carbon sequestration, optimised lime dosage and reduced lorry movements are considered then low-dosage lime stabilisation becomes a leading low-carbon option.

The carbon reduction and cost efficiency benefits of soil stabilisation can be further enhanced by the use of blended hydraulic and cementitious binders argued Keagan Badenhorst, Technical Sales Manager, Cemblend, in his presentation 'The benefit of Blends in Soil Stabilisation'. He forwarded that by moving beyond single-binder solutions, blended systems allow performance to be tailored to variable ground conditions. He explained how adjusting blend compositions can improve workability, strength development and durability across a range of soil types and moisture conditions. This flexibility enables fast delivery, reduced programme risk and improved on-site implementation. Keeping to the overall themes of carbon reduction and cost savings, Keagan concluded that lower-clinker and lime-blended binders can significantly reduce CO₂ whilst still meeting performance requirements and offer reduced material and haulage costs.

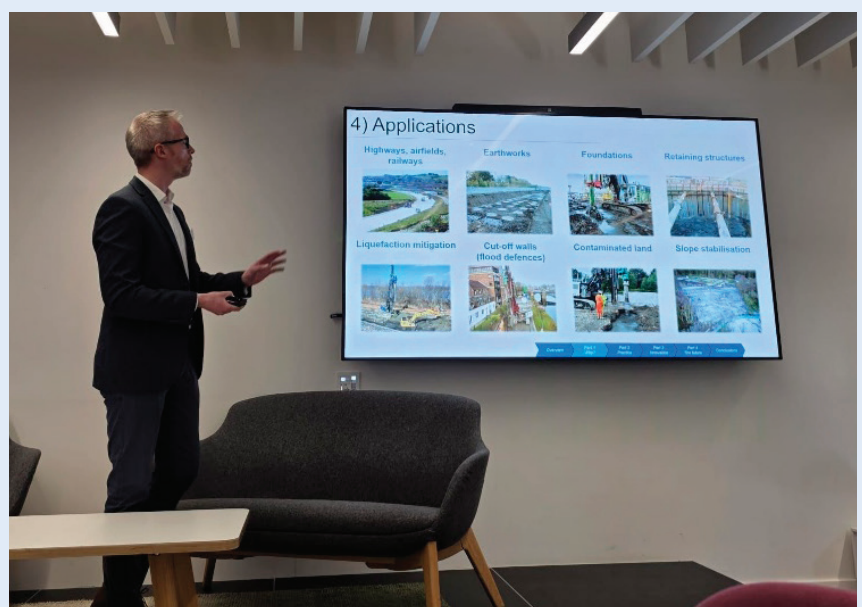
The final presentation of the morning was given by Dr Paul Sargent, Lecturer in Civil Engineering (Geotechnics), Ulster University. His presentation, 'Current practice and innovation opportunities for ensuring the future of the UK's soil stabilisation industry', examined how the Government's plans for expanding the UK's infrastructure will increase the need to develop on sites with poos and challenging ground conditions. This represents a major opportunity for the ground engineering sector, specifically in terms of ground improvement. He

outlined how soil stabilisation using for example lime, Portland cement and blast-furnace binders is a highly versatile soil improvement technique. However, their use must be aligned with the UK's net



Keagan Badenhorst forwarded the benefits of soil stabilisation blend. Photo: Rachel Woodward

zero and circular economic growth targets. This could be achieved by harnessing the potential of the technological and material innovations outlined by the earlier seminar presentations. Paul explains how innovation is important if decarbonisation is to be achieved but underlined that



Dr Paul Sargent examined current practices and innovation opportunities. Photo: Rachel Woodward

innovation required multi-disciplinary collaboration and both private and public investment to undertake the research and development and then convert new ideas into commercial implementation that balances economic costs with environmental consideration.

Summarising the seminar, Stefan thanked the both the speakers and attendees and concluded: "We all recognise that soil is the foundation of our infrastructure both figuratively and literally. As urban development expands and infrastructure demands grow, we are increasingly forced to work with challenging soil conditions. Traditional methods of "dig and dump" are no longer economically or

environmentally sustainable. Soil stabilisation is not merely about improving strength; it is about resilience, sustainability, and efficiency. Whether we are dealing with expansive clays, contaminated soils, soft ground or looking at reducing the impact of carbon.

The goal of this seminar was to bridge the gap between academic research and field practice. This has been achieved and I am confident that the knowledge shared here today will lead to more sustainable infrastructure projects tomorrow."

For copies of the powerpoint presentations contact:
info@britpave.org.uk

VOX POP

WHAT ATTENDEES HAD TO SAY.. . .

"The Britpave soil stabilisation seminar was a really interesting and informative event with some exciting networking opportunities with industry experts"

Asif Memon,
Balfour Beatty

"There was a great range of speakers covering various topics relevant to current and future practices of soil stabilisation which highlighted the importance of collaboration."

Rachel Woodard,
Ulster University

"It certainly was a very insightful day with industry experts sharing their knowledge and providing valuable information about soil stabilisation best practice, research and sustainability"

Darren Ames,
TD Construction Testing

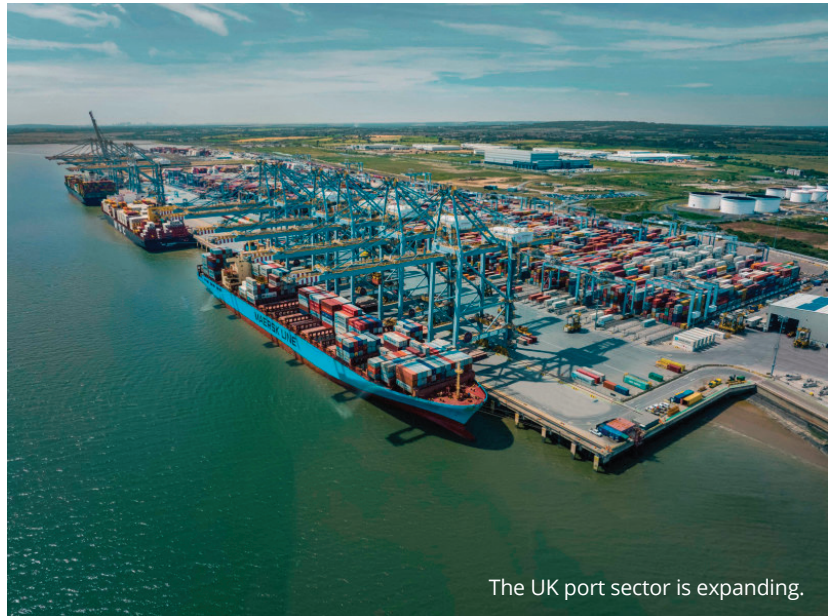
"A fantastic event that brought together a strong crowd of geotechnical engineers, cement and materials scientists, and representatives from industry and academia."

Paul Sargent,
Ulster University

> UK PORT EXPANSION

The ports sector is entering one of its busiest periods in years. Across the UK, port operators are preparing for new infrastructure programmes, energy-transition projects, major construction works and expanded logistics capacity.

The UK government is backing key port expansion efforts to drive job growth and economic gains, supported by strong long-term trade forecasts. New amendments to the National Policy Statement for Ports aim to expedite planning approvals and reduce costs for port operators. These changes are aimed at enabling ports to proceed confidently with major infrastructure projects.



The UK port sector is expanding.

The Department for Transport's freight forecast indicates that, compared to 2023, port traffic is expected to increase by 1.2% to 425.8 million tonnes in 2035 and by 7.8% to 453.5 million tonnes in 2050. Growth will be led by a 56.7% increase in unitized freight and a 61.7% gain in dry bulk cargo. General cargo freight is also forecasted to rise, although at a slower rate of approximately 12%, partly due to the increased containerization of goods and the decline in forestry products.

A pipeline of 2026 port projects has been collated by the Sustainable Ports Association. They include:

> Great Yarmouth – Southern Terminal expansion,	> Portland – offshore wind and project-cargo development,
> ABP Humber – Stallingborough Interchange logistics development,	> Port of Blyth – expansion of energy, subsea and renewables capability,
> Port of Tyne – offshore wind and clean-energy logistics growth,	> Workington – planned estate and operational improvements,
> Teesport – Freeport-driven industrial and logistics activity,	> Shoreham Port – sustainability-focused upgrades,
> Port of Cromarty Firth – electrification and energy transition planning,	> Milford Haven – hydrogen-ready and clean-fuel infrastructure,
> Port of Liverpool – warehousing expansion and terminal improvements,	> Holyhead – freight capacity and efficiency upgrades,
> Port of Felixstowe – rail and yard modernisation,	> Port of Bristol – warehousing and logistics growth,
> London Gateway – expansion across its logistics park,	> Grangemouth – container and landside infrastructure improvements,
> Southampton – equipment and capacity upgrades.	> Montrose – offshore-energy support expansion,
> Dover – improvements to freight flow and operational infrastructure,	> Harwich – enhancements across RoRo, cargo and energy logistics.

An example of the significant investment into port is the current DP World 4-year £1 billion London Gateway expansion which includes new 400m-long all-electric berths and a second rail terminal. When complete the expanded container port, part of the Thames Freeport, will be able to accommodate six of the world's largest container ships, which will be served by Europe's tallest quay cranes. Meanwhile, the Government has recently announced a £64 million investment in Port Talbot, Wales, for a dedicated floating offshore hub. The investment will allow Associated British Ports to complete the essential and design and engineering work needed to build the facility. The new port will unlock an initial 4.5GW of floating offshore wind projects in the Celtic Sea, enough to power 6.5 million homes.



Work is underway on the North Hykeham relief road

> NORTH HYKEHAM RELIEF ROAD UNDERWAY

Following the Government's confirmation of £110m of funding towards to the £218m cost of Lincolnshire County Council's North Hykeham relief road scheme working is now underway for the new dual carriageway between the A46 and A15. Britpave member Balfour Beatty is expected to complete the job in May 2029.

The Department for Transport allocated £110m back in November 2020 – more than five years ago – from its 'large local majors' programme. Only recently has it finally agreed to actually release the money. The remaining cost, currently estimated at between £203m and £218m, will be funded by Lincolnshire County Council and developer contributions, which the council will forward fund.

The road is expected to improve connections into Lincoln, reduce traffic congestion in surrounding villages and open up development land for up to 4,500 new homes to be built around Lincoln.

Lincolnshire County Council selected Balfour Beatty to build it back in April 2022 under a pre-construction services agreement.

> A4130 CONTRACT AWARDED

Britpave member VolkerFitzpatrick has been awarded the contract by Oxfordshire County Council to build the Didcot Science Bridge.



VolkerFitzpatrick will create a dual carriageway along the A4130 east of the A34 Milton Interchange and a new single carriageway bridge across the railway line and Milton Road. It is the latest deal under a £332m scheme to improve infrastructure around Didcot.

The three-span Science Bridge will cross over the existing A4130, the Great Western mainline railway, and Milton Road. The road will continue through the former Didcot A Power Station connecting back into the A4130 north of Purchas Road roundabout with a T-junction.

The dualling of the A4130 will repurpose the existing carriageway, using the current southern ditch to create a central reservation and adding two new lanes to the south. The existing A4130 carriageway will travel eastbound towards Didcot and the newly constructed lanes will travel westbound towards Milton interchange.

Main construction is expected to start in the Spring, and to last approximately two years.



A46 Walsgrave junction upgrade gets the green light

➤ MAJOR ROAD SCHEME GETS THE GO AHEAD

A multi-million pound roads scheme designed to boost the economy by tackling congestion in the Midlands has been given the green light.

Lord Hendy, on behalf of the Secretary of State for Transport Heidi Alexander, has approved a Development Consent Order (DCO) for the A46 Walsgrave junction upgrade project, which is part of the crucial Trans-Midlands Trade Corridor between the M5 and Humber Ports.

The A46 is one of the UK's major trade routes, serving millions of people, supporting jobs, and connecting inland manufacturing and distribution hubs with major ports.

The Walsgrave junction connects the A46 to the B4082 and is currently a three-arm priority roundabout, which causes substantial congestion in the area. The new-look junction will allow for a free flowing A46 carriageway while also enabling drivers to enter and exit the local road network.

National Highways Project Manager Emma Winter said: "Motorways and major A roads play a key role in keeping the UK economy moving, carrying a third of all traffic and two thirds of

freight. The A46 is a major trade corridor between the South West, the Midlands and the North, which is why we need to remove this bottleneck on the outskirts of Coventry.

"The new-look Walsgrave junction will reduce delays by delivering much-needed additional capacity, better connectivity and safer journeys for the 57,000 drivers using the road every day."

Construction on the Walsgrave junction is expected to begin in autumn 2026, with the £112 million scheme opening to traffic in 2028.

The scheme is categorised as a Nationally Significant Infrastructure Project under the Planning Act 2008, meaning it required an application for a DCO to obtain the equivalent of planning permission to move into the construction phase. There is now a six-week period in which parties can lodge an intention to legally challenge the decision.

➤ SOIL STABILISATION MEETS THE CHALLENGE OF SATURATED SOILS

One of the wettest Januarys on record has resulted in the construction industry having to deal with some of the most challenging ground conditions for years.

The Met Office confirmed that January 2026 was one of the wettest on record due to a series of Atlantic low-pressure systems. Northern Ireland and England were particularly wet with 70 per cent and 50 per cent more rain respectively. With few days of drier conditions, the ground has become saturated resulting in construction projects having to stop operations.

The use of soil stabilisation offers a solution. Soil stabilisation is a well-established civil engineering technique that treats and strengthens poor or unsuitable soils using cementitious binding materials. It is particularly useful in helping to dry saturated soils. When quick lime is added to a wet soil, the soil rapidly becomes drier and slaked lime is produced. This is a highly exothermic reaction, which, together with the chemical combining of water with quick lime,

significantly reduces the moisture content of the soil. In addition, a further change happens where the clay undergoes a 'cation exchange' whereby the soil becomes less clay-like and more sand like. This further adds to the drying process.

"Soil stabilisation binders are used to improve unsuitable soils that are soft and wet with low shear strength and low bearing capacity. Once treated with the binders these soils will be fit for use as general/ structural fill or even as sub-base material for pavement and foundation construction," explained Stefan Stansfield, Chair of the Britpave Soil Stabilisation Task Group. He added: "Furthermore, the treatment is carried out in-situ. The treated soils may be retained and used on site as opposed to being taken away via multiple lorry trips and dumped at tips."

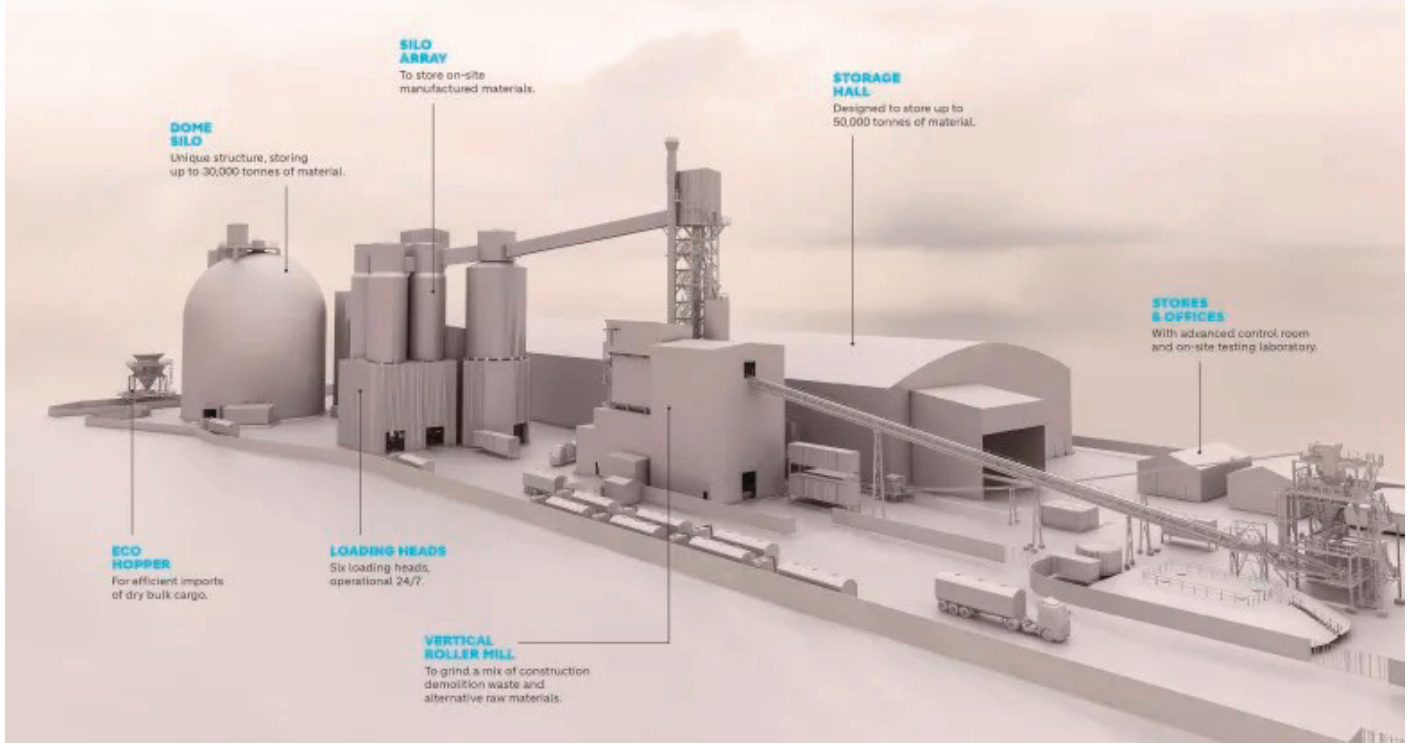
➤ RESERVOIR RESULTS

Britpave member Combined Soils Stabilisation carried out an earthworks and lime stabilisation improvement contract at the Clydach Reservoir in South Wales.

The site was wet and no suitable fill materials were available due to them being too wet to achieve the required shear strength needed as acceptable engineered fill. The soils also had cobbles and boulders present throughout.



CSSL's work was to undertake the earthworks and lime modify the wet soils that had been stockpiled. Due to the cobbles and boulders and to the constrained working space CSSL used a FAE rock crusher/stabiliser. The FAE mixer was able to handle the boulders without risk and broke the material down to a size of less than 100mm. The earthworks involved placing the soils for treatment, lime modifying, then pushing the company's Komatsu D51 dozer before the final stockpile was formed with an excavator. The stockpile was sealed so the soils could be taken as and when required by the main contractor. Whilst undertaking the works the environment agency came to witness the works to see how else lime stabilisation can be used to prevent muck away on schemes. This process has an approx. 60% re-carbonisation of the CO₂ used to produce the quicklime when mixed into the soils making lime modification and stabilisation the number one environmental choice for any site, by removing the need for muck away followed by import of suitable materials.



With a storage hall and dome silo that can hold 50,000 tons and 30,000 tons of cementitious materials, Tilbury will significantly expand Holcim UK's cement production capacity, enhancing our ability to serve customers across Southern England and beyond with an unparalleled, future-ready product range – 24/7.

➤ ADVANCES IN NEW TILBURY CEMENT WORKS

Britpave member Holcim UK, is moving ahead with the construction of its state-of-the-art Tilbury Cement Works, with steelwork and mechanical equipment installation of its new vertical roller mill (VRM) targeted for completion in 2026.

The VRM is part of a multi-million-pound investment from Holcim UK and will grind a range of raw materials including Granulated Blast Furnace Slag (GBFS) and Recycled Concrete Fines (RCF) that will enable the production of low-carbon cementitious products. Electrical installation, testing and commissioning of the full grinding system are planned for completion by the end of 2026.

This is another significant milestone at the flagship facility as it moves towards initial operations commencing in 2026. Once fully operational, the facility will allow Holcim UK to serve its customers across the South of England 24/7 with conventional, low carbon and circular cementitious products, from six loading heads and five weighbridges.

Alongside the VRM, other major investments at the advanced, multi-million-pound facility include a ship-to-shore conveyor, 50,000-tonne capacity raw material storage hall and the UK's first ever cement dome silo with a storage capacity of 30,000 tonnes. Five conventional steel silos will provide a further 6,500 tonnes of space for a variety of cementitious products.

Tim Fry, Project Manager at Holcim UK, said: "Tilbury is built around one clear promise, which is making sustainable construction a reality. The systems being installed at our Tilbury Cement Works are not only investments in innovative equipment and infrastructure,

but a commitment to our sustainable innovation pipeline. Alongside our promise to increase our low-carbon and circular products portfolio, we will provide absolute reliability with a consistent supply of cementitious materials."

The investment responds to the increasing appetite for circularity and lower carbon construction ambition in the industry. Holcim UK's recent Circularity Survey revealed that 97% of respondents believe that embracing circularity at their organisation is important, compared to 79% in 2024.

To ensure Tilbury is sustainable in both its output and its construction, the site is being developed on circular principles. The new plant is situated at a legacy location of Holcim UK's, where over 25,000 m³ of concrete has been recycled, together with 10,000 tonnes of reclaimed asphalt and 20,000 tonnes of excavated material repurposed through Holcim UK's waste management business. The build also utilises Holcim's own eco products, including ECOPact® low-carbon concrete and ECOPlanet® cement.

Mohamed Alami, Managing Director of Holcim UK's Cement Division, said: "This investment is about more than just capacity - it is about our impact. Tilbury embodies our strategy in action, bringing together innovation, sustainability, and scale to shape the next generation of construction in the UK."

CONCRETE CANAL SOLUTIONS FOR A CHANGING CLIMATE

Recent catastrophic failures have focussed attention on the durability of the UK canal system, much of which was built 250 years ago. Modern concrete and cementitious solutions could significantly extend the performance life of existing canals and provide a long-lasting, durable solution for both old and new planned waterways.

On New Year's Eve 2024, rising water on the Bridgewater Canal in North Cheshire hid the ongoing softening of the 250-year-old earth embankment. The embankment collapsed and water from almost two miles of the canal flooded the surrounding farmland. Fast forward a year later and on 22nd December 2025 the Llangollen Canal in Whitchurch, Shropshire, suffered from a failed embankment with resultant flooding and three narrowboats falling into a 50-metre crater in the canal bed.

The UK's ageing canal system is subject to a modern problem: the impact of extreme flooding and drought events resulting from climate change. Most canals are made with built-up earth embankments and linings of compacted clay. Small cracks in the clay lining allow water to seep through. The more water that seeps through the greater the potential for internal erosion of the embankment resulting in failure and collapse. External embankment erosion can occur when heavy rainfall causes water to flow over the top of the banks and so soak and weaken the bank from the other side. Extreme rain and storm events increase this water pressure. Summer hot weather and drought events cause embankments to dry out and crack. These cracks allow winter rainfall to seep into and saturate embankments increasing the potential for instability and failure.

The importance of the canal system is underlined by the Canal and River Trust, set up to manage over 2,000 miles of waterways, reporting that the use of canals is busier than it has ever been, even at the height of the industrial revolution. Some 35,000 boats are registered to use English and Welsh canals; the UK canal system supports over 60,000 jobs and brings in an annual £1.5 billion from water-based tourism and jobs. Future major canal projects include the proposed Grand Union Canal Transfer scheme to bring drinking water from the Midlands to the

Southeast and the construction of a new 26km canal linking the Grand Union Canal in Milton Keynes to the River Great Ouse in Bedford as part of the Oxford-Cambridge Growth Corridor.

Soil stabilisation is a well-established civil engineering technique used to improve and strengthen soils. An important benefit of soil stabilisation is that it is carried out in-situ. For canal projects this means that saturated soils can be rendered and canals reconstructed without

the impact of multiple lorry trips disposing or importing additional soils and aggregates.

The validity of using soil stabilisation for canal embankment and base construction has been confirmed by recent research⁽¹⁾ by Britpave and Nottingham Trent University which underlined its long-term performance

and addressed the misconceptions concerning potential leaching in water. The research included a range of extreme immersion tests that proved that the potential of leaching cementitious materials into water was extremely low, especially if good industry soil stabilisation practices are followed.

Cementitious solutions also include slipformed concrete canal linings. These offer a durable and long-lasting alternative to puddled clay. Concrete linings minimise water loss through seepage, negate erosion of canal banks, reduce the need for ongoing maintenance, and provide high levels of structural stability that reduces the risk of collapse.

For maintaining the existing network or constructing new canals, soil stabilisation and concrete linings offer durable, long-lasting solutions that are resilient to the impacts of climate change.

1. The Leachability of Stabilised Soils, Research Report, Britpave, 2025



Bridgewater Canal in Dunham Massey was breached for the first time in over half a century. Photo: Altrincham Today

PROGRAMME FOR CONCRETE BARRIER INSTALLATION FALTERING

Britpave has highlighted concerns over the growing evidence that the programme for installing safer concrete barriers is faltering. This is a significant road safety issue as the increasing weight and number of heavy electric cars calls for the programme to replace steel motorway barriers with stronger concrete to be expanded in order to minimise the potential for deadly crossover accidents.

Existing motorway steel barriers are proving inadequate. They are simply not designed to contain the increasing weight of modern cars. Designed to meet the 20-year-old requirements of EN 317 level N2 for containment for cars weighing up to 1.5 tonnes, steel barriers are out-of-date and fail to take account of not just the increased weight of many petrol and diesel SUVs and people carriers, but also the far heavier electric cars which, due to the additional weight of banks of batteries, can weigh up to 2.2 tonnes.

In comparison, rigid concrete barriers (RCBs) offer a high H2 containment level that has been tested to contain vehicles of up to 13.5 tonnes. Indeed, in real-life crash scenarios RCBs have successfully contained heavy goods vehicles weighing up to 44 tonnes. In addition, RCBs have a performance 50-year design life that requires minimum maintenance or little or no maintenance after the majority of vehicular impacts. Steel barriers have a design life of just 20 years, need ongoing maintenance, and need to be replaced regularly following impact.

In 2005, following a Britpave campaign, the then Highways Agency recognised the increased strength and enhanced long-term performance of RCBs and mandated that the more robust H1 concrete barrier rather than N2 steel barrier be the default option for new motorway construction where the average daily traffic level is 25,000 vehicles per day. In 2022, National

Highways started a three-year programme to replace 63 miles of steel barriers on existing motorways that were reaching the end of their 20-year design life. The programme included sections of the M6, M62, M42, M1, M4 and M5.

However, there is increasing evidence that the programme to install safer concrete barriers is not only faltering but that National Highways is going against its own mandate. A growing number of motorways projects are replacing end-of-life steel barriers with steel barriers rather than with concrete. Parliamentary Questions put to the Secretary of State for Transport on behalf of Britpave have revealed that Departures from Standard to replace steel barriers with steel have been granted a number of recent projects including sections of the A1(M) J37-38, M5 J23-24, M6 J37-38, M4 J13-14 and the A1(M) J61-62.

Concrete barriers offer unrivalled strength, safety, and whole life performance benefits. Yet only 5% of the motorway and major trunk road network benefits from their installation. This supports the concerns that the mandate to replace steel barriers with safer concrete barriers is not being fulfilled. The result is that the ageing steel central reservations of the UK roads network are increasingly unable to cope with the demographic of modern traffic of traffic.



Fast installation of RCB barrier. Photo credit PJ Davidson

> MEMBERS' NEWS

> NEW BRITPAVE OFFICE



Britpave has moved. It's new address is: Richmond House, Oldbury, Bracknell, Berkshire RG12 8TQ.

The telephone number and email addresses remain the same. What is new is that the new office offers Britpave members with free hot desk/meeting facilities.

> MOTT MACDONALD NEW FACES



Mott MacDonald has bolstered its aviation, maritime and offshore business with the appointments of Jason Buckland as aviation director and Kim Yates as sustainable aviation and green ports market lead. The two bring more than 55 years of combined industry leading experience to support clients across aviation and ports. Jason Buckland joins Mott MacDonald to provide strategic leadership across its UK & European aviation portfolio, supporting major clients including Heathrow Airport and Manchester Airports Group. Kim Yates takes on a focused role within the aviation, maritime and offshore team as sustainable aviation and green ports market lead, building on her long-standing cross sector leadership in sustainability and decarbonisation.

> NEW MORGAN SINDALL DEFENCE SECTOR LEAD



Morgan Sindall Infrastructure has appointed Gary Shuttleworth as sector lead for its defence business, as the company seeks to meet growing national demand for UK defence infrastructure. Shuttleworth brings more than 30 years of senior leadership experience across defence, nuclear, and national infrastructure programmes. He joined Morgan Sindall in 2017 as programme director and has directed major programmes, engaged stakeholders, and delivered results on complex projects throughout his career.

> BRITPAVE MEMBERS

As the focal point for in situ concrete and cementitious infrastructure solutions, Britpave offers its members a recognised industry voice, market sector development and beneficial industry networking opportunities. Britpave members include clients, consultants and engineers, contractors, material and plant suppliers and academia.

AECOM Ltd - www.aecom.com

Atkins Ltd - www.atkinsglobal.com

Balfour Beatty Ltd - www.balfourbeatty.com

Blue Phoenix Ltd - www.bluephoenixgroup.com

Buxton Lime - www.buxtonlime.com

MPA Lime - www.mpalime.org

Cemblend Ltd - www.cemblend.co.uk

CEMEX UK - www.cemex.co.uk

Combined Soil Stabilisation Ltd - www.combinedssl.co.uk

Costain Ltd - www.costain.com

Extrudakerb - www.extrudakerb.com

Gomaco International Ltd - www.gomaco.com

Heidelberg Materials UK Ltd - www.heidelberg.co.uk

Holchim - www.holchim.com

Integrated Solutions Contracting Ltd - www.iscontracting.co.uk

Jacobs - www.jacobs.com

Lagan Aviation and Infrastructure - www.laganaviation.com

Morgan Sindall Construction and Infrastructure Ltd - www.morgansindall.com

Mott MacDonald - www.mottmac.com

Norder Design Associates Ltd - www.norder.co.uk

On Grade Ltd - www.ongradeltd.co.uk

PJ Davidson (UK) Ltd - www.pjd.uk.net

Power Better Soil Solutions - www.powerbetter.biz

RJT Excavations Ltd - www.rjtexcavations.co.uk

Remediology (SE) Ltd - www.remediology.com

Roadgrip Ltd - www.roadgrip.co.uk

SGE - www.sgeworks.co.uk

Smith Construction (Heckington) Ltd - www.smithsportscivils.co.uk

Tarmac Ltd - www.tarmac.com

VolkerFitzpatrick Ltd - www.volkerfitzpatrick.co.uk

Wedgewood Groundworks - www.wedgewoodgroundworks.co.uk