

BRITPAVE NEWS

ISSUE 34 - SPRING 2017

Backing for Crossrail 2

Growth reliant on
infrastructure delivery

Revised DIO 033
specification published

New Britpave
busway report

Soil stabilisation help to fix
broken housing market

Highways England's
RIS2 plan

Britpave members' news



*Improve
infrastructure
to speed up economy*

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EDITOR'S NOTE

The need for a modern, efficient national infrastructure that forwards the social-economic well-being of the UK has never been more apparent. It is widely understood that a well-developed infrastructure is critical for providing the necessary conditions for businesses to grow, to attract inward investment and to enable the country to socially function. Yet, our road and rail networks, airports and ports are all suffering from lack of capacity and congestion.

There are signs that the government is, at last, translating rhetoric to real action. The delivery of RIS1 and now planning for RIS2 from Highways England show what can be achieved when real investment is met with long-term planning. Similar determination is required for increasing the capacity of not just Heathrow but our regional airports too. For delivering not just HS2 but also Crossrail 2. For ensuring that the UK regions, and not just the South East, have the infrastructure investment necessary to realise their economic potential.

Britpave has a direct role to play in the delivery of a modern infrastructure by working with client bodies to develop best practice, revising and updating industry specifications and forwarding a range of design and construction options for consideration to ensure that the best infrastructure solution is chosen. The Association supports its members' deliverance of those solutions by providing a forum for industry networking, enabling the exchange of ideas and experience and the development of new approaches.

And that is not the only role to consider. Post-Brexit, if the UK is to have a meaningful global role then it must have the modern infrastructure to support it.

Steve Elliott

Britpave General Manager



The British Cementitious Paving Association

Britpave, the British In-situ Cementitious Paving Association, promotes the better and greater use of concrete and insitu cementitious infrastructure solutions. Its members include major contractors, specialist equipment and material suppliers, consulting engineers and interested trade associations. Together, they provide a single voice for the insitu concrete paving industry.

Britpave News is published regularly by Britpave with the aim of keeping members up to date on Association matters, industry developments and member company news and views. Please help keep us in the picture on all of this by sending us any relevant information that you feel may be of interest to the membership.

Disclaimer: All articles are published in good faith. Britpave will not be held responsible for any errors, misinformation and opinions in articles submitted for this newsletter.

COUNCILS UNITE TO CALL ON GOVERNMENT FOR CROSSRAIL 2 BACKING

Councils from across London and the South East have joined together to pledge their support for Crossrail 2 and urge the government to give the scheme its full backing. Crossrail 2 would connect National Rail networks in Surrey and Hertfordshire with an underground tunnel beneath central London between Wimbledon and Tottenham Hale and New Southgate.

Councils stretching from Cambridge to Portsmouth and London Councils, which represents London's 32 borough councils and the City of London, have written to the Chancellor, Philip Hammond, and Transport Secretary, Chris Grayling, to highlight the project's importance to them, and to stress that the benefits of the railway would be felt nationwide.

Crossrail 2 will transform journey times and connectivity from the Solent to the Wash. It will relieve congestion on the overcrowded key rail lines from Portsmouth to Cambridge, and link with HS2 at Euston. It will also relieve pressure on the Underground, as the population of the South East region continues to grow rapidly.

With the overcrowded rail network threatening to stunt economic growth, the dangers of delaying the project are clear. For commuters travelling into London, overcrowding is already intolerable and, without the much needed additional capacity Crossrail 2 provides, stations including Waterloo, Clapham Junction and Euston will simply buckle under the strain of chronic overcrowding, while the London Underground will face more regular closures and

some of the benefits of HS2 will be lost in chaotic transport connections.

The councils highlighted that the new railway will bring economic benefits across the UK, boosting the country's economy by up to £150bn. Crossrail 2 would support some 200,000 new homes and 200,000 jobs, and generate 60,000 supply chain jobs across the UK, including 18,000 apprentices. It would open up areas for growth and new jobs, including in the Cambridge-Stansted corridor and in the south west of London, and local businesses will also benefit from improved capacity across the region.

The letter is the latest in a series of support for Crossrail 2, following backing from more than 70 business leaders as well more than 60 leading figures from the property industry and housing associations. London has already committed to meeting half the cost – unlike other nationally significant projects that do not receive such levels of local funding. But now the project needs a commitment from ministers.

The Mayor of London, Sadiq Khan, said: "The support of local councils from Cambridge through to Portsmouth shows just how important Crossrail 2 is, not just to London but to the entire South East. It will provide much-needed relief for commuters who are forced to travel on overcrowded rail lines every single day, and unlock thousands of homes and jobs across the region. But Crossrail 2 is not just vital to the South East, its economic boost is vital to the whole of the UK. That's why it's so important that the government gives us it's backing to proceed as soon as possible."

TfL has submitted an updated business case and funding plan to the Transport Secretary, who is due to make a decision in the spring on further Government support. Construction could start in the early 2020s and the railway could be operational by 2033.

CONSTRUCTION INDUSTRY GROWTH RELIANT ON INFRASTRUCTURE DELIVERY

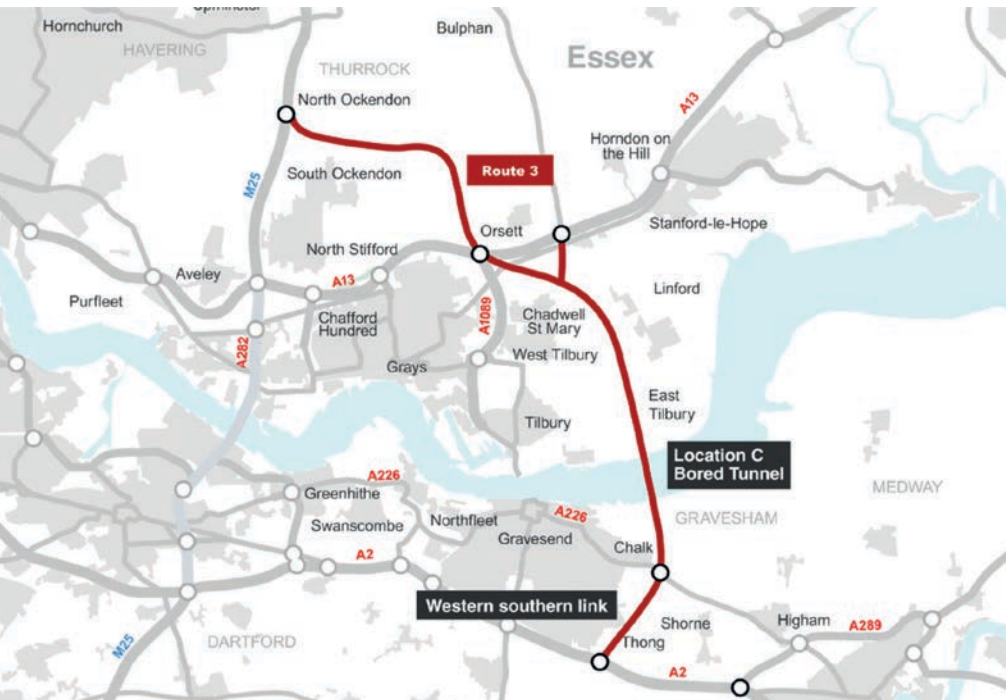
Activity in the construction industry is rising at a faster pace following the EU referendum than initially expected according to the latest forecasts by the Construction Products Association (CPA). Construction output is expected to rise each year between 2017-2019, by 1.3% in 2017, 1.2% in 2018 and 2.3% in 2019.

While the figures may fuel hope of a resilient UK construction industry amid Brexit-related anxieties and rising costs, the growth masks a considerable difference in activity across the key construction sectors. Infrastructure projects are expected to be the industry's main growth engine, driven by a strong National

Infrastructure and Construction Pipeline valued at £300 billion over the next four years. In particular, growth to 2019 is expected to be primarily driven by a 34.5% increase in infrastructure activity due to major projects in the energy, rail and water sub-sectors, which would offset expected falls in commercial and industrial construction.

CPA believes that looking forward, given the dependence of construction industry growth on activity in the infrastructure and private housing sectors, it is essential that government focuses on delivery of infrastructure projects in its National Infrastructure and Construction Pipeline.

➤ PREFERRED ROUTE FOR NEW LOWER THAMES CROSSING ANNOUNCED



Transport Secretary Chris Grayling has announced the preferred route for a new Lower Thames Crossing. The new crossing will create a new link between the A2 and the M25 and reduce the burden on the busy Dartford Crossing. The Lower Thames Crossing is expected to carry 4.5 million heavy goods vehicles in its first year.

The planned route will run from the M25 near North Ockendon, cross the A13 at Orsett before crossing under the Thames east of Tilbury and Gravesend. A new link road will then take traffic to the A2 near Shorne, close to where the route becomes the M2. This route was identified by the majority of nearly 47,000 respondents to a consultation on a new Lower Thames Crossing as the best solution for reducing traffic and congestion at the Dartford Crossing and for boosting the economy by improving links to London and the Channel ports.

Welcoming the announcement Christian Brodie, Chairman of South East Local Enterprise Partnership, said: "This is excellent news for Kent and Essex and will have a significant economic impact. The investments announced will strengthen the resilience of our UK and European connections – imperative as we now move towards Brexit. However, the benefits go far beyond Kent and Essex. With the current Dartford Crossing already operating at capacity and freight traffic continuing to grow, the new crossing will also support the government's wider economic aspirations for the Northern Powerhouse and Midlands Engine."

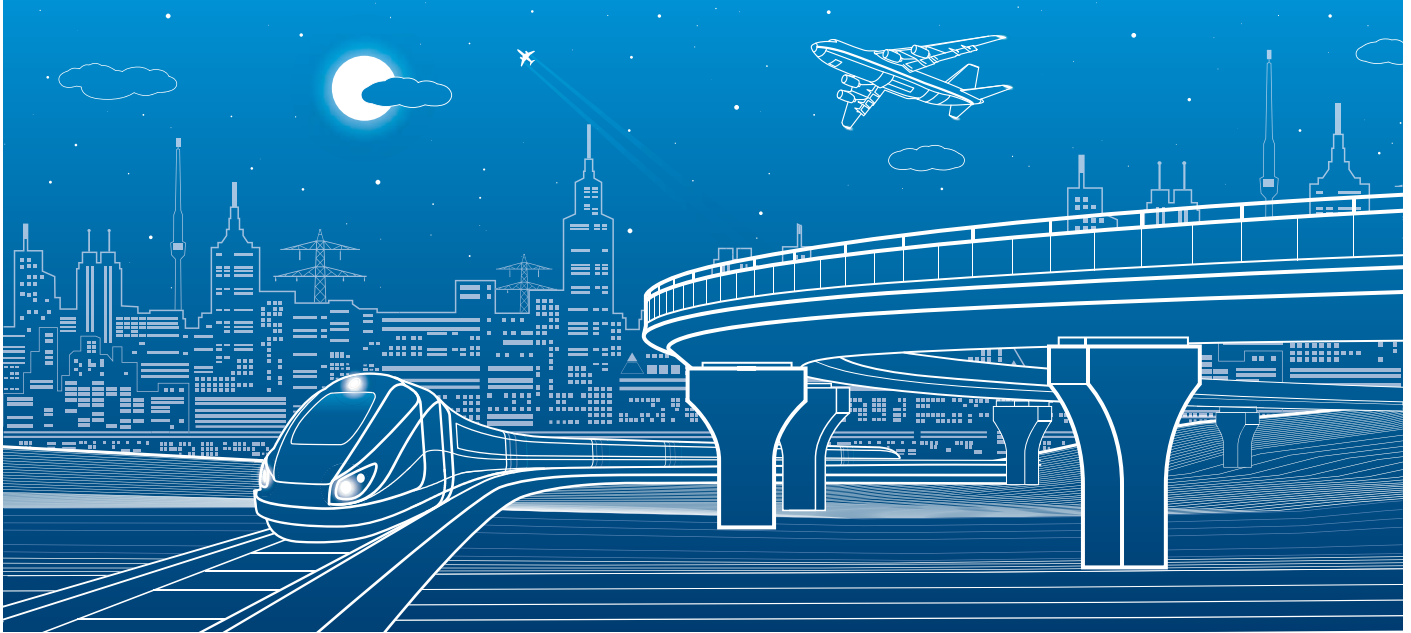
➤ FUNDING BOOST FOR ENGLAND'S ECONOMIC HEARTLAND

Transport Minister Andrew Jones MP has announced £625,000 of government funding for England's Economic Heartland. Speaking at the recent Heartland conference, the Minister welcomed the Heartland initiative and emphasised the importance of local partners coming together to provide strategic leadership. The conference brought together over 200 leaders from local authorities and the business community as England's Economic Heartland Strategic Alliance took another major step forward with its work on developing a long-term transport strategy.

Andrew Jones said: "I am delighted to announce £625,000 of government funding for England's Economic Heartland to help shape its transport priorities for the future and to help deliver the government's housing and economic growth objectives for the Oxford to Cambridge corridor.

Good transport links help to connect people, encourage growth and are crucial to building an economy that works for everyone. We look forward to working closely with the partnership and we want to see it speak with one voice for the benefit of everyone living, working and travelling in the region which contains some of the fastest growing cities in the UK."

Welcoming the announcement of government funding Cllr Tett said: "The government's support for England's Economic Heartland is fantastic news. The Strategic Alliance provides leadership on issues of strategic importance not just for the Heartland but the rest of the UK. The economic importance of the Heartland to the UK economy is being heard in Whitehall and we will continue to build upon the foundations laid by the Strategic Alliance."



▶ IMPROVED INFRASTRUCTURE COULD ADD BILLIONS TO UK ECONOMY

A total of £175bn could be added to the UK economy if infrastructure across England's regions is improved, a new report has found.

The Confederation of British Industry's Shaping Regional Infrastructure report found that improvements to regional infrastructure would help boost productivity and improve England's regions links with international markets.

The report looked at nine regions across England and found that the most productive area (London) produced three times the value of economic activity than the least (West Midlands).

It also noted that nine out of 10 of England's regional cities were performing below the European average. According to the CBI, if every English region's overall growth matched that of its best-performing local area between 2004 and 2014, £175bn could be added to the UK economy by 2024.

The report sets out six strategic infrastructure priorities for each of the English regions, plus the following four cross-cutting priorities which are common to all regions:

Linking regions to harness growth: Businesses across the country cite the need to improve connectivity within and between regions. For example, reducing travel times between cities in the North of England, via the best mode of transport, could provide access to a working population of up to 16 million, matching the number within an hour of London today.

Connections with international markets: Firms also recognise the need to better link regions to international markets to increase and encourage export capabilities. To this end, businesses cite the need for a long-term aviation strategy within a fully integrated transport system, alongside clear improvements in surface access to ports and airports.

Regional governance: In addition, businesses across the country are seeking greater clarity on where future infrastructure decisions will sit for the region in which they operate. Business confidence in devolution is highest in the regions where there has already been the greatest clarity, for example across the Northern Powerhouse and Midlands Engine. While we should not attempt to roll out a one-size-fits-all approach, it is essential that each part of the country has the means and ambition to take forward a shared vision of its own, which complements a long-term national strategy.

Joined up infrastructure: Finally, businesses in all regions voice a need for a more joined up and strategic approach to planning and delivery across the different types of infrastructure. In particular, the need to better link up local housing plans with economic infrastructure was seen as a priority, with businesses also keen to highlight the role of technology in improving the UK's infrastructure.

As the UK begins its exit from the EU, improved infrastructure will be needed to better link our cities and regions with each other, as well as with the rest of the world.

CBI infrastructure director Rhian Kelly said: "England's infrastructure is the arteries and veins without which the country its economy and businesses simply would not function.

"But with only a quarter of firms satisfied with the state of their region's infrastructure, it's vital the pace of taking action and delivering improvements is stepped up."

CBI will be presenting at the Britpave infrastructure conference in October. Copies of the report may be found at: www.cbi.org.uk/insight-and-analysis/shaping-regional-infrastructure/

NEW REPORT CALLS FOR REGIONAL AIRPORT EXPANSION

A new report from Britpave member Balfour Beatty claims that a third runway at Heathrow will not be enough to address overcapacity at UK airports and that other airports around the country should also be allowed to expand.

The report, 'Getting off the ground - an aviation policy for a post-Brexit Britain', highlights the lack of a clear airports strategy from the government and outlines a series of conclusions to address key issues, including relaxing planning legislation to give regional hubs a boost.

The government chose Heathrow over Gatwick as its preferred site for a new runway at the end of 2016. Balfour Beatty supports a third runway at Heathrow. However, one additional runway will not be enough to provide sufficient capacity to meet increasing demand over the long-term, given that international connectivity will be more important than ever post-Brexit. The Balfour Beatty report is sceptical about whether the third runway at Heathrow will ever be built, claiming that legal and political obstacles will mean the planning process is likely to be delayed "well into the 2020s". As a result, the report recommends that airports elsewhere, especially in Scotland, Birmingham and Manchester, should be allowed to expand. The report also calls for the extending of Crossrail to Stansted and for a further runway to be built at Gatwick.

The vote to leave the EU must be taken into account in considering aviation capacity requirements as lack of runway capacity has an impact on the trade negotiations the government will conduct post-Brexit, with many countries likely to require access to Heathrow for their national carrier as part of any deal. Nor does the UK have direct flights to some of the countries it will wish to target as key trade partners.



Post-Brexit, it will be even more important that all parts of the UK are well-connected. The Northern Powerhouse for example, needs direct routes to global markets, as do manufacturing industries in the Midlands, and Cambridge and its growing IT hub. The growth in demand for air travel demands expansion not just at Heathrow and Gatwick, but at other airports across the country, including for example, Scotland, Birmingham and Manchester.

Leo Quinn, chief executive at Balfour Beatty, said: "Consideration of where to add capacity must be given not just to London and the South-East but all regions. Failure to take this UK-wide approach could see our trade with international markets and potential economic growth fail to get off the ground."

Copies of the report may be downloaded at: www.balfourbeatty.com/media/244501/aviation-paper-v2-online.pdf

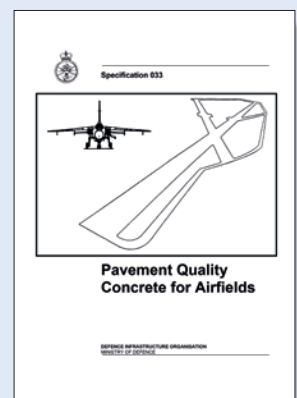
REVISED AIRFIELD PAVEMENT SPECIFICATION PUBLISHED

The latest version of the DIO Specification 033 Pavement Quality Concrete for Airfields has been published by the Defence Infrastructure Organisation.

Britpave members provided important input into the new version which includes revisions to mix designs, jointing details and methodology. Andrew Horan, DIO Senior Airfield Pavement Engineer thanked Britpave for its involvement saying: "Many thanks to Britpave for enabling DIO to liaise with its members and to make use of the valued industry input to the document. The completion of this document is a testimony to the close working relationship between Britpave members and

Defence Infrastructure Organisation".

Copies of the DIO Specification 033 are available as a download from www.britpave.org.uk/shop.ink





➤ IMPROVING THE RELIABILITY AND SPEED OF BUS JOURNEYS

A new report outlining the socio-economic benefit of bus travel and demonstrating how these benefits can be further enhanced via the provision of concrete guided busways has been published by Britpave.

Accounting for two out of three public transport journeys, the bus plays an important, and can play an even greater, role in improving local commuting, reducing congestion and carbon emissions and creating more liveable cities. The figures speak for themselves. Bus commuters generate £64 billion in output annually. 33% of city centre visitors made their most recent trip by bus, more than any other mode of transport including the car. Best used bus services in urban areas reduce carbon emissions from road transport by up to 75%.

However, the report 'The Benefits of Concrete Guided Busways', points out that the potential of bus travel is being stifled by increased congestion. For example, bus journey times in the West Midlands have increased by 8% over the last seven years. In Oxford, which has one of the UK's highest level of bus usage, bus speeds have fallen to below 10mph. Furthermore, the forecasted 55% increase in traffic by 2040 could see bus passenger numbers drop by 14% every year putting the future of the bus sector under threat.

Britpave believes that the solution is the guided busway that segregate buses from other road traffic thereby removing the problems of traffic congestion, obstruction from parked vehicles and the use of bus lanes by unauthorised vehicles. This allows the operation of regular bus services that have more reliable and faster journey times which make taking the bus a more attractive travel option.

Concrete guided busways are relatively simple to construct and are cheap in comparison with light rail systems. They typically consist of two 180mm high concrete kerbs set 260mm apart on a concrete roadway. The kerbs act both the guide for the bus and a physical segregation from other traffic. Once in the guideway, the bus is guided by two lateral guide wheels connected to the bus steering mechanism. On leaving the busway the kerbs terminate

and release the guided wheels allowing the driver to resume steering.

A recent guided busway project is the Leigh to Ellenbrook guided busway in Greater Manchester. Latest figures from First Manchester which runs the Vantage bus services on the busway, show that patronage of the busway has increased in 45,000 a week with a fifth of passengers having switched to the bus from their cars.

'The Benefits of Concrete Guided Busways' is available as a free download from www.britpave.org.uk

➤ BRITPAVE INFRASTRUCTURE INDUSTRY CONFERENCE

Britpave will once again be holding its annual infrastructure industry conference in October.

To be held in the afternoon of Thursday 19th October 2017 at the Warwick Hilton Hotel, just off the M40 junction 15, the conference

will hear from speakers from the Institute of Directors, the Confederation of British Industry and TRL examining the demands facing our infrastructure. They will be followed by presentations highlighting the infrastructure construction solutions that Britpave members can deliver.

The conference will be followed by the Britpave Annual Dinner. Both events provide excellent industry networking opportunities. A full programme and invitation will be issued to members in the near future. In the meantime mark the date, Thursday 19th October, in your diary.



ECOCEM JOINS BRITPAVE

New Britpave member Ecocem is Europe's largest independent producer of high performance, low carbon Ground Granulated Blastfurnace Slag (GGBS).



Ecocem's highly qualified team of technicians aim to enhance and deliver a wide range of GGBS benefits which include:

- › Leachate reduction
The pH of Ecocem GGBS is lower than that of cement (10-11 compared to 13+ for cement). This lowers the pH of the stabilised matrix which reduced the solubility of the contaminants and minimises leaching
- › Lower permeability
The higher silica and lower lime content in Ecocem GGBS achieves a denser binder matrix formation resulting in lower porosity and improving physical immobilisation of contaminants
- › Increased long-term strength
Ecocem GGBS reaches a higher long-term strength than ordinary Portland cement so extends the lifespan of a project
- › Resistance to sulphates and acids
Ecocem GGBS has replaced the use of Sulphate Resisting Portland Cement (SPRC) due to outstanding

resistance to sulphates and acids. Ecocem GGBS can be used in all classes of aggressive ground conditions lists in the BRE Special Digest 1:2005 Concrete in Aggressive Ground Conditions.

- › Lower environmental impact
The carbon footprint of Ecocem GGBS is just 42kg of CO₂ per tonne, whereas ordinary Portland cement is 898kg CO₂ per tonne. Ecocem GGBS has a third party verified Environmental Product Declaration
- › Security of supply
Ecocem's strategic locations and long-term partnerships with the world's largest steel producers ensures continuous supply of high quality GGBS around Europe.

GGBS is a by-product from iron producing blast furnaces. Blast furnaces operate at temperatures of up to 2,000°C and are fed with a carefully controlled mixture of iron ore, coke and limestone. The iron ore converts to iron, which sinks to the bottom of the furnace. The remaining materials form a slag that floats on top of the iron. The molten iron and slag are drawn off at regular intervals from the furnace. After being tapped from the furnace and separated from the iron, the slag is rapidly quenched in water. This process is known as granulation because it produces glassy granules, similar in appearance to coarse sand. These have excellent cementitious properties. The granulated slag is further processed by drying and then ground to a very fine powder in a mill.

GGBS can be used as a replacement for Portland cement because it contains the same oxides and undergoes the same hydration process. The key characteristic of the material is its ability to immobilise contaminants, both chemically and physically. This makes it a well-regarded solution for soil improvement and for stabilising contaminants in soil due to high strength, increased durability and leachate reduction. In addition, by being a by-product GGBS has a low environmental impact.

Strategically located across Europe, Ecocem operates four manufacturing facilities in France, Ireland and Holland with import terminals in the UK and Scandinavia. For further information visit: www.ecocem.ie

BRITISH LIME ASSOCIATION CONFERENCE – LIME IN ROAD SOLUTIONS

Britpave member, the British Lime Association, is holding a conference on the topic of Lime in Road Solutions to be held on the 16th November 2017 at the Lords Cricket Ground, London.

The aim is to promote the future of lime in road projects and key presentations from industry (including Highways England, Britpave, and Local Government Technical Advisors Group) and academic experts will

include the themes of lime in hydraulic road binders and asphalt as well as soil stabilisation and remediation for construction projects.

Early booking is advisable as there are limited places at this event, and it attracts an 'early bird' discount. Please email Gearoid Kennedy at the BLA for further information and registration details at: gearoid.kennedy@mineralproducts.org

➤ SOIL STABILISATION SUPPORTS CENTRAL PREMISE OF HOUSING WHITE PAPER

Maintaining the green belt is a central premise of the recent housing white paper 'Fixing our broken housing market'. To fulfil this, both government and housebuilders must forward the increased use of soil stabilisation to enable more brownfield land to be used for residential development.

The white paper sets out the government's plans to reform the housing market and boost the supply of new homes in England. There were concerns that this may be at the expense of the greenbelt. However, the paper calls for the maximisation of the contribution from brownfield and surplus land and for maintaining protection of the green belt which can only be built on "in exceptional circumstances".

Releasing more publicly owned brownfield land for development is the biggest opportunity arising from the government's housing white paper, according to new research among property developers commissioned by Amicus Property Finance, the specialist short term property lender. The research found that Over two-thirds (69%) of developers think increasing the availability of brownfield sites will offer the most potential for developers.

The focus on brownfield land is not without potential difficulties. Brownfield land is often more difficult to use than green field sites particularly if the site has been contaminated by previous industrial use. The traditional approach to this has been to simply dig up the problem soil and dump it elsewhere. This is not the most sustainable or cost effective approach as hazardous landfill sites are few and far between and the haulage costs can be significant.

"A far better approach is to deal with the problem on site", explained Al McDermid, chairman of the Britpave Soil Stabilisation Task Group. "In-situ remediation and improvement of poor quality brownfield land using cementitious materials to solidify and stabilise the soil removes the cost of lorry movements, landfill taxes and importation of virgin aggregate. It also has a significantly reduced environmental impact."

Soil stabilisation involves using cementitious binding materials such as cement, lime, fly ash or ground granulated blast furnace slag (GGBS) to render potential contaminants immobile and unleachable. Stabilisation of the soil treats the contaminants to produce a soil that is less toxic. Solidification improves the physical properties of the stabilised soil to provide a strong engineered construction



➤ BP74 WORKING GROUP SET-UP

The Britpave Soil Stabilisation Task Group has established a working group to progress the development and provision of new practical industry soil stabilisation guidance that will replace the Highways England HA74 specification which is to be withdrawn.

The working group has the support of Highways England. The provision of the new guidance is a significant opportunity for Britpave to forward the use of soil stabilisation and the adherence to contractor best practice. It is planned to have the new guidance published later this year.

➤ INSERVICE PROPERTIES OF HYDRAULICALLY TREATED SOILS AFTER 10 - 40 YEARS SERVICE

Britpave has published a technical paper by consultant John Kennedy on a Highways Agency project to assess treated soft rocks and cohesive soils for pavement foundations.

The objective was to provide data for improvement of the existing Highway Agency specification for hydraulically-treated soils based on the European standard EN14227.

Copies may be downloaded from the Britpave website: www.britpave.org.uk/shop.ink

material. McDermid said: "When done correctly by reputable and experienced contractors who carry out the necessary ground investigation and laboratory work, soil stabilisation/solidification is a most effective way to bring brownfield land back into productive use. It certainly is an approach that should be at the forefront of making more land available for housing without encroaching on the greenbelt."

➤ FUTURE INVESTMENT IN ENGLAND'S MOTORWAYS AND MAJOR ROADS



Highways England are making full use of route strategies and strategic studies to plan for future investment and inform the Roads Investment Strategy 2.

The creation of Highways England in 2015 changed the way road investment happens for England's motorways and major roads. Funding is now determined every five years via a Road Investment Strategy (RIS), which is set by the Secretary of State for Transport. Stable investment for 5 year periods allows Highways England and the Department for Transport to plan for the long-term, strategic challenges of the road network such as population shifts, climate change and technological advances.

Highways England are currently delivering the improvements outlined in the first RIS, making wide-ranging improvements to our road network. The second Road Investment Strategy (RIS2) will be delivered between 2020 and 2025. The detail of how funding will be allocated will be in the RIS2 document due to be published in 2019. This will be based on a suite of Route Strategies and Strategic Studies to collate evidence and feedback covering the whole of the network.

The 18 Route Strategies form an important part of the evidence base for RIS2. They provide a high level view of the current performance of the Highways England road network to enable an understanding of the road network that ensures every decision made further down the line is built on comprehensive evidence. The route strategies process gathers feedback from stakeholders, customers

and our internal performance data to ensure we understand every part of the road network, link by link and junction by junction. Each of the 18 strategies covers an important strategic route. Between them they cover all the trunk road network, providing a description of features, current performance and constraints and identifying the locations where further study will take place.

Strategic Studies consider 6 areas where longer term plans are needed to anticipate future problems. The findings from both strategic studies and route strategies inform the development of the RIS2 Investment Plan, helping decision-makers to identify where problems are most severe, and where the need for action is greatest. Data is also drawn from other sources such as the research and stakeholder engagement undertaken for the Highways England Strategic Economic Growth Plan - The Road to Growth.

The 6 areas that the strategic studies have analysed are:

- Northern Trans-Pennine — the A66 and A69 corridors
- Trans-Pennine tunnel — linking Manchester to Sheffield
- Manchester north-west quadrant — the M60 from junctions 8 to 18
- A1 east of England — from the M25 to Peterborough
- Oxford to Cambridge expressway – linking Oxford to Cambridge via Milton Keynes
- M25 south-west quadrant – the M25 from junctions 10 to 16

As with the first RIS, the government will set out its expectations of what it wants from Highways England during the next RIS in a performance specification. This will be used by Office of Rail and Road to monitor Highways England's performance.

➤ NEW GUIDANCE AND ADVICE NOTES FOR CONCRETE PAVEMENTS

Britpave is to fund new industry guidance on the non-destructive testing of the in-situ density of concrete pavements using nuclear density gauges.

The guidance will provide a framework for establishing compliance for density without having to take cores from the completed pavement. This is in line with the proposed change to the Specification for Highways Works, Series 1000, which will require non-destructive testing for density but does not specify any methodology there by leaving methodology to the contractor.

It is proposed that the guidance includes an advice note on the process of establishing and proving a mix design that meets the pavement design criteria of HD26, stated as flexural strength, and linking this to the site strength control procedures which will be based on cube compressive strength in the revised Series 1000. Guidance on the process from laboratory trials to mixing plant trials and on to the site trail length will also be included.

TILBURY EXPANSION PLANS

The Port of Tilbury, London's major port, has undertaken pre-planning community consultation to determine local views on its proposals to build a new port terminal adjacent to the current port. The proposed new port terminal, known as Tilbury2, will be built on a 152-acre site which was part of the former Tilbury Power Station and will include a new pontoon and deep water jetty.

The Port of Tilbury has been expanding at a fast rate over the past two decades as businesses in the port look for more space and land; coupled with a significant increase in the goods and products coming through the port. The port estimates that this will increase further in the next 15 years which the proposed new port terminal would support.

The proposed terminal at Tilbury2 will act as a satellite of the main port and it is proposed that it will comprise a roll on/roll off ferry terminal for importing and exporting containers and trailers. Tilbury2 is also likely to include a facility for importing and processing bulk construction materials to support demands from the UK's building sector. In the northern part of the site there is land available for the potential storage of a variety of goods, including cars.



Commenting on the pre-planning consultation, Peter Ward, commercial director at the Port of Tilbury, said: "We are one of the largest ports in the south east and have an ambitious plan in place to continue to grow and to bring

economic benefit and jobs to the area. Our customers are looking for expansion opportunities in Tilbury and Tilbury 2 is a part of the port's overall investment strategy."

Further information can be found at: www.tilbury2.co.uk

ABP INVESTS FOR PORTS GROWTH

ABP has announced an investment of £50 million to more than double the capacity of its two Humber container terminals, in response to continued growth in demand.

The UK's largest port operator has committed nearly £30 million to upgrading Hull Container Terminal including the purchase of four new Liebherr ship-to-shore cranes, two of which were delivered in 2016 with two more scheduled for delivery in 2018. Immingham Container Terminal, which also took delivery of a new Liebherr crane in 2016, will be further extended with major investment in new equipment and technology. Across the two ports, capacity will be more than doubled to allow them to handle around 550,000 units.

BP Humber's investment case is based on figures showing that across the Humber container terminals there has been a 41% growth in volumes since 2013. The investment in the Humber comes on the back of the recent investment by ABP in Southampton of a further £50 million on a vehicle handling terminal which will predominantly be handling UK manufactured vehicles for export around the World.

The Hull and Immingham investments are just a part of ABP's commitment to £1 billion of investment across all its ports over the next five years.

BRITPAVE MEMBERS NEWS

CEMEX RAIL SOLUTIONS COLLABORATION WINS AWARD

London Underground recently won the award for Track Technology at the UK Rail Industry Awards for their concrete check rail bearer which was developed jointly with CEMEX Rail Solutions. The bearers are for use on tight radius curves where the addition of a check rail enables trains to stay on the track. In the past the solution has been to use timber bearers. Life expectancy is poor and London Underground has been keen to move away from non-sustainable sources for some time. They anticipate the switch from timber to concrete will increase life of the bearer from 15 to 40 years.

IN SAFE HANDS

Power Plane has successfully received accreditation as a Safe Contractor. The SafeContractor scheme provides a health and safety audit service for nearly 27,000 contractors and 300 major clients.

RESPONSIBLE LAGAN CONSTRUCTION

Lagan Construction Group has been shortlisted for three categories in the Responsible Business Awards, hosted by Business in the Community NI. The three categories include:

- > Diversity and Inclusion Award
- > Environmental Leadership Award
- > Wellbeing at Work Award

The Awards offer the opportunity for Northern Ireland organisations to be recognised for their outstanding contributions to their people, the planet and the places where they operate. The final stage of the judging process takes place in early May and winners will be announced at a Gala Dinner on Thursday 1 June at Belfast Waterfront Hall.

EXTRUDAKERB NEARING COMPLETION ON MERSEY GATEWAY PROJECT

Mersey Gateway works are well underway on the Mersey Gateway Project, a major civil engineering scheme to build a new 2.3km six lane toll bridge over the River Mersey and a 9.2km road network connecting the new bridge with the M56. Extrudakerb have been on site since August and have completed the slot drain and WTCSB works to the Western Point Expressway plus works to the Southbound Central Expressway. The nature of the site layout and traffic management restrictions will see Extrudakerb completing works over a number of visits with the final visit for all works likely to be April/May 2017.

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

Allied Infrastructure Management Ltd - www.alliedinfrastructure.co.uk

Arup and Partners Ltd - www.arup.com

Atkins Ltd - www.atkinsglobal.com

Balfour Beatty Ltd - www.balfourbeatty.co.uk

Ballast Phoenix Ltd - www.ballastphoenix.co.uk

BAM Contractors - www.bamcontractors.ie

Bardon Composites Pavements t/a Aggregate Ind - www.aggregate.com

Barton Plant Ltd - www.barton-plant.co.uk

Beach Ground Engineering Ltd - www.beachgroundengineering.co.uk

British Lime Association - www.britishlime.org

Carillion plc - www.carillionplc.com

CEMEX UK - www.cemex.co.uk

CH2M - www.ch2m.com

Colas Ltd - www.colas.co.uk

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

Complete Design Partnership Ltd - www.cdpbroms.co.uk

Costain Ltd - www.costain.com

Dublin Airport Authority plc - www.dublin-airport.com

Ecocem - www.ecocem.ie

Extrudakerb Ltd - www.extrudakerb.co.uk

Fixing Centre Ltd - www.fixingcentre.co.uk

Geofirma Soil Engineering Ltd - www.geofirma.co.uk

Gill Civil Engineering Ltd - www.gillgrouphouse.com

Gomaco International Ltd - www.gomaco.com

Hanson UK Ltd - www.hanson.biz

Interserve Construction Ltd - www.interserve.com

Lagan Construction International - www.laganconstruction.com

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

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

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

Power Plane Ltd - www.powerplane.co.uk

RJT Excavations Ltd - www.rjtexcavations.co.uk

RPS Group plc - www.rpsgroup.com

SGE - www.sgeworks.co.uk

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

Tarmac Ltd - www.tarmac.com

Tata Steel Shapfell - www.tatasteeleurope.com

TR Stabilisation - www.trstabilisation.co.uk

Tyrolit Ltd - www.tyrolit.com

University of Nottingham - www.civeng.nottingham.ac.uk

UK Quality Ash Association (UKQAA) - www.ukqaa.org.uk

VolkerFitzpatrick Ltd - www.volkerfitzpatrick.co.uk

Wirtgen Ltd - www.wirtgen.co.uk