Issue 20

www.britpave.org.uk

BRITPAVE® NEWS

britpave
The British In-situ Concrete Paving Association

BRITPAVE TARGETS GROWTH

Market opportunities and potential - realised by industry focus, investment and innovation

WELCOME

Contents

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.

Looking forward with confidence

Even though there are welcome signs of global recovery, the British economy will continue to struggle to move out of recession this year and the construction sector continues to be particularly hard hit. Britpave is determined to help its members retain their share of infrastructure spend and is strengthening the advocacy part of its activities to help achieve this. Now more than ever must members work together to keep up the pressure on decision makers. In Europe, Eupave is also upping its game with the new Parliament and Commission.

On the domestic front, you will note that we have moved to new, serviced offices, in Bracknell after we were asked to leave The Concrete Centre at Camberley because no space could be made for us following their re-structure. Funding has also ceased from that source so Britpave is increasing its commercial activities to ensure the service to members remains high and that new initiatives can be supported. You will note that Membership Certificates are now being issued to members to help promote the Britpave brand. They look smart, and should be prominently displayed!

Finally, I would like to thank David York for three years of service as Chairman. Those were three difficult years and he led the Association well. He continues to give Council the benefit of his experience in his role as Past Chairman.

Thanks are due as always to all of you who participate in Britpave's many active committees. Your involvement makes Britpave the influential authority that it has become. The amount and quality of membership support makes the Britpave name such a respected one.

David Jones
Director of Britpave

Trade Marks Registered

The trade marks Britpave ® and Britpave Step Barrier ® have been registered with the Trade Marks Registry. This protects the use of these words and makes it easier to defend what has become an important brand. People cannot use our trademarks without our express permission. If someone deliberately uses our registered trade marks, without our knowledge or comment, they may be guilty of the crime of counterfeiting.

Correction

It is noted that the 19th Issue of Britpave News in the article headed "Roocroft's Power Curber avoids M6 traffic congestion" stated that the Power Curber 5700-C is unique in that is pours from either side. It was also stated that "the 5700-C pours in a single three traffic lane, with traffic moving beside it. Larger, competitive slip form machines require closing two lanes of traffic for this type of work."

Mr Bryan Hebble-Thwaite on behalf of Power Slipformers Ltd. recognises that in fact other machines have the ability to pour from either side. The paragraph should have read, "the 5700-C is unique IN THE POWER CURBER 5700 SERIES OF SLIP FORMERS in that it pours from either side". Power Slipformers Ltd. withdraws any implication that may be inferred in the article that the 5700C is the only machine that can operate within only a single lane closure. The paragraph should have read, "Some larger competitive machines may require the closure of two lanes"

Power Slipformers Ltd. unreservedly apologises for these errors contained in the article.

Britpave Targets Growth

Despite the continued recession in the construction industry and concerns over future cuts in infrastructure expenditure, Britpave and its members are focussing on the growth. The challenges of the current and future economic climate are being met by industry collaboration, product innovation and new solutions.

This is evident with the development of the Britpave concrete step barrier. Primarily developed to eliminate crossover accidents, the barrier is being used to develop new markets for security protection and flood defence. The first use of the Britpave security barrier has been at Edinburgh Airport and, judging by the interest shown in the barrier at the recent Counter Terror Expo held in London, more projects will soon follow. Similarly, the recent installation of flood barrier at Waterford, Ireland, provides the proof of the cost effective and robust flood defence solution that concrete barriers provide. Unfortunately neither the threat of terrorism or flooding is going to go away. However, the ongoing development of the concrete barrier provides a robust and long-term defence that is fast and straightforward to install. Meanwhile installation of the concrete step barrier on the UK's motorway network continues to gather momentum and Britpave is now looking at repeating its success on trunk and local roads.

The need to modernise and expand the UK's railway network is a further potential growth market. We run our trains on a ballast network that is based on a 19th century system. The demand for rail travel has increased by 60 per cent since the mid 1990s with 1.27 billion rail journeys made between 2008 and 2009. Yet we patch and mend a network that is outdated and simply not up to the job. Concrete slabtrack offers a 21st century solution that maximises rail efficiency by eliminating unplanned maintenance and provides high levels of safety and comfort with impressive long-term performance. Used by the highly successful Japanese and German rail network and increasingly throughout mainland Europe, concrete slabtrack is the way forward to an efficient rail service. Britpave is currently in discussions with Network Rail and High Speed Two (HS2) over slabtrack opportunities www.hs2.org.uk.

For road and airport paving, cost economies combined with the issue of sustainability are at the forefront. Both offer areas for growth. A number of major retailers have recently announced plans for out of town expansion. Regional airports are also planning future expansion. Both offer opportunities where the use of recycled aggregates and locally sourced materials call for both soil stabilisation and slipform paving solutions that have reduced embodied CO2 impact. In addition, new collaboration between clients and suppliers ensure that the most optimum solution is delivered. Soil stabilisation, with highly valued "green" credentials, is increasingly being considered by private and public sector clients alike.

The industry is facing challenging and uncertain times. However, the combination of the industry, research and marketing focus of Britpave and the on-going programmes of investment and product development of its members mean that the market opportunities are being targeted and translated into areas of growth.

The industry is facing challenging and uncertain times. However, by developing a coalition of co-operation and dialogue together with forward thinking and innovation the industry can work with clients to turn these challenges into opportunities. Britpave and its members aim to realise the potential of these opportunities via research and marketing focus, on-going programmes of investment and product development.

Britpave has moved

Our new address and contact details are:

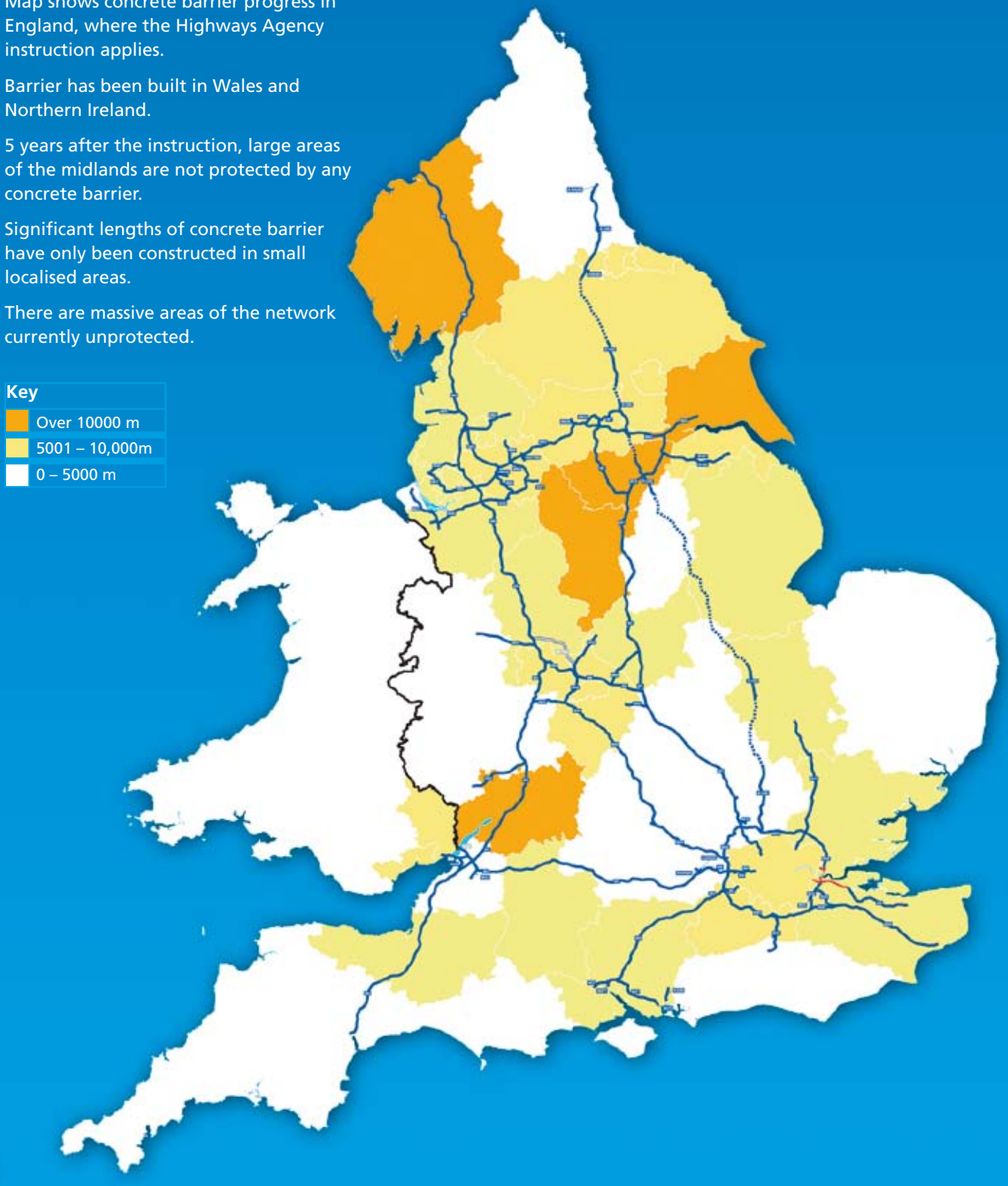
Britpave
Atrium Court, The Ring
Bracknell, Berkshire RG12 1BW

Tel: +44(0)1344 393300
Email: info@britpave.org.uk
Web: www.britpave.org.uk

BRITPAVE STEP BARRIER®

Concrete Barrier Success

- Map shows concrete barrier progress in England, where the Highways Agency instruction applies.
- Barrier has been built in Wales and Northern Ireland.
- 5 years after the instruction, large areas of the midlands are not protected by any concrete barrier.
- Significant lengths of concrete barrier have only been constructed in small localised areas.
- There are massive areas of the network currently unprotected.



Roocroft M6 Viable Barrier Installation

BARRIER UPGRADES - M6 Junction 33 - 34
North West England

Some 6,500 metres of central reservation steel barrier has been removed and replaced with 4,500 metres of slipformed concrete step barrier and over 2,000 metres of Britpave's variable step barrier. The project also included the slipforming of 5,200 metres of in-situ drainage channel and the installation of steel transitions to tie back into the existing steel barrier.

The barrier installation was carried out by Roocroft Fencing working as a direct sub-contractor to Hanson Contracting. The slipforming was carried out using Roocroft's Powercurber 5700-C and variable mould which ensured an above average output despite the poor weather.

Roocroft worked closely with their concrete supplier Cemex and undertook advanced trials to ensure that the mix fully met the specification, performance and finish demands. The batching plant procured aggregates specifically for this contract. The resulting excellent profile and high quality finish of the Britpave step barrier is testament to the professionalism and close collaboration of Roocroft and Cemex.

The contract was completed on schedule and was audited by the BSI Group as part of Roocroft's awarding certification for OHSAS:18001 which now complement ISO 9001 & 14001.

For more infomation contact: David Roocroft
E: david@roocroftfencing.co.uk

FLOOD BARRIER

Defending Waterford from Flooding

SIAC Construction Ltd has installed 360m of slipform concrete flood barrier at Waterford, Ireland. This is the first project to use the barrier as a defence against flooding. It was placed at the Ballindud roundabout on the Tramore Road A675 that runs adjacent to the river Suir. The roundabout is the major access point leading to the town of Tramore and the road floods 4 to 5 times a year up to a depth of 300mm due to combination of rain fall and tidal events.

The slipform concrete barrier was chosen for its speed of installation – for this project 360 m were constructed in one day – the ability to combine flood containment with vehicle containment in one system and construction within a limited space. In addition, the system ensured limited traffic disruption.

With over 30 years experience of slipform construction, SIAC has developed a thorough understanding and expertise of the process. This allowed them to work closely with the main contractor Bowen Construction on behalf of the client, Waterford County Council, and so facilitate the optimum approach. The barrier at Waterford features an exposed concrete finish. For other, more sensitive locations, SIAC is currently developing a range of special finishes.

The Waterford project proves the argument for installing concrete flood barriers. The one barrier provides a single long lasting, multi-purpose solution.

BRITPAVE SECURITY BARRIER

Protecting our Critical National Infrastructure

Increasingly being installed on our motorway network, the concrete step barrier and its variations is now being specified to counter concerns over the potential chaotic and costly impacts that flooding or terrorist attacks could have upon our critical national infrastructure such as airports, energy plants and water pumping stations.

The concrete step barrier has proved very effective at preventing that most dangerous of motorway accidents: the crossover. Designed and tested to the H2 containment standard, the barrier is able to contain vehicles of up to 13 tonnes in weight and prevent them from crashing through the central reservation. The barrier's inherent long-term robustness and rigidity has attracted other infrastructure sectors looking for cost-effective defence, notably for the protection of key locations such as airfields and airports, power stations, transportation infrastructure, fuel storage and distribution depots. Having worked with the Highways Agency on the development of the motorway concrete step barrier, Britpave is now working closely with the Centre for Protection of National Infrastructure (CNPI) and the Environment Agency to develop solutions to protect against acts of terrorism and the risk of flooding.

As part of this, Britpave has undertaken a programme of rigorous testing which have shown that a re-designed concrete step barrier meets the security impact standards of PAS68:2007. Full scale tests proved that the concrete security barrier, called BsecB, can stop a 7.5 tonne lorry travelling at 50mph (80kph). The first location to benefit from the installation of the BsecB concrete security barrier is Edinburgh Airport. A 120m length of the barrier has been placed to protect the terminal building from the threat of cars and lorries from the adjacent road being used by suicide bombers.

The barrier has also been developed to provide a flood defence system. Recent extreme weather patterns have proven the threat of flooding to key infrastructure locations. In 2007, floods around Gloucester caused much chaos and disruption. The local Walham Switching Station, part of the UK high-voltage transmission network, was inundated with flood water and only temporary barriers and pumping prevented the station from failing. If it had, 240,000 homes and businesses in the Gloucester area would have lost their electricity supply with a negative knock-on effect on the supply to South Wales.

The concrete barrier acts as a mini-dam. The mass of concrete provides the strength and resilience to remain standing when subjected to hydrostatic pressure. The relatively short time which a flood barrier is expected to function means that it would be essential for the barrier system to be absolutely watertight.

Construction of the concrete barrier, whether for motorway, security or flood defence, is simple and fast. Depending upon the cross section of the barrier being slipformed, it is possible to construct up to 200m/8 hour shift/machine. The barrier is also cost effective, especially as its mass means that no special foundations are required. In addition, land take is minimal as only a limited width is required. It has environment credentials too. High performance concrete is not required and both fly ash and ground granulated blast furnace can be used as cement placement plus both recycled aggregates and concrete from demolished concrete structures can be used. The barriers can also be made to mimic stone or brick walls or incorporate coloured concrete or exposed aggregate finishes.

The concrete barrier offers a cost effective solution to wide variety of infrastructure protection scenarios. It offers long-term robustness and minimum maintenance with proven ability to withstand terrorist and flooding threats.

Installation Edinburgh Airport

BRITPAVE SECURITY BARRIER

The threat of acts of terrorism on our national infrastructure continues to be a major issue. So much so that the Centre for the Protection of National Infrastructure (CPNI) has stated that:

"The threat from terrorism is real and serious and you need to consider security planning"

CPNI

Complete installation of BsecB System

Edinburgh Airport gets first installation of security barrier

CPNI is very involved in the development of security systems including the use of barriers and bollards able to protect strategic facilities from being entered by unauthorised vehicles. The success of the Concrete Step Barrier® has attracted the attention of the CPNI who have worked with Britpave to develop the barrier as a slipformed concrete security system.

Based on the requirements of the security standard PAS 68: 2007, the CPNI called for a concrete solution that:

- Had a maximum width of 0.5m
- Had a low height to meet potential planning restrictions
- Was based on a tested 30m length
- Could be mounted on a hardened surface without embedment.

Based on the above, Norder developed the security barrier system which was then subjected to a series of tests using 7500 kg truck travelling at 30mph head-on.

Some six crash tests have so far been carried out, following these and subsequent development, the resultant barrier has been proven to be capable of stopping a 7500 kg vehicle at 40mph head-on – this represents twice the energy of a 30 mph.

Edinburgh Airport is the first UK location to benefit from the installation of a new perimeter concrete security barrier. A 120m length of BsecB security barrier has been placed to protect the terminal building from the threat of cars and lorries from the adjacent road being used by suicide bombers. The barrier system has been successfully tested to prevent lorries and cars from breaching the perimeter protection. Full scale tests that have been carried out demonstrated that the BsecB barrier could stop a 7.5 tonne lorry travelling at 40mph and would also prevent any follow-up vehicle from getting through the barrier. BAA specified BsecB as it is robust, is surface mounted, can be rapidly constructed and has a design life of over 50 years.

BsecB is based on the slipform concrete safety barrier that is becoming a common sight on the central reservations of the UK's motorways. The new barrier's robustness and long-term performance means that it is well suited to combat the threat of terrorism. It has been developed to provide permanent perimeter protection for key locations such as airfields and airports, power stations, transportation infrastructure, fuel storage and distribution depots. Once installed, the concrete barrier requires little or no maintenance and is built to last for over 50 years. It meets all the security impact standards of PAS 68:2007.

Installation of the barrier at Edinburgh Airport was simple. No foundation was required as it was placed directly upon the existing asphalt pavement and then firmly anchored into position.

The layout design was developed by TPS (a BAA framework designer) with the detail design and technical advice being supplied by Norder Design Associates. Following the

award of the main contract to Kier Scotland, Norder was requested to develop the necessary detail design to the bespoke anchorages and then complete the detail construction design on behalf of the barrier licensed installer PJ Davidson.

The BsecB system has been developed to be slipformed with a closed mould to ensure a highly cost efficient system. However, for the longest section of the barrier slipforming was determined not to be practical for this project as the location of the barrier meant that two of the road traffic lanes would have had to be closed to allow safe access for the slipform operation and fixed form construction was felt to offer the quality of surface finish required by BAA.

Installation was completed over a period of 4 weeks during November – December 2009. Post construction the following benefits were identified:

- In prominent locations, the barrier system can be used to support advertising space – a useful way to recoup investment in enhanced security
- If a high quality surface finish and tolerance is required, fixed formwork should be considered
- The BsecB system can be easily and effectively constructed in fixed formwork by including the appropriate steel reinforcement links.

BsecB offers sensitive buildings and infrastructure a robust defence against the threat of lorry and car bombs. It is a proven system that is readily available from licensed installers.

Project Team:

Client:	BAA
Main contractor:	Kier
Licensed installer:	PJ Davidson
System designer:	Norder Design Associates
Civil works sub-contractor:	Incaforce

- For further information on the construction of the BsecB system at Edinburgh Airport, contact Alan Tuck of PJ Davidson, tel: 07970 836008

- For further information on the design of BsecB contact Adrian Erwee of Norder Design Associates, tel: 07515 995818

"The performance of the design consultants and the installation sub-contractor was impressive. The whole process from contract award to completion was carried out during a nine week period. Product quality is high, ensuring that this usually industrial product does not look out of place within an important international airport."

Kier Scotland

ROAD SAFETY

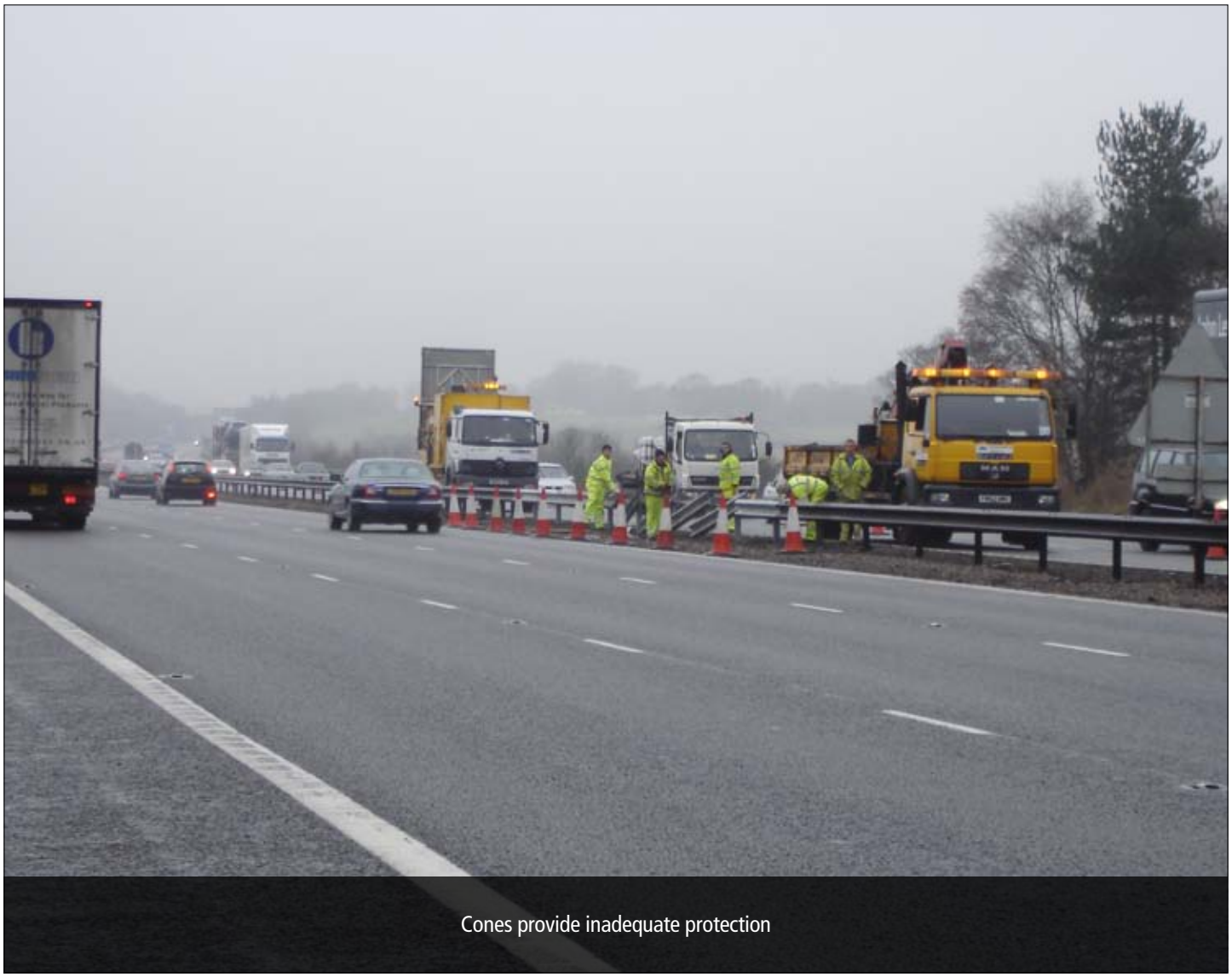
Britpave welcomes road worker safety campaign

Britpave has welcomed the Highways Agency road worker safety campaign. In particular it welcomes the Agency's objective to eliminate all fatalities and serious injuries to road workers maintaining the road network.

The Agency intends to meet this objective by setting itself a goal of 'Exposure Zero' which aims for the elimination of road workers undertaking routine maintenance on foot on a live carriageway. The Agency recognises that achieving this aim will require working with the road industry to develop new ways to be found to reduce risk and improve safety.

Britpave believes that the widespread installation of concrete step barriers on motorways and trunk roads could significantly assist the Highways Agency realise its goal of Exposure Zero simply because once installed concrete barriers, with a minimum design life of 50 years, do not require on-going maintenance. Nor do they require repair or replacement. On those sections of the motorway network where concrete barriers have been installed and have been impacted by errant vehicles not only have they successfully contained the vehicle but their robust performance has not been compromised.

Removing the need for maintenance, repair or replacement removes the need for road workers to be in carriageways. That is 'Exposure Zero'.



Cones provide inadequate protection

SIAC SLIPFORM LTD

Market Leaders in Slipform Concrete Technology...

ADVERTISEMENT

SIAC Construction Ltd. is a pioneer and market leader in slipform concrete technology in Ireland, having introduced the first slipform paver to the country in 1981. Our considerable technical expertise and appreciation of client requirements has enabled us to establish an unrivalled reputation for high-quality work at competitive prices.

Our state-of-the-art fleet of 8 pavers and over 40 mould types enables us cater for any concrete paving requirements. Our products range from Kerbs, Drainage Products, PQ Paving and Concrete Safety Barrier to specialist applications such as rail plinths, retaining walls, flood defence and sportsground terracing.

Head Office
SIAC Slipform Ltd.
London Road, Tetbury,
Gloucestershire,
GL8 8HH,
UK

Tel: 01666 501378
Mobile: 079 23249015
slipform@siac.co.uk
www.siac.co.uk

AIRFIELDS

FLYING SUCCESS - VolkerFitzpatrick has had a flying start to 2010 with a number of high profile airfield projects.

The largest of the contracts is at Farnborough International Airport, and is part of the Hanger 2 Apron Project. It involves earthworks, service diversions and protections, drainage and ducting, airfield ground lights and apron marking. The apron slab is approximately 52,000 m² and comprises of a 300mm PQC slab on a 150mm dry lean layer, on a 200mm Type 1 granular layer on terrain. The contract involved interfacing with other contractors Natta and Comley and also called for VolkerFitzpatrick to manage the demolition works. The £5 million contract is due for completion at the end of May.

At Gatwick airport, on behalf of clients Carillion and TPS, VolterFitzpatrick has recently carried out wet lean and PQC paving as part of the North West Zone Stands Project. The contractor provided all the labour, plant and curing agents required for the transportation, laying, compacting and finishing of the wet lean concrete at 150mm deep with concrete pavement at 300mm, 400mm, 435mm and 455mm deep. The pavement has a tapered key longitudinal joint following BAA specifications. Tarmac Topmix supplied the F6 PQC and the wet lean from its onsite batching plant.

As part of the defence estates framework, VolkerFitzpatrick undertook the demolition and reinstatement of an area of hardstanding for aircrafts at RAF Lakenheath. The contract included the laying of 5,200m³ of PQC and 2,800m³ of wet lean concrete, associated drainage and all aeronautical ground and high mast lighting requirements.

- For more information on VolkerFitzpatrick's Paving Division please contact Joe Quirke on 01992 305 000 or email joe.quirke@volkerfitzpatrick.co.uk.

RAIL

Concrete Slabtrack Investment Required for Efficient Rail Service

The Association of Train Operating Companies has warned the government that Britain's overcrowded railways are reaching the limits of their capacity. It is a situation made worse by Britain's aging rail network that is based on out-dated ballast tracks.

In a letter to The Times, the chief executives of the UK's seven private train operators said that lack of investment could prevent the railway from playing its part in supporting the economic recovery. They want all three main political parties to guarantee future investment to meet the growing demand for rail travel. Despite the recession, passenger numbers are still at record levels and the demand for rail travel is forecast to double within the next 30 years. Rail travel has increased by 60% since the mid 1990s and demand has reached its highest levels since the Second World War. Between 2008 and 2009 1.27 billion rail journeys were made.

A significant part of the capacity problems facing train operators is the lack of investment in a 21st century rail network. We run our trains on a ballast track system from the 19th century. It is a network that is outdated and simply not up to the job. The result is delays, weekend closures and unplanned maintenance disruptions. Some £12 billion has been set aside between 2009 and 2014 to address capacity constraints through measures such as lengthening platforms and signalling improvements to allow more trains to run. However, this is failing to address the real issue: an outdated rail network.

Concrete slabtrack, as used by the highly successful Japanese rail network and increasingly throughout mainland Europe, is the way forward. 40 years ago when commencing their high-speed network, the Japanese replaced much of their outdated ballast track with concrete slab track. This provided a rail track that, 40 years on, continues to maximise operating efficiency by eliminating maintenance, provides high levels of safety and comfort and impressive whole life cost savings. The Germans now use slab track for all their high-speed lines and many other European countries are set to use similar non-ballasted tracks.

If train operators want to provide an efficient level of service that meets the growing demand for rail travel then they must have the right track that eliminates the delays and disruption caused by continual patch and mend maintenance programmes. Increasing the length of rail platforms is all very well but what happens once the train leaves the station? Concrete slabtrack offers the long-term performance and reliability is essential for an efficient and punctual rail service.

ROADS

Unique pavement solution to Logistic Centre Project.

M11 Logistics Site – Chigwell

DHL were awarded the contract to run a logistic centre in Chigwell, Essex. An area just off the M11 was ear-marked by the client as a temporary, off site logistics facility to manage all inbound construction traffic into the more congested London site. The 33,000m² site was designed to provide security screening, scheduling and vehicle marshalling facilities of all inbound goods, controlling deliveries in real time in line with the site's requirements. PJ Carey Construction, part of the Carey Group Plc, were awarded the contract to construct the project.

A heavy duty pavement construction was required alongside an extremely demanding, tight construction period. Bardon Composite Pavements* proposed at tender stage an alternative pavement solution which fulfilled the requirements of the project in terms of pavement performance and durability; speedy construction timescales and which also satisfied the client's responsible sourcing of materials criteria.

A 200mm slab of unreinforced roller compacted concrete (RCC) C32/40 was proposed on top of a 150mm thick Cement Bound Granular Material C5/6 as an alternative to a CRCP concrete slab on top of Type 1. Both elements of the pavement are fully recyclable. The CBGM aggregate utilised a quality, sustainable source of aggregate – Incinerator Bottom Ash Aggregate (IBAA) - provided by Ballast Phoenix Ltd. This 100% recycled product was produced from one of the six plants operated by Ballast Phoenix in the UK. The aggregate was transported by road only 11 miles from the site. Using Ballast Phoenixs' own calculator, the C02 embodied for the production and transportation was 2 kg for every tonne delivered. Early trials proved IBAA as a material suitable for use in the CBGM in terms of strength and quality and it's usage resulted not only in a reduced cost per sq m but also in overall environmental impact.

Roller Compacted Concrete provided the finished pavement surface over the bulk of the site with the exception of the entrance kiosk areas whereby a bespoke asphaltic surface course was placed. Roller compacted concrete combines high performance, strength (Flexural Strength 7N/mm²; compressive strength 55N/mm² at 28 days) and durability with a fast, efficient pavement construction methodology. Both the CBGM and RCC were mixed on site using a high output continuous mixing plant and placed using a tracked paver with a high compaction screed. Compaction was achieved by vibratory steel drum and pneumatically tyred rollers. Compliance testing was carried out using an independent, accredited laboratory. Outputs of 2000 sq m were achieved daily in a busy construction area.

Bardon Composite Pavements provided a complete pavement service in this instance identifying a best value pavement solution to deliver optimal whole life performance.

* Bardon Composite Pavements was created in 2009 to integrate three businesses: Sitebatch Technologies; Needham and Cullen and Roller Compacted Concrete Company.

- The new company has relocated to Maltby – Tel 01709 814577. E-mail:bcp@aggregate.com Ballast Phoenix - www.ballastphoenix.co.uk

Highways Projects Update

VolkerFitzpatrick is working in Ireland at Newry and Portlaoise laying a total of 255,500 cubic metres of dual lane CBM. The contracts involve batching and laying site supplied materials using belmix and elba batching plants along with our Vogele tracked pavers.

VolkerFitzpatrick has also been contracted to lay 4,000m of surface water channel as part of hard shoulder strengthening between junctions two and three of the M3 for client Bam Nuttal.

Also on the M3 between junctions four and five VolkerFitzpatrick is laying 3,500m of concrete step barrier for client Birse.

Finally as part of the Active TM project around Birmingham the contractor is laying channel and CSB for Carillion. This project has approximately 8,000m of surface water channel and 1,500m of CSB.

- For more information on VolkerFitzpatrick's Paving Division please contact Joe Quirke on 01992 305 000 or at joe.quirke@volkerfitzpatrick.co.uk.

MEMBER UPDATE

Leading Industry HBM Specialist Created

The acquisition by leading international construction and building materials company, Aggregate Industries, of the major hydraulically bound materials (HBM) production and paving specialists has created the brand leading Bardon Composite Pavements.

The closely associated range of professional services offered by Sitebach, Needham & Cullen and Roller Compacted Concrete Company have been brought together to offer specifiers and end users a total delivery package for HBM paving projects.

Bardon Composite Products (BCP) sits comfortably under the Aggregates Industries business portfolio and is able to collaborate with sister companies across the group regarding material supply, contracting and civil engineering services and on a broad range of projects including transport, waste, utilities and private, industrial and commercial. This collaboration enables cost advantages and minimises supplier interface to the customer.

By taking the in-depth experience and skills from each of the businesses – the production of high quality HBM, placed by a UK-wide and international contracting labour force using a dedicated site mixing service – BCP, from its new head office in Maltby, is able to offer an innovative, highly sustainable and bespoke HBM solution.

Danny Falls of BCP said: "Bringing the three companies together under one brand within the AI Group offers huge benefits to our customers. BCP offers a highly specialist service that can provide sustainable, versatile and alternative pavement solutions which can give customers a competitive edge in delivering projects".

Mike Archer, national contracting director at Bardon Contracting added: "These three acquisitions are very much in line with the long term vision for Aggregate Industries of widening our service and product offerings, creating best value and strengthening our position within our core markets".

■ For further information visit: www.bardon-contracting.com

From left – John Donegan (BCP Commercial and Technical Director), Richard Needham (BCP Operations Director) Mike Archer (National Contracting Director at Bardon Contracting) and Danny Falls (BCP Regional Director)

EUPAVE
EUROPEAN CONCRETE PAVING ASSOCIATION

Eupave International Symposium on Concrete Roads

The 11th International Symposium on Concrete Roads will take place on 13-15 October 2010 at Seville, Spain. The event is organised by Eupave, the Spanish Institute of Cement, the Andalucian Cement Association and the World Road Association. The title of the event is: The Answer to New Challenges. The symposium will examine the challenges posed by climate change, economic constraints, skills shortages and rising oil prices.

Careful planning, cost efficient designs, sustainable construction and focused maintenance are just some of the ways how concrete roads can meet the challenges of today and tomorrow. Past experience provides a wealth of knowledge that can be used to develop innovative solutions that give direction to the future.

Particular themes to be examined by the Symposium include:

- Pavement design – planning evaluation
- Sustainable construction
- Techniques for good maintenance, repair and rehabilitation
- Alternative and special applications

■ For further information visit: www.2010concreteroads.org

TREMTI Report

The 3rd International Symposium on the Treatment and Recycling of Material for Transport Infrastructure (TREMTI) was held last November in Antigua, Guatemala. It was organised by the Institute of Cement and Concrete of Guatemala (ICCG) with the support of the Inter-America Federation of Cement (FICEM-APCAC), the World Road Association (PIARC) and the lime industry of Guatemala.

There was a good turn-out, with some 50 per cent of the papers coming from Latin America. The technical, economic and environmental benefits of soil stabilisation and pavement recycling were examined. In addition, three special lectures were given on:

- Soil stabilisation with cement or lime
- How to organise effectively a stabilisation worksite
- French practices for in-situ recycling of pavements using cement.

Presentation can be downloaded from www.digipro.com.gt/iccg

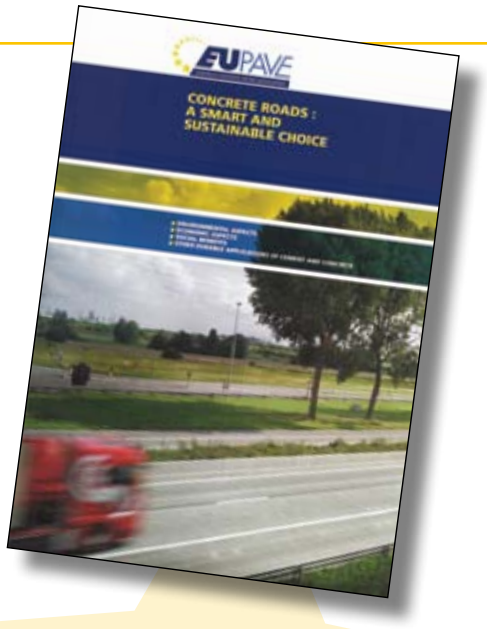
Many thanks go to the Guatemalan hosts for their hospitality and for a successful symposium which saw a good international exchange of technical information. You are invited to the 4th TREMTI Internal Symposium to be held in 2013, venue to be announced.

"Concrete Roads: a Smart and Sustainable Choice"

EUPAVE released its first publication "Concrete Roads: a Smart and Sustainable Choice".

This brochure draws on international experience to show that the modern concrete road can be a sustainable solution for our society and that it satisfies the basic criteria for sustainable construction in respect of the environment, economy and society.

This brochure can be obtained via Eupave or the Britpave offices.



THE LAST WORD

New Soil Stabilisation Best Practice Guidelines Published

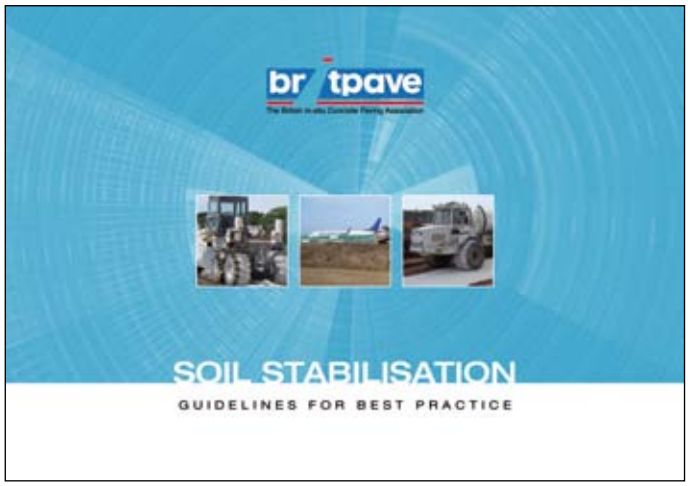
Stabilising land with the use of lime, cement or other binders offers an extremely cost effective and environmentally friendly way of making weak soil viable for infrastructure or construction use. New guidelines, 'Soil Stabilisation: Guidelines for Best Practice', from Britpave explain how the execution of a successful project can be achieved.

The use of binders means that virtually any soil found on site can be strengthened and improved. Carrying out the operation on-site is far more cost effective and has considerably less environmental impact than traditional 'dig and dump' which takes untreated soil away from site by lorries to dump in increasingly scarce and expensive landfill sites.

Soil stabilisation is carried out in layers. The soil is excavated to the required depth for stabilising and mixed with the binder. It is sealed, to prevent carbonisation of the binder while it reacts with the moisture in the soil, and then compacted with a roller. The strengthened and improved engineering properties of the soil mean it can then be used for road, pavement and foundation construction.

"These guidelines offer the basis for planning a soil stabilisation project and provide a checklist to ensure that each phase is properly carried out", said David Jones, director of Britpave. "Soil stabilisation offers an effective solution to the problem of weak, unusable soil. These new guidelines explain the steps needed to achieve a successful project." Many Britpave soil stabilisation contractors have already signed up to these Guidelines. A list of those who have may be found on www.soilstabilisation.org.uk.

- For copies of Soil Stabilisation: Guidelines for Best Practice, visit: www.britpave.org.uk



Poldim on Poland

With one of the worst transport systems in Eastern Europe, Poland has the potential to be a strong new market for Britpave and its members. Investment in new transport infrastructure is of paramount importance. This a fact which is recognised by the EU which has pledged EUR 91 billion from 2007 and 2013 for improvements in transport infrastructure, regional development, education and environment. Some EUR 60 billion of this is designated as structural funds to help Poland improve its road and rail transport.

Poland is the largest Eastern European country with a land area of 31.1 million hectares, yet only 3% of Polish roads currently meet EU standards. Traffic congestion has added to the problems of poor infrastructure. The possession of passenger cars has risen from 32.26 per 100 households in 1990 to 63.15 per 100 households in 2006 and continues to rise. The poor transport infrastructure is stalling economic development. Particular sections of the road network to be improved include new sections of the A1, A2, A4 and A6 plus major national roads along Pan-European Corridors II, III and VI. The European Investment Bank has recently announced a second tranche of funding towards to co-financing of the construction of a 57 km section of the A1 motorway (Maciejow – Sosnica – Gorzyczki), a 52.1km section of the A4 motorway (Zgorzelec – Krzyzowa) and the rehabilitation of an 8km section of the A6 motorway (Klucz – Kijewo).

It is anticipated that the Britpave concrete step barrier will be specified for much of the new Polish motorway network. A leading Polish contractor, and new Britpave member, POLDIM JSC has worked closely with Britpave in order to forward the use of the step barrier in Poland. The motorway crash barriers originally developed by POLDIM did not meet the requirements of EN 1317, however, following consultation with Britpave, POLDIM hope to be able to install the Britpave step barrier which, even with no foundations, is able to stop a H2 vehicle impact.

POLDIM has a strong reputation in the Polish road sector due to its high standards of road construction and maintenance and production of materials and products for road building. The company's work ethos is best described as "done well, on time, with a warranty". In addition to its contracting work, the company provides a range of asphalt emulsions, modified and cold mix asphalts, sewers, curbs and now barriers.

The Polish programme of road expansion offers exciting opportunities. Britpave is please to be working with both its UK and Polish members in realising the tangible benefits offered by these opportunities.

- For more information contact Richard Inglot on 00 48 698 689 895

THE LAST WORD…

Getting to Know You: Dr Jim Troy, Britpave Chairman

Name:
Dr Jim Troy

Location:
Wolverhampton, Although I do not spend much time there.

Occupation/Job Title:
Director of Concrete and Mortar Technologies.

I have worked for Tarmac for 25 years joining them as Technical head of the ready mixed concrete business in 1984. Prior to this I spent five years lecturing at the Cement and Concrete Association; I was heavily involved with the development of their first distance learning course. In the 1970's I spent a period in the Middle East

I am involved in a number of British Standards and European Standards committees. Currently I Chair CEN TC/ 303 on floors. I am a member of the technical committees of ERMCO (European Ready Mixed Concrete Organization and the European Mortar Organization (EMO).

Organisation:
Tarmac Quarry Materials.

Top of your in tray?:
Usually an urgent technical problem or one of the operating businesses needing advice.

Biggest Work Achievement?:
I have had the privilege of being involved with concrete supply for some large projects (The land terminal for the Channel Tunnel, the military bases at Faslane and Coulport, most of the materials had to come in by sea, a logistical nightmare) I have also had involvement with some of the overseas businesses of the group in Spain and Dubai.

Best Part of your job?:
Variety, from Technical problems through to lecturing and drafting new Standards.

Top Business Tip:
Problems are often a route to greater success.

Favourite Holiday Destination:
I enjoy travelling to the Philippines. My wife and I are in the process of having a house built there in a rural setting for our retirement. We spent part of the Easter Break visiting an area in the North of the Philippines that we know only a little about.

Favourite Food:
Roast pork and bread and butter pudding.

Describe yourself in 3 words:
Determined, patient, studious.

Interest/hobby or favourite sport:
Studying is a hobby of mine, I am usually undertaking some new course. Currently I am working my way through a Theology degree. I also enjoy travel.

Annual Dinner and Seminar

27th and 28th September 2010. To take place in

Nottingham.

Britpave
Atrium Court, The Ring, Bracknell, Berkshire RG12 1BW, United Kingdom.
Tel: +44 (0)1344 393300 E-mail: info@britpave.org.uk Web: www.britpave.org.uk

britpave
The British In-situ Concrete Paving Association