



Better Safety For Pedestrians & Equestrians!

As Network Rail (NR) runs its new £1m TV, radio and online advertising campaign to support the organisation's level crossing awareness programme, HBPW is also working hard to assure people of a 'safer' future.

NR hopes its campaign will make people more aware of the need to treat approaching rail footpath crossings with the same caution as they would a busy road, even in quiet rural areas.

And, as part of the wider 'hands on' approach to improving safety, HBPW has been invited to work on Network Rail's East Midlands Package 1 Level Crossing Replacement Scheme.

It has been asked to design two new footbridge schemes at Allsopp's Lane, Loughborough and near Station Road at Ampthill in Bedfordshire.

HBPW design engineer, James Cable, who is leading the HBPW element of NR's wider programme, said: "As well as improving pedestrian safety, the footbridges will allow increased rail traffic use of the lines without an adverse effect on public safety."

The footbridge at Allsopp's Lane is a rural bridgeway track used by horse riders, cyclists and pedestrians. Because of this it has to feature higher parapets. "This is to reduce the threat of a horse jumping over the side," added James.

The footbridge at Ampthill will have anti-trespass screening on the staircases because of nearby high voltage overhead lines.



The TV advert "Distraction", depicts a family taking a cycle through the countryside, playing a game of "I spy" which distracts them as they approach the footpath crossing. The daughter is standing on the crossing as she realises the answer to "I spy with my little eye, something beginning with t" is track." She then hears the approaching train sound its horn and realises she is in its path. Network Rail hopes the powerful message will help save lives.

Client: Network Rail
Contractor: Buckingham Group Contracting Ltd
Contract value: £750k



Both above: Allsopp's Lane existing crossing

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For those web 'techies' amongst you, we have now upgraded it to Word Press format and, in addition to this printed newsletter, we have also developed a smart, up-to-the-minute blog to keep you abreast of progress. Good marketing dictates that there is still a place for both.

Google has made so many changes to its 'search algorithm' in the past 18 months – that's the coding that dictates how online search works – that we realised we needed to move with the times, hence our shift to Word Press, one of the best pieces of online software for any digital presence.

The blog, as well as informing our clients, will also be instrumental in supporting us on the World Wide Web since Google, by its actions, has made it clear that a blog is now one of the most important online tools available. We now have one!

Meanwhile, on the engineering front, I hope you enjoy reading those stories we have outlined in this newsletter. We've been working with Asda Supermarkets on their store at Shepshed near Loughborough whilst racegoers in Uttoxeter will soon be benefiting from our work. Enjoy the read.

PAUL WITHERS
DIRECTOR
HBPW CONSULTING

Welcome



Paul Withers - Director

Dear Reader,

It might not be entirely fashionable to say so but, right now, business is good and the HBPW team has never been busier. I believe it is called bucking the trend!

Network Rail has been keeping us busy with a steady stream of work and, this month, sees one of the biggest changes to our corporate structure since we began trading so many years ago. On November 1st we became a Limited Liability Partnership.

Like so many other professional firms we have been advised to become an LLP as part of our succession planning strategy. No one lives for ever, least of all me (!), so it is important that we create a corporate 'vehicle' that will take us through this next decade and beyond. Meanwhile, have you been on to our website recently?

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Groundbreaking Asda Project For HBPW

A new Asda store is now serving the people of Shepshed near Loughborough in Leicestershire thanks to a £3m 'ground up' design and build initiative by HBPW and its sister company.

HB Projects of Bradford was asked by the supermarket giant to tender for the East Midlands project, and asked HBPW to engage in a value engineering project aimed at determining the most cost-effective way of completing the project.

HBPW Associate, Emyr Parry, who led the project, said: "We have done a lot of work for Asda in the past, however, this is the first time we have done a 'ground up' project which, in simple terms, meant we completed all elements of the drawings including design, drainage, car parks and foundations, as well as the steelwork and masonry.

"Everything went exceptionally well and we hope that it will lead to further opportunities in the future."



Client: Asda
Contractor: HB Projects Ltd
Contract Value: £3.5 million

Above & below: the new Shepshed Asda store



Turnkey Bridge Solution for Suffolk



The completed footbridge

A strategic alliance between HBPW and two other specialist firms, has produced dividends for Suffolk County Council with the design and build of a new footbridge at Stowmarket.

HBPW Consulting, A. Torn Construction and Arramax realised there was a gap in the market for a 'turnkey' bridge solution and established Bridgespan to meet the need.

The company is dedicated to the design, fabrication and installation of predominantly steel road and footbridges. HBPW completes the designs and details, Arramax, as a steel structural worker, fabricate the bridge and A. Torn Construction, as a civil engineering contractor, installs the bridge.

Paul Withers from HBPW, said: "Bridgespan recently received

a direct enquiry from Suffolk County Council for a new footbridge at Stowmarket, and it was perfect opportunity for Bridgespan to show its capabilities.

"We jointly designed, fabricated and installed the footbridge onto abutments which were designed and constructed by Suffolk County Council. Bridgespan was delighted to receive positive feedback from

the County Council who said they were highly pleased with the outcome."

With A. Torn Construction's capabilities as a Civil Engineering Contractor, Bridgespan is able to undertake the construction of foundations for bridges, creating, for clients, a full 'turnkey' approach to the procurement of bridges, or the possibility of mix and match where the client provides the foundations and Bridgespan provides only the bridge and bearings.

Bridgespan is able to provide either temporary or permanent works bridges, and has a stock of temporary structures available to suit many different applications.

Client: Suffolk County Council
Contractor: Bridgespan
Contract value: Project £350k (Bridgespan £60k)

Thirty Hour Bridge Challenge

Client: Network Rail
Contractor: Carillion



Industry Begins Creep Towards 3D

The shift by more and more architects and engineering firms towards 3d modelling will create greater efficiency and more effective 'collision detection' according to HBPW senior engineer, Alastair Reid.

Certainly for the last decade, most professional firms – architectural and engineering – have completed 2d drafting in software like Autocad.

However, when state-of-the-art Building Information Modelling software (BIM) is used – this is the 3d version – it means that the work of each discipline – architectural, structural and mechanical & electrical – can be overlaid onto one set of computer drawings. And that's a major change.

"Collision detection is very important," commented Alastair, "for example, it

enables clashes between ducting and steelwork to be instantly noticeable."

Whilst many large organisations already use 3d modelling, many smaller practices have not yet bitten the bullet.

"We have," added Alastair. "When an architect has used 3d software – and in many respects they are driving the market – then they want their engineers to work in the same software so that the two elements of the project can be simply overlaid onto one set of drawings. Problems can be spotted in seconds.

"To that end we have used BIM to produce the design and drawings for the latest Airkix indoor skydiving building in Basingstoke. The increasing need for greater, and more effective, collaboration will drive this change, over time, ever more rapidly."



An Airkix indoor skydiving centre

Client: Airkix
Contractor: Buckingham Group Contracting Ltd
Contract Value: £3.5 million

Precision planning took on a new meaning when HBPW engineer, Paul Monaghan, worked with a team of experts to replace two railway underbridges in just 30 hours.

The challenging project, carried out on behalf of Network Rail (NR) and in conjunction with contractors, Carillion, took place on NR's South Yorkshire Joint Line (SYJL) between Brancliffe and Kirk Sandall at Maltby.

Two mobile 'heavy' cranes were used to carry work on the bridges – approximately seven miles apart – and Paul, an Associate with HBPW, was on site during the installation of the new structures to provide technical assistance to the construction team.

He said: "The success of projects like

this are in the planning and, as you can imagine, nothing can be left to chance when there is only 30 hours to complete the work. I travelled between the two sites, over a period of hours, assisting all parts of the process."

Network Rail closed the line so that the work could be completed on time, and the old structures were removed to a special compound nearby and cut up before being take away.

The SYJL is a mineral line and both bridges, which have to support heavy goods rolling stock, were old, weakened and in need of replacement.

The new bridges – designed by HBPW – mean faster, heavier trains will now be able to use the line. The Brancliffe to Kirk Sandall line runs between two collieries.



Working through the night on the underbridges