### HBPW — LLP-Civil & Structural Engineering Services

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# Elin Strikes A High Note!

**HBPW's newest** geoenvironmental engineer, Elin Griffiths, is bringing more than an understanding of land contamination to the company's East Midlands office.

She not only arrived in Nottinghamshire with her trusty violin and Welsh speaking skills, but, as a performing member of a morris team, a few handy skills for the dance floor!

But Elin, who graduated from the University of East Anglia with a BSc (Hons) in Environmental Science, ahead of achieving an MSc in Environmental Hydrogeology from Cardiff University, is already up to her eves in work with precious time for her musical pastimes!

"I am delighted to have joined the HBPW team," she said. "This is a great opportunity to work with some of the largest construction and retail brands in the world and I am also pleased to be supporting some of the industry's top engineering professionals in our own office.'

Elin, who hails from Barry in South Wales, worked as a graduate hydrogeologist with Norfolk County Council and later as a UK-wide contaminated land consultant

"Whilst I was at Norfolk County Council I helped look after their closed landfills when the Authority took over responsibility for them from the Environment Agency. My core expertise was carrying out



hydrogeological risk assessments across various sites.

"I also gained valuable engineering experience in geotechnical consultancy, and it is this past pedigree that is now serving me well at HBPW."

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similar comments. If he does then hopefully we will be confident that the new, post EU economy is moving in the right direction.

There will be challenges ahead for both industry, retail and the wider economy, as the ramifications of Article 50 become increasingly real, be it a hefty divorce settlement from the EU, or the controversy associated with the UK aligning itself with President Trump. However, the only way out of this tunnel is forward, not back, and the challenge of walking into the unknown has positives and negatives. There will be spiders and loose brickwork but there will also be light at the end of the Brexit tunnel!

It is going to happen so let's dig in and prepare ourselves for the rough and the smooth. It is time for one collective voice, not a disparate collaboration of people, some of whom are for Brexit as others continue to lick their wounds. We are past that bit now!

Meanwhile HBPW continues to work on some great projects so please keep an eye on the HBPW blog to see what we've been up to (www.hbpw.co.uk).

Enjoy the read!

PAUL WITHERS MANAGING PARTNER HBPW LLP

## Welcome



Paul Withers - Managing Partner

Aldous Huxley may have expounded the virtues of a Brave New World in his novel of the same name, but we must hope that his dystopian prophecies have little bearing on the real world now that Prime Minister Theresa May has been given the green light to push on with Brexit.

I have occasionally commented in previous newsletters that now is not the time for finger pointing, whatever flag you wave. It is about putting our differences to one side and moving together with a collective voice because Brexit will definitely happen.

Towards the beginning of February the Governor the Bank of England, Mark Carney, said his economic predictions for this year and next had been a tad conservative. Good! Let us hope that he is able to keep returning to the table with



iPort Doncaster - A Birdseye View

HBPW's diverse range of engineering skills are proving key to the success of a multimillion pounds' project that will see Doncaster transformed into a major commercial hub servicing the likes of Amazon and other multi-national companies.

That is the verdict of HBPW Managing Partner, Paul Withers, who has been working alongside some of the UK's largest construction companies behind South Yorkshire's so-called Inland Port, dubbed 'iPort Doncaster'.

"There are so many elements to this mammoth project it is difficult to categorise them in a single sentence.

"iPort comprises a 337-acre greenfield development site connected to Junction 3 of the M18 motorway via the Great Yorkshire Way, the result of FARRS, the Finningley And Rossington Regeneration Route Scheme. Phase One is already open and the continuing build is being led by Carillion. Eventually it will extend to Robin Hood Airport.

"Beyond that the wider scheme will also incorporate a 35 acre

## Up To Our Neck In You Know What!

HBPW's ever expanding knowledge of renewable energy engineering has landed it another contract courtesy of The Clugston Group and Kelda Water Services Ltd, owners of Yorkshire Water.

YW has been granted full planning permission to build an Anaerobic Digestion Plant at the

Knostrop Sewage Treatment Works in Leeds and HBPW has been invited to produce the civil & structural engineering design drawings for the contractor.

The waste water treatment works. located in the city's Cross Green area, is committed to developing renewable energy projects on site, as part of

YW's commitment to invest in renewable energy so that it can minimise environmental impact and keep customer bills low.

Partner Emyr Parry, said: "AD plants use waste as fuel in order to produce electricity and, with Knostrop processing in the region of 48,000 tonnes per annum, this will enable the plant to generate



approximately 2.4MW of electrical energy which will be used on site.

"HBPW has been involved in several AD plants for a number of clients so we were a natural choice to work alongside Clugston. Nevertheless we are proud to be associated with such a key brand from the UK water industry."

> The wider proposed development includes a reception building incorporating solar panels on the roof and a digester tank unit comprising primary and secondary digester tanks

Client: Kelda Water Services (Yorkshire Water) Contractor: Clugston Group



# **Diversity Is Key To Doncaster Success Story**

dedicated strategic rail freight terminal. Needless to say, it is a massive scheme which has had huge engineering requirements and challenges!" said Paul.

The development has outline planning consent and funding in place for the construction of up to six million sq. ft. of logistics space.

"We have been involved at several stages in the process to date," said Paul. "Early on. as FARRS was being constructed, HBPW was involved in the temporary works for the construction of a bridge over the East Coast Main Line.

"Then, another set of our engineering skills were called upon to refurbish a different, existing farm road-over bridge first built some 150 years ago. Huge Volvo A70 dumper trucks needed to cross the structure as part of largescale earth moving works.

"Consequently we had to strengthen it by almost building a bridge within a bridge. The structure ended up featuring concrete approach walls so that if one of the vehicle's accidentally veered to one side, there was no threat of it crashing onto the rail lines below."



Paul said that Buckingham Group was building huge logistic storage sheds on the main site for the likes of Amazon.

"We are now designing the engineering drawings for a large area of concrete hard standing adjacent to new rail freight terminal sidings. It will provide a home to containers - up to five high - and huge reach stackers with front axle loads of the order of 125 tonnes each, will operate in the area.

"There have been some huge challenges within this continuing development but I am delighted to know that we have met every one of ours.

**Contractors:** Carillion; Buckingham Group



# **Keeping Commuters Moving**

Despite the recent wave of industrial action on Britain's southern rail network. HBPW has been playing its own part in keeping northern commuters firmly on the move.

Network Rail is delivering faster direct links between cities and towns across the north of England and, as part of its wider plan, is electrifying the route between Manchester and Preston via Bolton.

The Lancashire initiative will pave the way for faster more spacious trains this year whilst creating more passenger capacity.

However, before the entire plan can be brought to its conclusion, tracks at Chorley railway station have had to be lowered so that new overhead line equipment, required to power electric trains, could be made to fit under nearby bridges.

HBPW helped keep passenger inconvenience to a minimum during the development phase.

Design engineer, James Cable, said: "Both subway roofs at the station were replaced last August to support the increase in weight that faster electric trains will bring to the route from December.

"Not only did a 450m retaining wall have to be installed to support the embankment next to the railway, but the track also had to be realigned to facilitate the safe passing of faster trains in the future. This meant both platforms at the station had to be rebuilt with the resulting requirement for

> temporary works and platforms.

"Platform One has been reconstructed to support new track alignment work so that longer, more spacious trains can use Chorley station in the future. Consequently, a temporary platform, accessible from the customer car park, and to the south of the existing structure, had to be created for use by passengers travelling towards Preston.

"It was 138m long with pedestrian access at the station end, and was designed using proprietary falsework components, scaffold tubes and boards, as well as non-slip plywood boarding. The entire platform was founded on a reinforced concrete slab."

Platform Two, meanwhile, was rebuilt in sections which meant it could remain open throughout the reconstruction phase.

"We provided a temporary platform decking system across the surface of the existing platform, and pedestrian access was maintained throughout whilst work continued a good example of how quality engineering planning can help achieve major goals whilst keeping disruption to a minimum," added James.

Around 5,000 - 6,000 man hours were involved in the slewing and raising of tracks adjacent to each of the two platforms, and there was a 50-hour station blockade between Friday and Monday so that the work could take place. An army of track workers, labourers, contractors and Network Rail personnel were involved.

Partner Paul Monaghan, said: "By any standard this was a major exercise because the slewing of track some 300-400mm with an additional track lift of approximately 150mm-190mm meant there were major passenger safety considerations.

> **Chorley Station's** temporary platform in use



"The temporary structure on Platform Two had to be put in place to bridge these height and width changes so that passengers could seamlessly get onto trains whilst work continued around them. It was a great team effort by all concerned and produced a superb result."

Network Rail says electrification of lines will provide for faster, more spacious trains and greater reliability. Their lighter structure will also mean less track damage.

Equally the 2017 transformation will mean lower carbon emissions than diesel locomotives, hence better air quality, and guieter trains. Electric trains are cheaper to operate, have lower energy costs and require less maintenance.

**Client:** Network Rail Contractor: Buckingham Group





# **HBPW Backs Wildlife Boardwalk Initiative**

Less able people will soon have greater access to one of the UK's most stunning wildlife reserves, thanks to a new initiative between HBPW, the international service organisation Rotary and a local conservation charity.

Members of Retford Rotary Club have agreed to support Nottinghamshire Wildlife Trust's goal to construct a new 100 metre boardwalk at the Idle Valley Nature Reserve north-west of the town on North Road.

It will run from the visitor centre into part of the reserve, providing greater access for wheelchair users and other ambulant disabled people.

Paul Withers, HBPW's Managing Partner and a former Assistant District Governor with Rotary, said: "As a company we

are eternally aware of the continuing need to be socially responsible, so when something worthwhile presents itself, and it is an area in which we can make a real difference, then it is to coin a phrase, a no-brainer."

As a result of the three-way dialogue, Retford Rotary will raise the necessary funds to pay for materials for the project, whilst HBPW has agreed to commission a topographical survey and employ the facilities of its civil and structural engineers to design and detail the boardwalk. It should be open this Autumn.

Idle Valley Nature Reserve is part of the Idle Valley Project area, managed by Nottinghamshire Wildlife Trust - a beautiful 450-hectare network of lakes, wetland.

grassland and scrub. The reserve also includes the 300 hectare nationally designated Sutton and Lound Site of Special Scientific Interest, one of the largest in the county.

Paul added: "The area designated for the boardwalk is covered in willow, which is a copseable material in that it continues to grow back even when pruned to the ground. Rotary Club members have already played their part in starting to bring it under control and work continues.





**Idle Valley Nature Reserve Visitor Centre** 

# **Quality Hat Trick From BSI**

The British Standards Institution's auditors have given HBPW a 100% clean bill of health for the third year running following their most recent quality audit.

The firm developed its own quality assurance scheme several years ago, not only to meet ISO9001 criteria, but to control and complement the innovative and lateral processes for which it has become known amongst clients and contractors.

Associate Paul Jacklin, who has responsibility for quality standards within HBPW, said: "Adopting a system is one thing but ensuring that a large, complex team of people - all with differing requirements and demands - use and police it is quite another.

"It takes across-the-board commitment to ensure that all processes are followed and adhered to. Needless to say, I am not only delighted to have received yet another perfect

"This spectacular wetland site is the size of 600 football pitches and is one of the largest of its type in the East Midlands, so I am delighted that we are playing our part in opening it to a wider 'audience', specifically the less able."



score, but the outcome is also testimony to all those people who have committed to following those systems and processes that play a key role in delivering exemplary standards to clients every day of the year."



