

September 2018

ZERO EMISSIONS

Nothing like taking delivery of a new company car to brighten a wet and cold Monday morning! RML have taken delivery of our first zero emissions vehicle, a BMW i3s. We have other ZEV's and hybrids (where no ZEV option exists) on order and over the next five years or so our small fleet will be completely fossil fuel free. The market for electric cars and SUV's is about to have far greater variety on offer with new models



launching from the established manufacturers, at long last catching up with Tesla - as the new Model 3 took 52% of the US small executive market in July, out-selling BMW, Mercedes, Audi and the rest put together, they are a bit late to the party.

This is great news for everyone living or working close to a busy road as the NOx emissions are impacting on our health. This recent realisation is influencing the route selection of major highways projects including ones that we are working on We are considering in much more detail the impact that the development will have on NOx concentrations for nearby receptors, so far as current modelling techniques allow.

Another advantage might be a reduction in noise pollution, especially for lower speed roads where tyre roar is not the over whelming source of noise. I look forward to not having to put up with an idling bus outside our office, rattling our windows. Denbighshire has bought it's first four electric buses just last month with a £500k grant from the UK government.

I am particularly looking forward to the winter when the car will be pre-conditioned to my preferred temperature and the battery filled in time for my trip to work, all from my house supply, much of which will be from my new solar panel array and Tesla Powerwall 2 battery! Acceleration is brisk (0-62mph in 6.9secs) and silent. Our insurers actually class it as a sports car!

The price of batteries seems to be continuing its downward trend as production scales up, and manufacturers are now desperate to secure supply, with VW investing \$25billion in a battery supply deal in March this year.

We are quite well served for rapid chargers on the North Wales coast, but the usual north-south routes through Mid Wales are without any rapid services, at least until next year when Tesla will install several more super charger stations. Hopefully others will follow soon, until then the Jag will suffice for my Rugby trips to Cardiff.

Kind regards

David

Director
Richards, Moorehead & Laing Ltd

THE GOLDEN RULE

Jerry Horwood, an experienced business angel, says that the golden rule for start-ups is that one should not be selling things that one wants to sell but selling things that one would like to buy. As a principle I'll buy that!!

I would not argue with Jerry and would say that it still applies for businesses that are well established too. As a consultant advising people on what they should do for the best then your enjoyment in and commitment to your approach must be genuine but you must show it too. I have said at least once before that faint hearts ne'er won a fair hand or a tender.

I think that engineers have a problem in that their excitement and commitment to their work is often self-contained and this restricts their ability to talk about their work and advertise their skills. My experience of working with them has long convinced me that engineers are the world's worst business people. Certainly engineers would buy what they are selling but that is not enough for them to succeed in business. Even the Institution of Civil Engineers see no merit in taking any interest in the livelihoods of their members. Well, many years ago Professor Hambley told members to take a serious interest in the environment otherwise their jobs would be threatened. I haven't heard many similarly well directed comments about the business of civil engineering from the institution since then.

From an early age Ivor was used to talking to people and explaining his ideas on topics that were current in those days. It was the same in school, getting up on your feet and speaking in public was considered to be important. The school eisteddfod had a competition in impromptu public speaking. So talking about work became second nature to him, especially since he was emotionally committed to it.

So along with Jerry Horwood my message to business people, especially engineers, is to sell what you yourself would buy, be emotionally committed and for goodness sake talk to people about your work and convey the excitement that both you and I see in it.

Public sector organisations should consider and act on the same message.

Kind regards

Idris

Chief ranter and problem solver
Richards, Moorehead & Laing Ltd



NUISANCE KNOTWEED



Court of Appeal

Published: August 20, 2018

Williams and another v Network Rail Infrastructure Ltd

Judgment: July 3, 2018

A landowner's knowledge of the presence of Japanese knotweed on its land in close proximity to other properties, along with actual or constructive knowledge of the risk of damage and loss of amenity to adjoining properties by encroachment of Japanese knotweed rhizomes, and the landowner's failure reasonably to prevent such interference with the adjoining owners' enjoyment of their properties gave rise to a cause of action in private nuisance.

The Court of Appeal so held in dismissing the appeal of the defendant, Network Rail Infrastructure Ltd, against an order of Mr Recorder Grubb, sitting in the Cardiff County Court on February 2, 2017, in favour of the claimants, Stephen Williams and Robin Waistell.

This would appear to be an important decision by the Court of Appeal about a situation that is probably quite common around the country. A landowner who knew that Japanese Knotweed (JK) was on his land and failed to control the spread of the rhizomes of Knotweed caused an adjoining landowner to suffer a loss of enjoyment of his land.

The banks of many rivers are heavily infested with JK because clumps of it can be removed from an existing infestation by erosion and simply float downstream and get re-established.

A great deal of railway land and many highway verges are infested with it.

JK continues to spread...

Kind regards

Steve

Principal Landscape Manager
Richards, Moorehead & Laing Ltd

“The idea of doing what you can to improve people’s lives seems to me to be a reasonable ethical precept”. David Aaronovitch.

In a piece published in The Times on 25 June 2015 - yes it’s that long ago that I started writing this note - David was discussing the merits or otherwise of the approach adopted by people who complain about how disadvantaged people are hard done by but have no suggestions as to how these conditions can be changed. I think that Mathew Parris may have fallen into the trap only recently when commenting on how a lady had been charged the earth by loan sharks when buying a present for her son. People who read the piece asked Mathew what he had done about it.

David thought little of the arguments of the complainants which he said seemed to be shallow. David’s phrase, which I have quoted, struck a chord with me and I have often thought about it and my reaction to it. I consider that I have been well blessed to be presented with the opportunity to improve people’s lives.

I was able to focus my emotions, recognise an opportunity and then take action and by doing so initiate some radical changes. All three elements, emotion, recognition and action are equally important if one is to have some impact. I have spoken about how important these three elements are in our working lives. It seems to me that the people who David was complaining about lacked the wit or the will to put all three together.

In my address to the Worshipful Company of Water Conservators on my installation as Master in 2013 I recounted how after the Aberfan disaster in 1966 I had been motivated by the wish to improve the lives of people in disadvantaged and severely degraded communities. My activities became focussed on communities and environments that had been disfigured by mineral workings and had left a legacy of physical and chemical danger.

That morning at Aberfan triggered an intense emotional reaction in my wife Marjorie and me; we were heavily involved in the recovery work on that very grim day and for quite some time afterwards. The response - Wales-wide, stemming from ‘love, pity and pride’, as Jan Morris puts it in ‘Wales – the First Place’ - was to rehabilitate all kinds of abandoned mineral workings. The multiple aims were to remove danger, reduce pollution, improve physical environments and enhance the possibility of developing new housing, public amenities and businesses. In designing and directing much of this work I was privileged to have had the chance of expressing my feelings in a particularly physical way and on a substantial scale, which Marj shared too. We were privileged to find ourselves in a situation where life, emotions and work ran freely, bringing us enormous satisfaction. What is even more satisfying is that we re-visited sites and saw for ourselves how the landscape and the environment had changed for the better. “Do you really go back?” was one interviewer’s reaction during an interview for a project. I was told in the interview for work with the DoE that our revisiting of sites set us apart from a great many people.



What RML 'learnt by doing' has informed others through our newsletters and published guidelines, so in this respect too our actions have created the opportunity for improvement. I mentioned this in my September newsletter last year about how engineers can change the world.

What David Aaronovitch saw as a reasonable ethical precept fits in well with my own convictions.

Kind regards

Ivor

Managing Director

Richards, Moorehead & Laing Ltd

10 YEARS ON



2008 and the collapse of Lehman Bros seems a long time ago. One of my favourite films is 'The big short' in which various people on Wall Street can see what is going to happen and after a very trying couple of years all of the bets that they made by selling short in the years before 2008 turn up trumps.

The crisis, started by the failure of Lehman Bros, has not been so good for us engineers involved in infrastructure. Cutbacks in capital spending in both the public and private sectors and severe competition for what work was available meant that RML, along with a few others I have no doubt, had a few very lean years, and I mean lean. But as the Old Testament tells us lean years and fat years seems to counterbalance out. I am pleased to tell you that RML are busy, are recruiting more staff and can already see 2020 beginning to fill up with committed work.

What kind of work are we involved in?

Highway work, i.e. infrastructure, has once again become the favourite. We are busy examining four significant highway improvements in North Wales and one in South Wales and there are important projects in the pipeline if the politicians can hold their nerve in these trying times. The times are trying.

Applying for and getting approvals for redevelopment or changes to buildings can require quite an effort on the part of our town planning and environmental team. These activities deal with complex issues. Most of them are man-made and have totally changed the world in which I used to operate in the 1970 and 80s.

As an aside I must say that those were simple days when quite large reclamation projects were nodded through. Mind you I would say that we were then in the earliest days of environmental awareness and faith and trust were forces that drove the work forward. I suppose that leading from the front, which is what I was doing, was where the fun was. I do fret that regulations and regulators have taken a lot

of the excitement out of civil engineering. I would say that there are still so many things to learn about how to work well with nature because we know so much more about the topic already.

So what about the next 10 years?

What is certain is that the UK needs to become more productive and make better use of our assets both natural and man-made. This means that the country must work hard on improving connectivity and infrastructure like communication between communities and professions as well as water collection/disposal, water treatment and distribution and waste management as well as improving/protecting our environment.

We must all work hard too to improve the literacy and numerate capabilities of young people.

All in all that seems to be quite enough for my colleagues involved in construction to be getting on with.

Kind regards

Ivor

Managing Director

Richards, Moorehead & Laing Ltd

40 YEARS ON

In 1977 the civil engineering work involved in the reclamation of the Braichgoch slate quarries in Corris were complete and the landscape work was about to commence.

The west side of the very narrow valley that was occupied by the Afon Deri was filled with slate waste to a height of several hundreds of feet above the river. The A487 trunk road which was very narrow and well below standards even for that time threaded between the tips. The road was overshadowed by the tips and retaining walls of dry slate which appeared to be stable but were threatening never the less.

The Secretary of State for Wales had visited the sites and asked me if the tips were stable. I replied that I couldn't say that one way or the other, which was true at the time. I had been introduced to him as one of his constituents in Merthyr Tydfil where he was MP and of course only a few miles from Aberfan. We got the OK for the project.





The plan was to provide a new trunk road to be built on the lower tips between the existing road and the river and bring the hillside tips down to create a new platform between the old and new highways.

I don't think that anyone had built a highway on top of slate waste before. In 1973 I met the County Surveyor of Merioneth on site along with my colleague from South Wales who was the recently-retired county surveyor for Glamorgan County Council. Between

them both highway engineers agreed that most people would give their 'back teeth' to build a road using this material and so I got on with it. The highways engineers in the Welsh Office questioned me about the earthworks specification which was a complete re-write of their usual documents.

The contract for the engineering works was let in 1975 and was effectively completed by the autumn of 1977.



Not a single day was lost on account of wet weather, in fact the contractor thought that in wet weather the slate waste actually handled a little better than when dry. This was a far cry from our experience on colliery waste. But we had one problem in that the tips of slate waste were extremely porous having been placed by hand and composed of platy material. We only produced 3cu.m of fill from 5cu.m that had been measured in the tips.

The photographs show the works in various stages as well as the landscape in subsequent years.



The slate was well crushed simply by being moved and then compacted. The surface slopes were dressed with 150mm depth of material made up of <25mm crushed slate. Some small areas were topped with improved sub soil. The subsoil beds were planted up with Willows, Hazel and Birch at 1500mm centres. The whole site was dressed with broiler house litter and sown with a grass seed mix which included some clovers.



I was helped in the landscape design by friends at Wyn Thomas and Partners



The dense growth of grass faded within a year or two and the whole site was taken over by self-sown trees. We had already learned from Professor Bradshaw that the fine-grained surface and freely-draining medium sized substrate provided ideal conditions for roots to develop, and so the trees, both planted and sown, prospered.

Above is a photo from approximately 20 years ago looking north, and below from September 2018 looking south from the same position.



We protected the hillside planting with sheep-proof fencing, the only complaint that we had was from the local farmer who wanted his sheep to enjoy the grazing. He was discouraged for a few years and then the forestry commission planted on the hillsides where all of the slate had been removed and the original soil exposed.

I was responsible for the structural design of the Craft Centre.



Photos above and below from 23rd September 2018. Given the limited nutrient content in the slate, the vegetation management requirement is limited, and the middle path looks well used.



Kind regards

Ivor

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