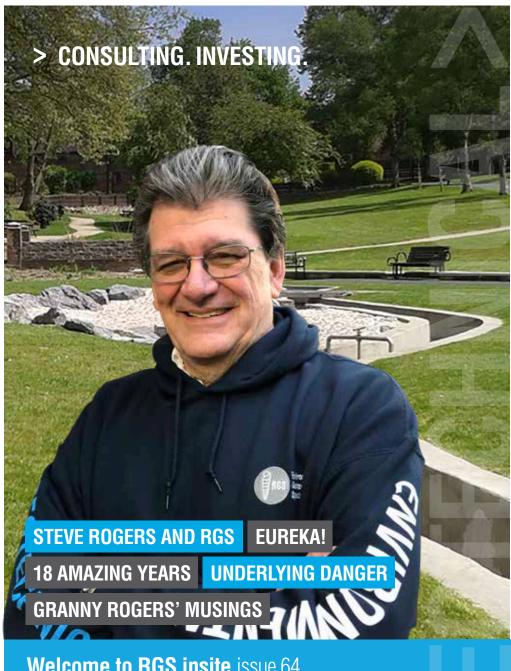


#RGSSolidGround 18 YEARS DRILLING & ADVICE

REGULAR NEWS AND VIEWS FROM ROGERS GEOTECHNICAL SERVICES



Welcome to RGS insite issue 64

Our regular newsletter celebrates 18 years of drilling and keeps you up to date with RGS and industry news.

Rogers Geotechnical Services Ltd are site investigation specialists offering ground investigation and geotechnical services to developers, builders, structural and consulting engineers, architects, insurance companies, local authorities, piling and foundation engineers, private individuals and other geotechnical consultants.



STEVE ROGERS AND RGS: FIRM FOUNDATIONS

This special issue marks a landmark moment, both for RGS's 'founding father' and Technical Director, Steve Rogers and for the company as a whole.

At the end of June, Steve not only celebrated his 70th birthday but also retired from the role he's held from the company's earliest days.

Steve's immense experience as a passionate geologist, geotechnical and environmental engineer, laboratory manager, university lecturer, consultant, expert witness - and more! - means he's widely known and respected in the field. We feel sure you'll enjoy learning a little more about the great man (not to mention his granny) and his career.

The interview that follows took place at RGS's HQ amongst the hills of Shepley (mostly Pennine Lower Coal Measures Formation!), West Yorkshire.

How did you discover your love of geology and geoengineering?

I was born in Southampton, spent my childhood in Malawi A and my secondary school years mostly in Rhodesia B (now Zimbabwe). Around the time that I should have been taking my final school exams, my father died and we returned to the UK.

Rather than go back to school to study for A levels, I decided to move on to college, where an OND in Building opened the door to a degree in Civil Engineering.

In the first six weeks of my course I was introduced to the Soils Laboratory, and realised instantly that Soil Mechanics was what I really wanted to do! I gained useful early experience from some lecturers who ran a consultancy: they employed me from time to time to carry out site visits for them, as well as testing in their university labs.

My Building studies were, you might say, a great foundation for my career: I soon began to learn not only how buildings are built - but also why and how they can fall down!







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How did RGS begin?

In April 2004, I'd been working for some time with foundation engineers, Roger Bullivant Ltd, and my son, **Chay**, was thinking about taking a new direction. One evening, Emma and Chay were at my house chatting, and I asked Chay, "**How would you fancy starting a business with your Dad?**" Perhaps for the first time in his life, he said, "**Yes, that might be good!**" (Previously, the answer would have been, "Not a chance!"). We both felt it was time to move on in our careers, so that's what we did. RGS was born... I borrowed £20,000 for a car, but we bought a drilling rig and a transit van instead! With Chay manning the rig, I covered the engineering. Like so many new entrepreneurs, I set up an office in the back bedroom. We also created a small laboratory in the garage and later we extended the house to accommodate the growing business.

Emma Lewis was part of it all along: she came in when we realised we needed good management! I think we ended up with about four or five of us working in the extension and one in the garage (aka sample store). They were certainly humble beginnings but it was good!

As we grew, it became vital to expand our Fieldworks Team, overseen by Chay. He now has four drilling teams, a substantial fleet of rigs, vehicles and equipment and a fieldworks manager to keep everything running smoothly. It was good to have Chay with me from the start, as his positivity outweighed my worries!

five

Chay Rogers

OPERATIONS DIRECTOR

The business has grown enormously since those early days, from the team, its client base and capabilities to the property, plant and equipment. Looking back over those 18 years, what aspects make you most proud?

It's most certainly the team - the people. I think we've developed an outstanding team of people, and that's a wonderful thing! Another important element is the way that Emma's come to the fore. I'm incredibly proud of her and what she's achieved: she's done magnificently. It means that the business is in such capable hands that I just don't need to worry about it.

On the technical side, we've got a terrific team including a number of young engineers and we've faced some good technical challenges. Kirby Knowle Castle was a fantastic project, for example. It gave me some sleepless nights when torrential rain threatened an already unstable slope but we did a great job there and most importantly, made our client a very happy man. I think we've developed a bit of a reputation for 'oddball' jobs - ones that pose lots of problems. For me, that came from starting the business with few facilities but plenty of experience

We successfully handle loads of complex and challenging jobs and I'm proud of that.

in solving tricky geotechnical problems.









What's been the biggest business challenge?

Well, here's the thing... In terms of business challenges, I've not really had any! This is why Emma's so good, because she's dealt with all the major challenges. And it's why I'm really happy with the way things are. If you asked Emma about the greatest challenges, she'd probably say, 'the recession'. It was really tough. We had to downsize and let team members go, which is always sad. We probably left that too late, hoping that we could weather it, but we couldn't. So that was a very fraught time, and I think it was incredibly difficult for Emma but she's been absolutely central in getting us through.

The economic climate has ebbed and flowed in many directions over RGS's lifetime. What advice would you give to today's entrepreneurs who aspire to build a successful business?

Build the right team - that's key. And know your own limitations... I know I'm not a good manager. I know that technically, I'm okay [sic]. I stick with the technical, Emma covers the management and Chay leads the operations. I'm very happy with that, and I don't try to get involved with either of those two areas: I do what I best know about! So yes, build a good team, stick with what you're good at and get others to do what they're good at.

What's the most exciting recent innovation in the geotechnical world?

We're not a very innovative industry, really! For example, geotechnical engineers refer to 'shell and auger' drilling rigs. In fact, the shell and auger drilling rig lost its auger in the 19th century! It should be called a light percussive drilling rig. So we don't necessarily move forward as quickly as we might but of course computerisation has changed our work just as it has everyone else's. In the lab, for example, modern oedometers with hydraulics and digital technologies bring huge benefits. Tests that used to involve taking readings all through the day from a dial gauge (maybe for a whole week) now take far less time and effort... You push a button and it does everything for you. When I first started, I used a slide rule, so calculations took quite a while!

It did mean, though, that you understood what you were doing in a calculation, so you had an approximation of the answer in your head: that can be really handy as a checking aid, even if you've got a calculator in front of you. Another good example of digital change concerns slope stability. Again, those calculations used to take a week by hand. Nowadays, a computer generates the solution in minutes and often provides a whole lot of additional valuable data at the same time.

The impact of digital change is massive.

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In terms of the equipment itself, changes have been smaller and more gradual. We now have the innovative Panda (dynamic cone penetrometer) for compaction control and site investigation and the Dutch cone penetrometer for determining cone resistance and friction in soil layers. The theory we used is all pretty old - and it still works!

Standards have changed, too and the European codes have come to the fore. Many older engineers like me don't think they're very good, because to some extent, they hide the actual method that you're using. Anything that hides what's going on underneath should be questioned.

What would Granny Rogers think of all these changes?

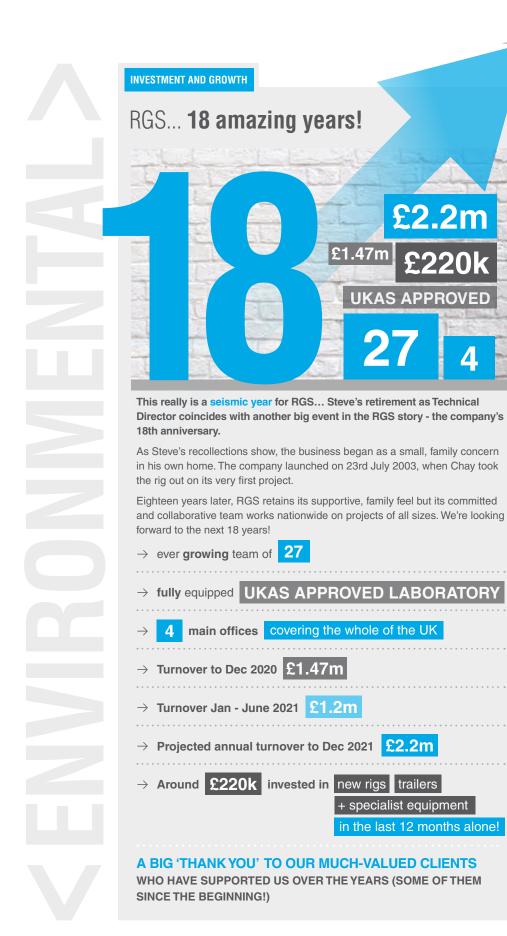
She'd be very happy, in general, because the changes aren't so huge that she wouldn't understand what's going on. She might not know how to use a computer but if you gave her a set of computer-generated results, she'd say, "Yes, I can see what's going on here!" So she'd be fine with it... As I am!

So, you're now retired from your Technical Director role at RGS, but what's next for you, Steve?

I'm sure I'll take on some occasional consultancy and I've always enjoyed the challenge of expert witness work, which I'll do whenever I'm needed. I'd like to mentor some of our young engineers to become expert witnesses, and more generally, too. Experience is a great thing and maybe I can help them become competent old engineers like me!

I'm looking forward to a bit of croquet, playing with my motorbikes - and extending my shed to keep them in. Plus, my wife will find me plenty more to do... It won't be leisurely!

CONGRATULATIONS
AND A HAPPY
RETIREMENT
STEVE!
Want to find out what we bought Steve as his retirement present?
Look out for the answer in next month's insite!

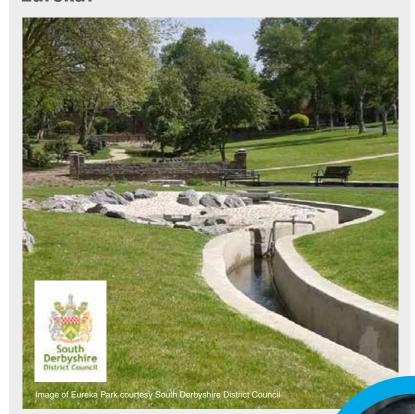






JOB FILE

Eureka!



We've recently been working on a project in Swadlincote, Derbyshire: Eureka Park is a delightful green space which is named after the coal seam that runs beneath it.

REMEMBERING THE BEVIN BOYS

Back in the 1920s, Eureka Park was an ordinary recreation ground. It was redeveloped in 2014 with a Heritage Lottery Grant but **South Derbyshire District Council** (SDDC) was keen to improve it still further. In particular, the Council wants to recapture the park's 'invisible heritage' which they feel has been lost over time.

Part of this work involves creating a **memorial garden** for the 'Bevin Boys', the 48,000-strong workforce who during the Second World War were conscripted by Minister for Labour, Ernest Bevin to step into the role of the many miners who had volunteered for military service. Mined resources were essential during wartime for building ships, vehicles, armaments and ammunition and Bevin realised that by using conscripted men to fill the vacancies in the mines, production could be maintained at a viable cost.

Ernest Bevin



Environmental Geotechnical **Specialists**

RGS IN THE PARK

Charlotte Mason

The plans for the memorial garden included some pergolas which were built to resemble mine shafts and tunnels, as well as sculptures, refurbished mining artefacts and a mosaic. However, as in any coalfield area, a thorough investigation of the site was essential. SDDC needed to be sure that the mine beneath the new garden would cause no safety concerns for visitors or for themselves.

RGS was tasked with carrying out these vital site surveys.

Geoenvironmental Engineer, Charlie Campion, located the treated mine shafts and inspected the mine caps to confirm that the old shafts had been properly remediated. Trial pitting and chemical testing were carried out to check for any site contamination. Geotechnical Engineer, Charlotte Mason also oversaw rotary drilling to a depth of 19.5m to investigate the strata for mineworkings and installed a regime of standpipes for gas monitoring. One rotary borehole which gave high readings for

(ATNAMMOR) hazardous gas had to be sealed to make it safe.

As Eureka Park has public access on all sides, it was essential that we managed the safety and security of the works, as well as fully reinstating

the site for public use. Safety is always at the heart of all that we do and both during and after our carefully managed operations, our team made sure that the entire site remained safe and tidy.

Our client now has the benefit of a comprehensive report which includes our recommendations for the safe development of this exciting site. The project is currently in its early stages but why not take a day out to see the Bevin Boys' Memorial Garden for yourself once it's completed?



IF YOU'RE PLANNING TO DEVELOP LAND IN CURRENT OR FORMER MINING AREAS, ATHOROUGH PROFESSIONAL SITE **SURVEY CAN SAVE YOU FORTUNES.**

FOR EXPERT ADVICE, CALL RGS TODAY ON 01484 604354



THE ROGERS ARCHIVE

Granny Rogers' Musings: Episode 8 On retirement



I would have been about 30 years old and happily settled into my career when Granny Rogers retired. Keen to celebrate her grand old age of 70 (well, as a mere lad of 30, everyone over 50 seemed ancient), I popped around to her house with a large bunch of flowers.

I found Granny R in the back garden of her cottage. Relaxing in her large wicker and rattan peacock chair, she was draining a large glass of G&T which I suspect was a little more gin than tonic.

Smiling, I shouted (she was a little deaf), "How's retirement, Gran?". She put down her glass - although only for a moment - and gave me her sardonic stare.

"Steve, my boy, a geotechnical engineer never retires. They simply change their job title!" Grinning broadly, I ventured, "So what's your new job title?" Her reply was immediate. "Consultant!" she exclaimed.

"You see, Steve, I can still play the game exactly as I always did, but now I can take time out whenever I want!".

It seems I am more closely aligned with Granny Rogers than some realise!

JOB FILE

Underlying danger





A property developer recently called on us for help with a worrying problem at a site in Huddersfield.

He had planned to demolish an old bungalow and build a brand new property in its place, but the demolition process revealed an alarming series of large voids opening up beneath the site's surface.

Such voids cannot simply be backfilled.

The site must be carefully investigated and analysed to inform a plan of action that leaves the site safe and secure.

A coal mining risk assessment showed that there were known workings at depths of around **30m** as well as potentially illicit shallow workings within **5m** of the site surface. Our client wanted us to make sure that the ground was **stable** and **secure** enough to support foundations for the proposed new development.

With our Senior Engineer, Rob Palmer at the helm, RGS moved on to the site and excavated trial to find out more about the apparently illicit shallow workings.



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This initial step was vital, as we had to be sure that the near surface was stable in order to **safely support** the weight of the **rotary drilling rig** when it arrived on site.

As predicted, we found illicit shallow workings within the trial pits. We therefore decided to replace the rig at this point with an excavator. This smaller, lighter machine gradually worked its way around the site, digging a series of pits to locate the dangerous workings. Whenever these workings were identified, the excavator had to backfill, retreat and search again for stable ground.

Once an area of unworked ground was identified, we brought one of our rotary rigs onto the site to drill a **30m borehole**. Following a thorough analysis of the borehole logs, we gave our client a **full report** including an **effective foundation solution** which will both ensure the **stability** of the new property and **satisfy** all the relevant planning conditions.

While our client had an unpleasant shock when the holes and voids appeared, the situation could have been worse - plus a great deal more costly. If he'd chosen to redevelop the existing bungalow (which had previously seemed a good option), the outcome could well have been disastrous, with his investment in the redevelopment tumbling to the ground when the voids gave way.

Fortunately, his redevelopment plan revealed the invisible hazard and his wise decision to seek professional expertise and advice ensured the future safety of his site.

YOU HAVE NO IDEA WHAT LIES BENEATH YOUR FEET! DON'T LEAVE IT TO CHANCE.

IF YOU'RE BUILDING, PROTECT YOUR INVESTMENT BY CALLING OUR FRIENDLY RGS EXPERTS ON 01484 604354



Do you need a phase one environmental desk study report? RGS STANDARD RGS PREMIUM Contact us for more details and to discuss your options for this service For more information about your investigation requirements please don't hesitate to contact us.

Telephone on 01484 604 354

Click here to email us

CLIENT FEEDBACK

Talk to us

RGS were professional and courteous throughout the whole process. Highly recommended!



We're always keen to hear what clients think of our service and welcome feedback from our clients, colleagues and associates.

We're looking forward to hearing from YOU!

Click here to email us your comments.





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