

The Shield

**WIN
A FAMILY
BREAK**



THE PAPER FOR RAIL PEOPLE IN THE SOUTHERN REGION

ISSUE 01, SPRING 2015

SPAN-TASTIC



Super-fast bridge job is injury-free

ITS predecessor had stood for more than a century. But thanks to the smart work of rail contractors in the Southern Region, it took just 67 hours for this replacement bridge to be installed over a busy London street, and all without a single safety incident.

The bridge, next to South Tottenham station, was more than 100 years old and had reached the end of its useful life. The new bridge also removed the need for six supporting columns, which were at constant risk of being struck by passing traffic on the busy A10 road.

An added complication was that the road closure required for the work to take place could only happen when Tottenham Hotspur were playing away from their home ground, just over a mile up the road.

With Spurs playing at Leicester City on Boxing Day, there was a brief opportunity to get the job done in a single possession before the next home game.

Colleagues involved in the work told *The Shield* that it was a challenging but hugely satisfying...

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GOING TO PLAN: MICK GLOVER, STUART WAVELL AND SHANE O'HARE

Driven to distraction

Stay safe on the road

NEED TO KNOW

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"It's tough work on a freezing cold day"

AT THE CUTTING EDGE

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Seen and not hurt

A CLOSER

LOOK AT PPE

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Seven signs of a tidy site – page 4 & 5

First Person



John Cox, Managing Director, Rail – VolkerFitzpatrick

It is a privilege to welcome you to our first edition of *The Shield*, a newspaper for everyone working on infrastructure projects in the Southern Region.

This is an initiative from the Southern Shield Steering Group, a group made up of directors within Network Rail and its key partners.

As a Managing Director for VolkerFitzpatrick, I participate in this group to show my commitment to making positive changes to

eliminate incidents and injuries on the railway. Only by improving the quality of site conditions, and the approach and behaviours of our people, are we able to create a safer working environment.

Personally, I am committed to make sure that everyone associated with our work goes home safely. By joining our forces we will deal with challenges and make sure everybody returns home safely every day.

I would also urge you to write your own

commitment and share this with your colleagues.

I will be visiting many sites this year, and I am looking forward to sharing your experiences and lessons learnt. Feel free to take this as an opportunity to challenge me if you believe I'm not delivering on my own commitment!

I hope *The Shield* inspires every one of you to make your individual contribution in creating a safer railway together.



ELIMINATES ERROR: MATT HEWITT

SAFE WORKING GOES DIGITAL

THOUSANDS of people across the rail industry are being trained to become Safe Work Leaders.

A new competence, the Safe Work Leader (SWL), is being introduced to make sure that everyone working on or near the railway is always clear about who is in charge of the work being done.

SWLs will be highly competent employees of Network Rail, principal contractors or holders of the newly created Railway Contractors Certificate (RCC), who are trained and equipped to be responsible for identifying and managing risk on any site of work. Already more than 650 people have been trained as SWLs by Network Rail with thousands more to follow.

The SWL training is part of the wider Planning and Delivering Safe Work programme,

aimed at improving worker safety for everyone in the railway industry.

As part of this, a new electronic "permit to work" system called Proscient will provide colleagues with better tools to identify and manage the risks that they face.

This key safety initiative is designed to help practically deliver Network Rail's vision to get "everyone home safe everyday".

Among Network Rail colleagues at one recent SWL session were signalling technicians Leon Stockley and Matt Hewitt.

Matt added: "The new system eliminates error in the planning process and actually stops plans conflicting. It takes away that problem – which was a common issue before. That's better for everyone."

Leon said: "I've found the training really useful. I think it's about time we embraced the digital age. If it makes our working day safer, it can't be a bad thing."

Got a question? Email safework@networkrail.co.uk



EMBRACING DIGITAL: LEON STOCKLEY

LEADERS MAKE 'HOME SAFE' PLEDGES

To show their commitment to Southern Shield – and to the welfare of their colleagues – group members made the following pledges...

"I will not accept any lost time injuries on projects under my leadership. I will enrol my direct reports in committing to this, and I will create an environment that ensures everyone goes home safe every day."
Jonathan Walley, Managing Director, McNicholas



"I will be as committed to everyone going home safe everyday as I am to protecting my son and guiding his future."
John Dowsett, Managing Director, One Team Wessex



"I will make a difference by driving through real improvements to the working environment my teams are exposed to. In doing this, I will demonstrate my commitment to everyone going home safe every day, and I will be able to set a realistic expectation of eliminating workforce injuries."
Shane O'Halloran, Managing Director, BCM Construction



"I will be seen by others as a role model for safety, entitling my people in the belief that 'everyone gets home safe every day' will become reality and thus make a step change in safety performance. I will challenge myself to answer the question 'have I done all I can to eliminate all worker injury?'"
Andy Duffin, Anglia Regional Delivery Director, Network Rail



Continued from page 1 >>

...project. Foreman Mick Glover from contractor VolkerFitzpatrick said: "Good communication between the team, subcontractors and the public was vital, especially with so much going on. It was very challenging at times but a great feeling seeing it completed safely and watching that first train go across."

Works manager, Shane O'Hare, added: "The key to getting the work done safely and on time was making sure everyone was properly briefed and that they stuck to doing things the right way."

The skew of the bridge meant parts of the downline had only a 10mm tolerance, putting pressure on site engineer Stuart Wavell to get things spot on first time.

He added: "It all went well – and that was down to very good planning – but there was big sigh of relief when the bridge was in place."

"Working at height, I was very aware of ensuring I was safely harnessed when necessary. It is important that I kept a look out for others' safety too."

Scheme project manager Mike Crossling said the team had shown "great safety leadership".

ROCK STARS

The Tottenham bridge was just one of several major projects carried out over the winter, which combined high performance and first class safety.

In Kent, specialist rope access skills and innovative engineer-



ing techniques helped Costain contractors protect part of the railway beneath the iconic White Cliffs of Dover.

The 1,500-metre stretch of line at Samphire Hoe, has a long history of rock falls, so subcontractor CAN is stabilizing sections of the cliff with over 2,500 square metres of protective mesh, secured by 350 mesh dowels and reinforcing rock bolts. Catch fences are being installed along the lower parts of the cliff face.

Exposed to high winds on the cliff face and with the risk of rock fall, it is a hazardous place to work.

To help reduce the risks but maintain progress, a daily rock fall monitoring system has been put in place, while specialist slope climbing rigs are being used to complete the works without causing disruption to rail traffic below.

All of which have meant the programme has remained on schedule, with an impeccable safety record.

CAN project manager, Max Lloyd said: "The attention to detail and willingness to carry out tasks in the correct manner first time, by the team at Samphire Hoe, has ensured high productiv-

ity while maintaining an exceptional safety record in what is an exposed and potentially very dangerous worksite."

MARATHON EFFORT

The safety of operational teams and the public, as well as maximising productivity were also the twin priorities for McNicholas, when delivering feeder and pilot cable at Cobham in Surrey.

In order to achieve both, a cable train was used, resulting in more than 26 miles of cable being installed safely, during a 26-hour possession.

The work involved in excess of 200 operatives over the weekend, and followed months of careful planning.



PULL TOGETHER: CABLE AT COBHAM



CROSS REFERENCE: THE BRIDGE TEAM STUDY THE PLANS



SHORT HAUL: THE OLD BRIDGE IS REMOVED

The Shield

This paper is produced for:



Written and designed by beetroot

SPEAK UP, STAY SAFE

COLLEAGUES at Infrastructure Projects sites across the region have been taking part in SPEAK UP for Safety briefings.

Designed to give better feedback on which to make safety improvements, briefing sessions included an open floor discussion for colleagues to discuss any issues and concerns.

It was also hoped the briefings would spark further Safety Conversations and encourage

a more proactive approach to identifying and tackling health and safety issues.

Regional Health and Safety Manager, Stephen Webber, who is collating feedback from the engagement sessions and Safety Conversations said: "Ultimately these briefings are about us all having the best understanding of the issues people face, so we can keep everyone safe every day."

SURVEY REVEALS THE GOOD, THE BAD AND THE FRUSTRATING

PEOPLE enjoy working on the railway but feel there could be more recognition for jobs done well and safely.

These were just two of the points made by colleagues in a survey carried out across IP Southern. Feedback also revealed that some colleagues felt that long hours and constant deadlines were affecting wellbeing, while others felt it was difficult to raise safety concerns with managers.

The "culture survey", which was held in October last year, was open to all people working within the Southern Region. More than 1,500 people responded to the survey which was backed up with 68 interviews.

Other feedback suggested that:

- Managers' care and concern does not appear genuine

• Safety statistics are viewed as meaningless, and don't hold people's attention

• Up to 50 per cent of incidents or close calls are still not being reported.

Eric Woodward, who organised the survey said: "Thanks to everyone who took part in this survey for your open, and often very frank, feedback. Only by being honest about our current safety performance can we hope to identify the changes that are needed to make the railway a better and safer place to work. Having studied your comments and suggestions, I believe that there is now a genuine commitment by your senior management team to making the right changes so that everyone gets home safely."

The Shield visited a bridge replacement project in South Norwood where colleagues who have a passion for keeping things shipshape showed us their...

SEVEN SIGNS OF A TIDY SITE



1 Designated briefing area
When it comes to safety, the team start as they mean to go on. Every day starts with a detailed briefing outlining the scheduled work and hazards. Having the right environment for this can make a big difference. Here there is a well-organised, covered area, large enough to accommodate the whole team comfortably, with tidy and regularly updated noticeboards.
Site Engineer Tom Steel said: "We make sure there's room for everyone to see and hear the briefing. That's vitally important for safety every day."



2 Site Task Briefing Sheet
This pocket-sized sheet contains each colleague's work schedule for the day – as well as full details about work on the rest of the site. It includes the Lifesaving Rules and a reminder to follow the "20-second scan" rule. This rule, created by site contractor GRAHAM, compels colleagues to take a few moments to look around them for any potential safety risks – and address them before beginning any piece of work.
Skilled Labourer Simranjit Singh said: "The briefing sheet is very useful. I refer to it every day. The list of emergency contact numbers is a great idea."



3 Walkways
Pedestrian areas for colleagues and visitors are clearly marked and fenced, and the paths are concreted. It keeps people away from machines and vehicles, and reduces the risks of slips and falls.



4 Vehicle segregation
In the same way that pedestrian areas are clearly marked and segregated, there is a well-marked and strictly enforced one-way system for vehicles. There is also a fenced loading area, meaning delivery vehicles load and unload away from other working areas, while allowing continued access for other vehicles.



View from the bridge
Tennison Road bridge, close to Norwood Junction station, was built almost 100 years ago. It is being replaced with a wider, stronger and more resilient structure with improved lighting, wider and safer footways and improved safety for cyclists. It is the biggest bridge to be replaced on the network in the South East in the last decade.
"As soon as you set foot on site, you notice the attention to detail," said Network Rail Construction Manager Paul Adams. Every aspect of colleagues' health and safety is considered and every effort made to reduce the risk of accidents so that everyone goes home safe every day.
"Of course, some sites have less space and fewer resources than others. But many of the initiatives here, and without doubt the attitude to safety, could be used at any site, anywhere."
Rory McFadden, Project Manager for GRAHAM Construction (pictured), which is delivering the work, added: "The team can see the effort that goes in to looking after them and that rubs off on the way they approach their own safety and the safety of others."



5 Dedicated mobile phone areas
Mobile phones are an inescapable part of modern life, and can be a vital communication tool. But used at the wrong time in the wrong place, they can be a dangerous distraction. That's why a number of authorised mobile phone areas allow colleagues to make and receive calls in safety.
Technical Apprentice Karl Thomas said: "These areas reduce the need to go off site and remove the temptation to try using the phone while walking around."



6 Secure stores
These stores are covered to keep rainwater out but open-fronted with mesh windows to ventilate them. They are tidy, clearly signposted and permanently manned. It's all about keeping products safe and accessible and ensuring COSHH rules are strictly followed. At this site they not only ensure expired items (such as single-use straps) are identified and kept apart, they also take extra care to salvage reusable materials.



7 Waste separation
Waste products are meticulously sorted and separated into clearly marked units. This reduces the environmental impact of the project and creates a culture where colleagues think carefully about how and where they discard anything.
Foreman Martin Ryan said: "Taking a few extra moments to sort the waste is easy and it means we are doing the right thing for the environment."

...AND HERE ARE SEVEN DEADLY SINS
Network Rail Construction Manager Paul Adams gave us his breakdown of personal peevs that he has seen at some other sites. These bad habits not only look sloppy, they could lead to more serious safety issues.

1. Lack of, or poorly maintained, welfare facilities
2. Poor handling of site deliveries – especially operatives and visitors failing to use handrails and steps when loading
3. Uncontrolled and unsafe use of mobile phones
4. No exclusion zone to keep people and vehicles a safe distance from operating plant
5. Generators and other equipment with no drip trays or "plant nappies"
6. Power cables and wires not properly secured
7. First aid kit not restocked

Safety in numbers

In the Southern Region in 2014 there were:

113 accidents

17 RIDDORs

That's **130** people who did not "go home safe"

There were also **64** operational close calls

4,183 close calls reported

6M hours worked

Lifesaving Rule: "Never enter the agreed exclusion zone, unless directed to by the person in charge."

HEALTH CHECK



THE diagnosis that changed Andy Gore's life came in 2010.

He had put feelings of tiredness, thirst and headaches down to simply being under the weather.

But after a colleague recognised the symptoms, and encouraged him to get tested, he discovered he had type 2 diabetes.

"At the time, I was devastated," said Andy, a construction manager for BCM. "I was in my late 30s and had thought I was quite healthy."

But four years on, the lifestyle changes Andy was forced to make have left him feeling better, fitter and thankful that the condition was spotted.

He added: "I've cut out sugar and cut back on alcohol, I've lost weight and now I read every label in the supermarket for the sugar content, which can only be a good thing. I'm looking after myself and I feel better as a result."

Luckily Andy's condition is such that he can control it with tablets and healthy eating, rather than depending on insulin injections. He urged colleagues not to take any chances with their own health.

He said: "If you've got any of the main symptoms (see panel), then get checked. It doesn't cost anything and it could change your life."

DIABETES FACTFILE

Diabetes is a condition where glucose levels in the blood are too high because the body cannot use it properly. This is because the pancreas doesn't produce any insulin, or not enough insulin, to help glucose enter the body's cells.

Type 1 diabetes is where there is no insulin, type 2 is where there is not enough insulin or it is not working properly.

The main symptoms include:

- passing water more often than usual, especially at night
- increased thirst
- extreme tiredness
- unexplained weight loss
- slow healing of cuts and wounds
- blurred vision.

For more information, and a simple test to see if you are at risk, visit diabetes.org.uk



HIGH SPEC: PHIL MELLISH, SENIOR CONSTRUCTION MANAGER FOR NETWORK RAIL, PRESENTS GLASSES TO (CLOCKWISE FROM TOP) DAVID, JARED AND MATT



GLASS ACTS

IN each issue of The Shield we'll be handing over a pair of these smart safety glasses to colleagues who have made an outstanding contribution to safety where they work.

Made by Bollé, the specs are Network Rail approved and come with a smart case.

Among the first to receive their safety glasses was David O'Connor, who works for SRS installing sleepers at Clapham Junction. He was praised for the way he briefed colleagues, emphasising the dangers of the third rail and ensuring they witnessed the testing of every single piece of live rail within the worksite. Jared Ismail, a COSS working at Vaux-

hall, recognised that he had too many operatives to cover. He was not afraid to speak up and ask for another COSS to be utilised so he could ensure he was effective in his duties.

Another Vauxhall colleague, Osborne supervisor Matt Brent, earned a pair of shades having been described by his manager as having a "positive attitude" to safety awareness.

Has your colleague made an outstanding contribution to safety? If so get in touch... shield@networkrail.co.uk

KIT IN CLOSE-UP

What you wear – and how you wear it – can be the difference between a job well done and a serious injury. In each issue we'll focus on one piece of PPE and reveal some of the science behind the safety

HAND IN GLOVE

IT'S easy to take our gloves for granted. But because we use them for almost every task, they are constantly exposed to risk.

There are different gloves for different tasks, including those which are flame retardant. And from November last year it became compulsory for all gloves worn for work on IP Southern projects to be rated "Cut 5".

"Cut 5" refers to the glove's level of resistance to a blade cut as measured to comply with European safety rules – specifically the EN388 Standard. EN388 requires gloves to be scored on a scale of 1 to 5 for blade cut resistance (with 5 being the highest score).

Blade cut resistance is measured using material taken from the palm of the glove and subjecting it to repeated cutting motions from a rotating tungsten steel circular blade. Two specimens are used and each one is tested five times.

DID YOU KNOW?

There were **25** hand injuries in first **six months** of the year in 2014, but only **3** hand injuries since the introduction of **Cut 5** gloves in October last year.



DRESSED TO IMPRESS: KATE WOODS FROM OSBORNE

NEED TO KNOW – DANGEROUS TALK



USING a hands-free kit while at the wheel is as dangerous as drink driving, according to a study. Researchers found that talking into the phone, whether hands-free or hand-held, drivers are:

9% slower hitting the brakes, when using a hands-free phone

24% more variable in the distance they kept behind the lead car

19% slower resuming their normal speed

The same study concluded that in the same way that you put yourself and others at risk when you drive drunk, you also put yourself and others at risk when you use a hands-free or hand-held phone.

Never use a hand-held or hands-free phone or programme any other mobile device while driving. It's a Lifesaving Rule, so pull over and stop before you take a call.

ON SITE

AT THE CUTTING EDGE

The Shield visited Longfield in Kent, where some of the team reinforcing a Victorian cutting told us about the highs and lows of life on the slopes



MICHAEL FRIEL, CONTROLLER OF SITE SAFETY (COSS)

"I brief the access gang on their work that day, making sure they are working safely when underway and look out for any debris falling onto the track. It's my role to alert Network Rail and stop trains if that does happen and that can be the toughest part of the job; keeping a constant look out.

"We have a briefing each morning and discuss any safety aspects that day, the line speeds and how heavily it will be trafficked.

"I'm proud of getting the boys off site safely at the end of each shift."

Most important piece of safety kit: "I keep train stopping equipment with me. Vital for use in case there is an emergency."

If I could change one thing: "It would make my life easier if we worked with catch fencing for debris."

Which colleague would make the best transport minister?: "Our banksman Anthony Lawrence. He has all the safety tickets!"



ROB BROOKS, FOREMAN

"Working with large pieces of equipment, at height, safely while trains pass beneath is definitely a challenge.

"My key responsibility is the roped access part of the work – I am a level three roped access supervisor. I also make sure the guys work the task briefings.

"They are all working at height, so it is important to check and recheck the suitability of all the equipment they are using."

"Finishing the emergency work on one of the bridges so that road traffic could pass unrestricted, was something I was proud of – and it made local residents very happy."

Most important piece of safety kit: "Harness. It is safety critical when working at height."

If I could change one thing: "Adjacent Line Open (ALO) restrictions limit how far we can take drill rigs down the slope. That means more man-hours exposure to working at height."

Which colleague would make the best transport minister?: "Myself. I quite fancy a nice spell in Parliament!"



ROSS PORTER, ROPE ACCESS TECHNICIAN

"Part of my role is to abseil the side of the slope and mark out the borehole locations. Like others I'm working at height, so this involves checking all the ropes and harness before work. We always work in pairs as a further safety measure.

"The work we are all doing here is important and will be of benefit to the travelling public. But it's tough on a freezing cold day in a cutting. There is no sun and the cold air sinks. You never get warm!"

Most important piece of safety kit: "My harness. It is checked before and after each shift and each break."

If I could change one thing: "The interpretation of the ALO restrictions could be eased."

Which colleague would make the best transport minister?: "Jim Drew. He's not afraid to say what he thinks."



ROBIN LONDON, ROPE ACCESS TECHNICIAN

"I'm responsible for stressing the soil nails so that they do their job.

"This involves lots of heavy equipment so I have to make sure it is all tethered correctly at the top of the slope and make sure the tethering point is sound and safe.

"The toughest part of the job is working in difficult terrain with large pieces of equipment. But I enjoy my job and am proud of what I do."

Most important piece of safety kit: "My harness, ropes and anchor points. I make sure I check them after every use."

If I could change one thing: "Make the use of safety glasses task specific. They are useful when drilling but other times they get foggy and can be a real hindrance."

Which colleague would make the best transport minister?: "I think I could do a good job."

PROJECT BRIEF

The Victorian cutting at Longfield Hill on the Chatham Main Line is as much as 14 metres deep and features some very steep slopes.

It slices through sand and chalk deposits which have weathered and over the years, increasing the danger of rock falls.

Now BAM Ritchies, contracted by Costain, is installing soil nails and slope mesh in a move that will eradicate that risk.

Carrying out that work is an army of men hanging from ropes down the side of the cutting as trains pass beneath.

BAM Ritchies Project Manager Andy Morris said: "We don't skimp on safety. We all want everyone to go home after each shift."

RAIL LIVES

HAPPY FRY-DAYS

Ian looks back on a career in safety



SAFETY is always at the forefront of any project, but as Ian Fry can attest, that wasn't always the case.

Ian is retiring as IP Southern Wessex Route Delivery Director, after a distinguished career on the railway. But his first experiences of the importance of safety came while he was working on building sites.

"At the time, there wasn't a huge emphasis on using PPE," Ian said. "Some people may have had a hat or boots but that was about it."

"Instead of using a ladder to traverse scaffolding, you would often climb it – something

you would never dream of doing nowadays.

"During my time on the site my friend had a lucky escape and I was fortunate not to be seriously injured when part of an unsupported scaffold collapsed three stories up.

"There was no real culture of reporting accidents either; neither incident ever got reported."

Ian then joined London Underground, before joining Network Rail in 1996 as a programme manager, later working on the Train Protection and Warning System (TPWS) programme.

"When I first joined the programme, there

was very little interest in it," he said. "That all changed following the Ladbroke Grove accident in 1999, when safety was thrust into the limelight."

After three years on the programme, Ian joined the Southern power upgrade project, supporting the introduction of new trains to the network.

"It was during this project that I started to see safety become a much more front-of-the-mind activity.

"We were, however, struggling to find a venue to brief the workforce. So we created the

first 'safety bus'. They are now used all over the country."

Ian managed the King's Cross redevelopment project, and during this time worked as part of the team investigating the 2010 Tay Bridge fatality.

Although he will be taking some time to relax, Ian will still continue to lend his expertise to the railways: "I certainly hope that I can continue to have an input into safety, but perhaps from a different dimension.

"Safety is always improving, so I expect to see safety culture continue to improve".

WIN A FAMILY WEEKEND BREAK AND THEME PARK ADVENTURE



ENTER our competition and you could be enjoying a two-night country hotel break in south Wales, as well as a day out for the family at one of Wales' biggest adventure parks.

The Shield has a two-night stay for two adults and two children at the Wolfscastle Country Hotel, plus there's a family ticket to the nearby Oakwood theme park included in the prize.

Wolfscastle Country Hotel is a former vicarage nestling in the lush mid-Pembrokeshire countryside. The hotel is still known locally by its original name 'Allt yr Afon', which means wooded hill by the river. Renowned for its friendly atmosphere and great service, Wolfscastle is a member of Welsh Rarebits gold collection of individually owned hotels of distinction. It was also awarded two AA rosettes for culinary excellence in its popular restaurant.

Oakwood is Wales' biggest family adventure, set in 88 acres of spectacular countryside with more than 40 exhilarating rides and amazing experiences to discover.

Don't miss Megafobia – voted the best ride in the UK and the third best ride in the world by the Roller Coaster Club of Great Britain. You can also enter the magical world of Peter Pan in the £4m family-themed area, Neverland, which spreads across more than three acres and features 10 new rides and attractions.

For more information visit wolfscastle.com and oakwoodthemepark.co.uk

To enter just send your answers to the questions below, including your name, job title and company and a daytime contact number to shield@networkrail.co.uk. You can also post your entry to: Marsha Gray, Infrastructure Projects Southern, Waterloo General Offices, Waterloo Station, London, SE1 8SW.

The winner will be drawn from the correct entries. Closing date is Monday 13 April 2015.

Q1: CAN has been protecting the railway from rock falls at which famous Kent landmark?

Q2: Which rating of glove became mandatory for work on IP Southern projects in 2014?

Q3: What is the name of Network Rail's new electronic "permit to work" system?

T&Cs

Hotel prize is for two adults and two children (12 or under) sharing to include breakfast each morning and dinner up to the value of £100 (excluding drinks) on one night. Theme park ticket is for two adults and two children 12 or under.

What do you think? Get in touch – shield@networkrail.co.uk