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HIGHWAYS



ASBESTOS MANAGEMENT ON HIGHWAY PROJECTS

Risk management specialist Lucion Services has produced a white paper on the asbestos management issues associated with highways projects.

With much of the UK highways infrastructure over 20 years old, one of the biggest risks associated with renewal, repair and maintenance activities are the hidden dangers of asbestos containing materials (ACMs) that may be present.

In the highways environment ACMs are known to exist in road building materials, drainage structures, pipes, bridges and viaducts, retaining walls, associated buildings and other assets. In particular, road tunnels, depots and other buildings are considered to pose the highest risk for highways related works.

It is the responsibility of the duty holder to make sure that all highways assets are well managed and maintained, and this includes knowledge of where the asbestos is located.

To address the health risks associated with ACMs, the Control of Asbestos Regulations 2012 (CAR) seeks to minimise the risk of harmful effects of exposure to asbestos. Regulation 4 of the CAR 2012 includes an explicit duty for those in control of assets to identify and manage any asbestos present. In addition to CAR 2012, the Highways England (HE) asbestos

management strategy complements existing requirements under the Construction Design and Management Regulations (CDM) 2015. This forms the basis for ensuring asbestos issues are included in Health and Safety Plans and files, and in the design of risk assessments and other actions required by the Control of Substances Hazardous to Health (COSHH) Regulations 1992.

HE will audit and monitor Providers and Major Project Providers against these policies.

In order to manage any ACMs present they must first be positively identified or presumed to be present. The presumptive basis of asbestos management requires the duty holder to assume that all unknown infrastructure fabric contains asbestos and that procedures are put in place to ensure that the material is dealt with accordingly – through an asbestos management plan.

The most common starting point is an asbestos management survey which is designed to identify, as far as is reasonably practicable, the presence and extent of any suspect ACMs.

As well as desk studies, this is also likely to include 'intrusive' sampling and analysis to make a material assessment of the condition of any ACMs present and their ability

to release fibres into the air. In the case of hidden assets, including drainage systems, the assets must be presumed to contain asbestos unless there is evidence to the contrary.

In addition, for specific work packages or projects, a refurbishment and demolition survey is needed before any refurbishment or demolition work is carried out. This investigative work is fully intrusive and also involves destructive inspection, as required, to gain access to all areas including those that may be difficult to reach. This is an involved process requiring trained civils operatives working alongside the asbestos surveyor.

The asbestos management plan uses the location of any ACMs identified in the survey to set out those measures required to prevent any unknowing exposure to asbestos by highways staff, maintenance workers and the general public.

A thorough and robust area asbestos management plan, and associated action plans, is therefore a fundamental requirement to ensure compliance with Highways England requirements.

To help those responsible meet their responsibilities, risk management specialist Lucion has produced a special white paper on Asbestos Management on Highways.

[Click here for your free download.](#)

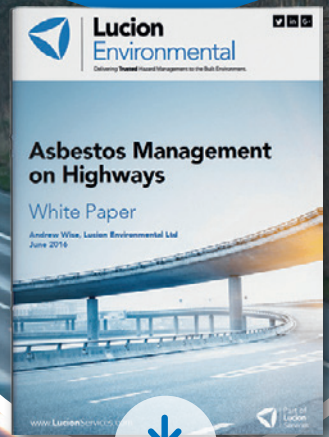


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in highway structures
and assets



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teams and mitigating
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Asbestos Management on Highways

Lucion Environmental specialise in the surveying, identification and analysis of asbestos containing materials. As an independent company we are able to ensure the delivery of impartial, trusted inspection and testing services to our clients across the world. We offer a holistic approach towards asbestos management, supporting infrastructure organisations and local authorities to ensure that appropriate measures are incorporated into the design and allowance made in project budgets and time scales.

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"Lucion's ability to provide continuous high levels of resource proved crucial to the success of a large project required on a small timescale. Their operatives were professional in dealing with staff on site whilst remaining aware of the sensitivities of the project."

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Highway to BIM: Innovating England's road network

WHEN we think of Building Information Modelling (BIM) most minds alight on the obvious; buildings, and the myriad ways in which BIM is revolutionising both their conception and construction. BIM has broader applications however, and the industry at large is beginning to feel the benefit.

First and foremost, what is Building Information Modelling? In broad strokes, it is a method of managing project information in a more collaborative and cost-efficient way – collaboration being the operative word.

When properly implemented, BIM is able to create a single shared source of information to ensure all parties are working

from the same page. It's a more flexible and reactive way of working – one which might just iron out inefficiencies and bad practice further down the line. If the industry is to deliver a more sustainable built environment in-step with the Government's aspirations, BIM will no doubt have a role to play. This is especially true of highways infrastructure, which has already made significant efficiency gains thanks to the implementation of BIM.

In April of last year, the Government's long-awaited BIM Level 2 mandate arrived, bringing with it a requirement for BIM to be used on all public sector projects, regardless of size. As a member of the

Government Construction Board responsible for the strategy, Highways England also agreed to roll-out BIM across all centrally-procured projects. Its vision? To "make informed decisions and achieve excellence in delivery with visible benefits".

The Organisation – which operates, maintains and improves England's motorways and major A roads – has thrown considerable support behind the BIM initiative, having launched a sector-specific Digital Component Library (DCL) last July. Compiled by Costain Graduate BIM Technician Faris Mahder on behalf of Highways England, the DCL houses a variety of 3D BIM models – from gantries and vehicle

restraint barriers to MS4 variable signs and signals - for use on upcoming highways projects.

Faris was on-hand to explain more: "The aim of the DCL is to reduce the extensive effort spent recreating content amongst project teams. The value for Highways England is in generating project information models more rapidly and at an earlier stage in a project lifecycle. The DCL will act as one version of truth, through the availability of digital contents from the highways supply chain."

Though the concept of a digital component library is well-established, the DCL has broken new ground in the UK highways sector. What's

more, it demonstrates how Highways England is working to arm delivery partners with the tools necessary to make BIM uptake that much easier.

Both BIM and the DCL are set to play a pivotal role in the ongoing delivery of Highways England's hugely ambitious smart motorways scheme. This transition forms part of a £15Bn government investment, to be managed by Highways England between now and 2021. In total, 292 additional miles will be added to England's existing road network through the conversion of the hard shoulder into an active traffic lane. Innovative new technology will tell motorists what speed to drive at, if lanes are blocked or closed, and

about any incidents up ahead. Faris added: "In the Smart Motorways Programme, there is a huge drive towards standardisation of assets and features commissioned within all projects. The DCL reflects this drive but it doesn't remove the responsibility of the designer to provide a safe, innovative and buildable solution."

There's still work to be done, of course. SME uptake of BIM has long been a bone of contention, and more must be done to engage the highways supply chain in the process. But the message is clear. BIM is making a difference, and it might not be long before its use is standard practice.



SHB Hire Ltd is a leading vehicle hire and management company that has been operating for nearly 50 years. They have vast amounts of experience in supporting highways and infrastructure projects alongside delivering to all other market sectors. SHB fully understand what vehicles are required to complete highways jobs from start to finish and the tight timeframes which are involved.

Their Account Managers have years of experience and work collaboratively with the customer to ensure that all areas surpass their expectations. Throughout the company all staff receive on-going training to ensure they are kept up-to-date on new processes and legislation.

SHB is renowned for having one of the most, if not the most, diverse vehicle hire fleets in the UK. The fleet encompasses all of the vehicles required to carry-out highways and infrastructure projects. The fleet includes:

- Cars and Europe's largest fleet of 4x4s
- CDVs
- LCVs including MEWPs, Welfare and Crew vehicles
- HGVs such as Gully Emptiers, Gritters, Surfacing and White Liners

- Tipper Grabs of various configurations
- Traffic Management vehicles from 3.5T – 26T with/without light boards
- Impact Protection Vehicles

The above is just a selection of what SHB can offer and through strong relationships with bodybuilders, and utilising their own fabrication facilities, they can build all types of vehicles to specification to meet the operational requirements. Also, there are no restrictions in place on the manufacturer enabling the most suitable vehicle to be chosen.

If you need it, SHB can supply it!

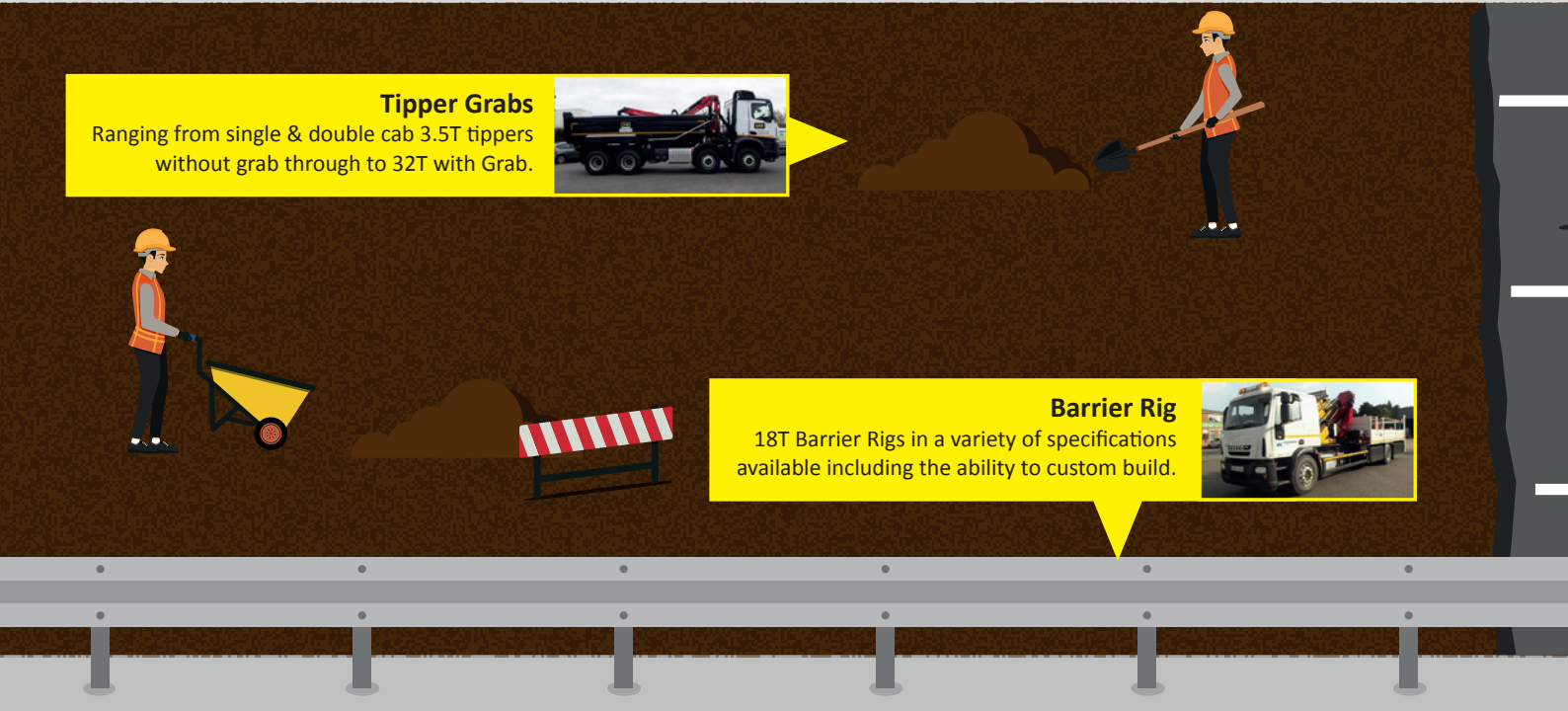
To ensure that SHB can hire vehicles to all corners of the UK they operate a fluid fleet enabling any vehicle request to be fulfilled. By utilising their in-house logistics fleet they are able to transfer vehicles to any of their 15 strategically placed locations with ease and within tight timeframes.

SHB also provide compliance management and a 24/7 and 365 days a year breakdown service. The maintenance and breakdown technicians are situated throughout the UK and positioned to enable rapid response.



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Barrier Rig

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The maintenance and breakdown technicians are authorised by leading manufacturers to carry out servicing and warranty work and each vehicle carries diagnostic systems enabling them to repair vehicles on-site rather than having to arrange for the vehicle to go to a dealer workshop. Each location has full workshop facilities enabling SHB to provide full servicing, inspections, repairs, MOTs and major breakdown work.

Plus, SHB's customer portal enables bookings, maintenance enquiries, reports plus more to be carried out remotely, instantly and at a convenient time for the customer.

SHB's acquisition of Acklea, the UK's Leading Traffic Management Equipment Supplier, enables them to offer a full range of Traffic Management vehicles from 3.5T Transits with TM bodies and LP13 to 26T Full TM bodies with crash cushions including Low Entry Chassis'. Acklea are the sole UK agents for the class leading Scorpion Crash Cushion, the only Crash Cushion to be tested in the UK and to meet all required standards of the NCHRP350 and the additional side impact test requirements.



Vehicle Hire and Management

Street Lighting

Van mounted MEWPs and 4x4 MEWPs available as well as various HGV scissor lifts.



White Liner

7.5T through to 15T White liner vehicles complete with boiler, variable gallon pots, compressors and cranes.

Traffic Management

3.5T with lightboards through to 26T specialist impact protection vehicles.



IPV

Various IPVs available ranging from 18T through to 26T fitted with industry leading crash cushions.



One of Britain's biggest road upgrades officially underway

Cambridgeshire has welcomed the news that construction is underway on one of Britain's biggest road upgrades.

The announcement was made as Transport Secretary Chris Grayling visited the major improvement scheme, on the A14 in Cambridgeshire, to formally mark the beginning of construction.

The A14 Cambridge to Huntingdon improvement scheme will be delivered on behalf of the Highways England by the A14 Integrated Delivery Team. The joint venture of four UK contractors and two design consultants include Balfour Beatty, Carillion, Costain and Skanska and, for design, Atkins and CH2M.

The £1.5Bn project will upgrade 21 miles of the A14 to three lanes in each direction adding additional capacity, boosting the local and national economy and cutting up to 20 minutes off journeys.

The project will include a major new bypass for Huntingdon, widening the A1 between Brampton and Alconbury, widening the existing A14 between Swavesey and Milton and improving the junctions at Bar Hill, Swavesey, Girton, Histon and Milton.

Jim O'Sullivan, Highways England Chief Executive, said: "The A14 is one of the most important east to west road links in the country, connecting businesses, communities and families.

These vital improvements have been highly anticipated, and it is great to be able to start main construction today.

"We have worked very hard to get the project to this stage and I would like to thank all our local partners who have supported us and worked with us to get this far.

"I want the A14 to redefine what a road scheme can achieve and, in addition to a significantly upgraded road, I am determined

that our work here will leave behind a positive legacy for people living along the A14 – providing better, safer journeys, setting hundreds of young people off on fulfilling careers in construction, and boosting the capacity of the whole country to deliver world leading infrastructure improvements."

The project was given the go-ahead in May 2016, and preliminary work has taken place including preparing for the construction of compounds as well as ecological, archaeological and ground investigations.

In autumn last year, a new Highway Academy run by the West Anglia Training Association opened, which will train apprentices who will go on to work on the project. A community fund set up by the project team has already agreed funding in principle for four local community projects, with several funding rounds left to run.





£1.2Bn funding for road safety improvements

COUNCILS across England are being informed whether or not they have been allocated a share of the £1.2Bn local roads funding, which includes money from the new National Productivity Investment Fund, as well as the Pothole Action Fund. There will also be £75M available for councils to bid for to repair and maintain local infrastructure such as bridges, street lighting and rural roads. The funding, which will improve roads, cut congestion and improve journey times, is part of an economic plan to stimulate the economy and build a country that works for everyone.

In partnership with Thurrock and York Councils, the Department for Transport will also begin a new “pothole-spotter” trial, which will use high-definition cameras mounted to refuse collection vehicles combined with integrated navigation system and intelligent software to identify road surface problems before they become potholes.

Transport Minister Andrew Jones said: “Roads play a significant part in everyday life linking people with jobs and businesses with customers, which is why this government is investing record amounts improving and

maintaining highways across the country to help motorists.

“The funding we have allocated today is focused on relieving congestion and providing important upgrades to ensure our roads are fit for the future – helping to build an economy that works for everyone.”

The DfT will also support plans for a new motorway junction on the M11, near Harlow in Essex, following the announcement that the Government plan to build 200,000 homes. Part-funded by Essex Country Council, the new motorway junction will cut several minutes from journeys to Stansted and Cambridge, and will help ensure the delivery of 15,000 of those homes, supporting continued growth in the local economy. The £1.2Bn for the 2017 to 2018 financial year consists of:

- £210M from the National Productivity Investment Fund announced in the Autumn Statement when the Chancellor committed to invest an extra £1.3Bn improving the road network over the course of the Parliament. From this, £185M will be allocated in the 2017 to 2018 financial year to local highway authorities in England,

outside London, to improve local highways and public transport networks, with the remainder of the funding of £25M being available for safer roads to help tackle some of the most dangerous A roads.

- £801M to be shared across local highway authorities in England, outside London, to help improve the condition of local roads.
- £70M to be shared across local highway authorities in England, outside London, from the Pothole Action Fund which will help repair over 1.3 million potholes.
- £75M from the Highways Maintenance Challenge Fund, inviting local highway authorities in England, outside London, to compete for funding to help repair and maintain local highway infrastructure, such as bridges, lighting and rural roads.
- £75M from the Highways Maintenance Incentive Element which invites to complete a self-assessment questionnaire in order to reward those who demonstrate they truly understand the value of their asset.

NO STING IN THE TAIL



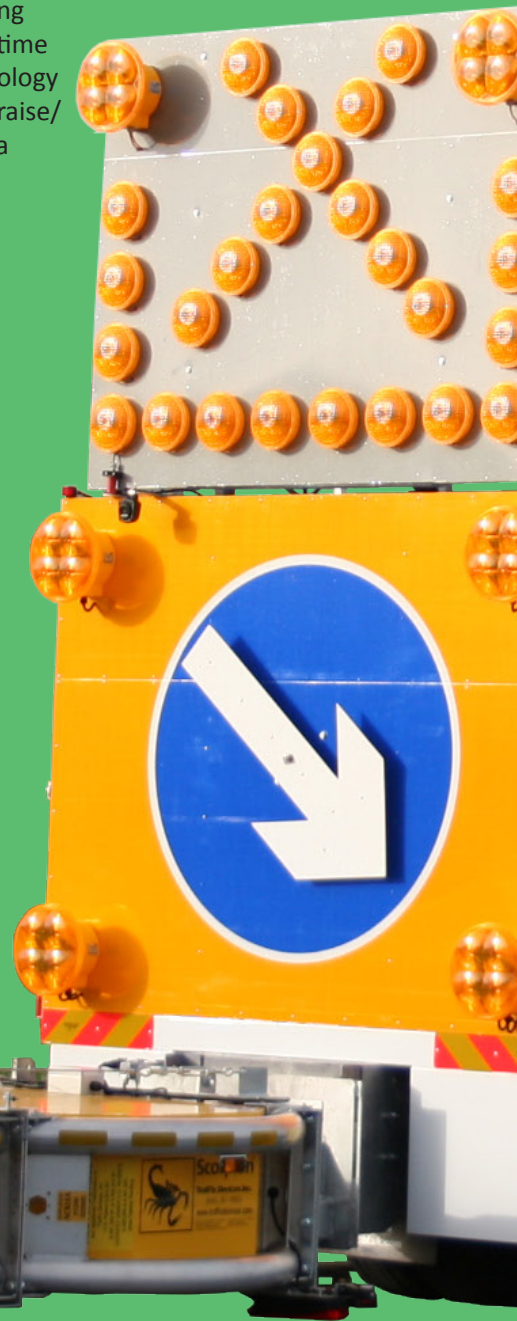
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They offer a robust selection of Traffic Management vehicles from 3.5T Transits with TM bodies and LP13 to 26T Full TM bodies with crash cushions including Low Entry Chassis'. Acklea are the only company in the UK to utilise the class leading Scorpion crash cushion, the only crash cushion to be tested in the UK and meet all required standards of the NCHRP 350 and the additional side impact test requirements.

The forward thinking Acklea is continuously developing new traffic management bodies for HGVs, LGVs and LCVs and have developed plastic bodies which offer considerable safety and operational benefits over larger truck chassis typically used for the same deployments. Alongside hire and purchase options that Acklea offer they can also design and build to meet the operational requirements on all vehicles from 3.5T to 26T and can supply and build VMS trailers specifically for the traffic management industry. They operate a substantial hire fleet, part sales and service department to ensure that the customer has complete control over their fleet.

VSA lighting board

Nissen have developed the new LP8000 Zyklop' s LED lighting board, which saves down time using the very latest technology by encompassing Acklea's raise/lower folding system over a galvanised steel sign rack.



Scorpion crash cushion

Is tested to 70mph and is used to absorb the impact of vehicles with side re-directional properties (large aluminium rings) giving a safe working area for the maintenance crew.

Bodywork

Designed to last the life of the vehicle and more. It is built to the customers' requirements with full CAD drawings to support the required specification. The bodywork has all the latest safety features along with Acklea's new designed footwell allowing easy and safe access egress from both inside and outside of the vehicle. NSS type approval.



Night Owl

Supplied by Woodway Engineering together they have developed the Night Owl, a first for vertical mounted light masts. It enables the driver or operative to use the light mast from an area around and inside the cab. This allows a quick operation, deployment and lighting an area anywhere around the vehicle using the light heads rotational LED lights. They can be moved upward, downwards 360° and side to side 360°.

High Visibility

The vehicle has been designed with highly visible steps and handles, while reminder signs make it hard for operatives to forget the 'three points of contact' rule.



Switch control

All switches are positioned within easy reach of the driver or to the customer's required positioning. Trying to give a safe operation. All switches are back lit and labelled.



Sliding Access System

In an industry first Acklea has incorporated a sliding access system to the cone well. The sliding system reduces the risk of collision and improves safety for operatives by removing the need to lean or stretch to place traffic management cones from a moving vehicle. There is even an intercom linked to the cab.

Safer and Easier

"These improvements to the traffic management vehicles make the work of operatives safer and easier. Every feature goes some way to reducing the accidents and resulting decline in health we see time after time, associated with this particular activity. Traffic management is our bread and butter work, and remains a hazardous operation. As part of action 108 of our five year plan, we have been working towards improving the safety of road workers working near to or on traffic management vehicles. These vehicles will help to reduce the risks and ensure we keep ourselves and others safe above all else."

Stew Evans, Head of Health & Safety Programmes



Think Smart: Motorways for the modern age

IN recent past, smart motorways have proven a somewhat contentious addition to the UK transport network. But Highways England is assuring motorists that active traffic management is the way forward.

For the uninitiated, smart motorways employ cutting edge technology to effectively manage the ebb and flow of oncoming cars. From its regional traffic control centres, Highways England is able to remotely monitor day-to-day goings-on and adjust motorway signage and speed limits as necessary.

It's a more flexible and responsive way of working - one that makes sense, though the temporary or, in some cases, permanent removal of the hard shoulder has left some motorists uneasy.

For Highways England, the hard shoulder is fair game - its loss, a cost-effective alternative to disruptive road widening works and a means of further increasing vehicle capacity. Drivers can look forward to significant savings in time on less congested roads - 20 to 30 minutes or more in some cases.

In the event of an incident, smart motorists are expected to press on to the nearest emergency refuge area, while more complex traffic mishaps can be managed electronically - speed limits reduced and lanes closed on the fly.

The driving public remains largely unconvinced however, and parliamentary figures are beginning to take note. A cross-party committee of MPs recently disclosed that it had "major safety concerns" over the removal of the hard shoulder.

According to Louise Ellman, Chair of the Transport Select Committee, the introduction of smart motorways could lead to an astonishing 216% rise in vehicle stoppage on live lanes.

Industry authorities are equally apprehensive, with Paul Watters - Head of Roads Policy for The AA - recently stating: "There are many things wrong with the way that smart motorways and in particular all-lane running is being implemented. We have warned Highways England about concerns - especially when it comes to spacing of refuge areas, which we would like to see being far closer together."

Clearly, there is a disconnect between Highways England's aspirations and the public's perception. Worse still, the concept of smart motorways is unfamiliar to many. As such, Highway's England, together with West Yorkshire Police, has embarked on a new safety initiative to raise awareness and improve driver compliance and safety - particularly with regard to the 'Red X'.

Highways England's Operations

Manager, Rob Beckett, had this to say: "A Red X above a lane indicates it is closed because of a breakdown or accident. It is used to keep drivers, our traffic officers and the emergency services safe.

"By ignoring these signs and continuing to drive in the lanes, you are putting yourself and everybody else at risk of danger. Hopefully our initiative will raise awareness of the Red X sign, and protect people driving and working on our motorways."

Sergeant Gary Roper of West Yorkshire Police also cautioned: "The increasing number of vehicles on the roads combined with the new smart motorways that have recently opened in our region mean that compliance with Red X signals is an important part of road safety.

"This initiative provides the opportunity to educate those drivers who contravene the Red X signals, however it should be noted that prosecution remains an option for those drivers who continue to ignore the Red X sign."

If smart motorways are to be successfully integrated, this hurdle of education must first be overcome. Yet until Highways England fully engages with the public, the uncertainty looks set to continue.

For guidance, please visit: www.gov.uk/guidance/how-to-drive-on-a-smart-motorway

£1.2Bn funding for road safety improvements

HIGHWAYS England has awarded over £300M in four new-style contracts, which will help improve journeys for road users in Cumbria and North Lancashire, and the North East of England.

Kier Highways Limited and CH2M Costain Joint Venture have been awarded the two maintenance and response contracts expected to be worth up to £262M and last up to 15 years, as part of Highways England's new delivery arrangements.

The contracts, which will start on 1 April 2017, will see Kier Highways Limited operating in Cumbria and CH2M Costain Joint Venture operating in the North East, delivering routine highway maintenance services, repairs to defects, emergency incident response and severe weather services on the Highways England road network.

The new way of working will see Highways England directly managing both routine maintenance and the delivery of

capital renewal and improvement schemes, bringing key functions in-house and taking greater control of the road networks.

The first of these types of contracts began operation in the East Midlands region in July of last year. Amey OW Limited have been awarded two new five-year design contracts, with an expected value of over £38M, for both the Cumbria and North Lancashire, and the North East areas.

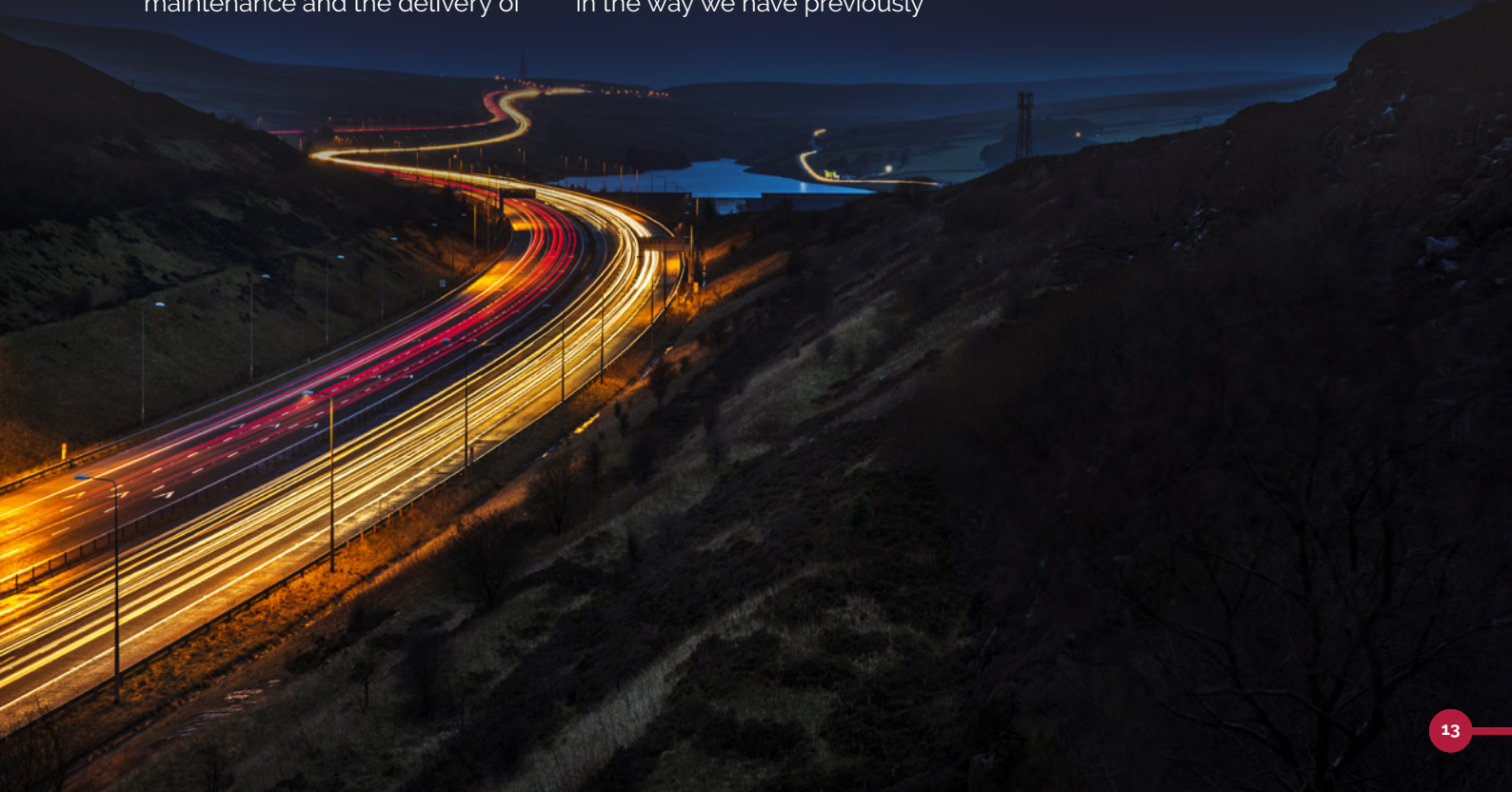
David Poole, Executive Director for commercial and procurement at Highways England, said: "We are delighted to welcome Kier Highways Limited, CH2M Costain Joint Venture and Amey OW Limited to our Asset Delivery supply chain community in Cumbria and North Lancashire and the North East. The awarding of these four new contracts builds on the new way of working already taking place in the East Midlands and is a real change in the way we have previously

operated the network. These contracts demonstrate our commitment to increasing capability and understanding within Highways England and bringing Highways England closer to our customers.

"Collaboration with our supply chain is key to our new way of working and we are looking forward to establishing a successful, long-term relationship with the appointed contractors."

The Asset Delivery maintenance and response, and design services contracts will commence in these areas when the current Managing Agent Contracts with A-one+ in the North East and Kier in Cumbria and North Lancashire come to an end.

Highways England will be working with the successful contractors in the coming weeks to ensure that they are ready to begin delivering key services from 1 April 2017.





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