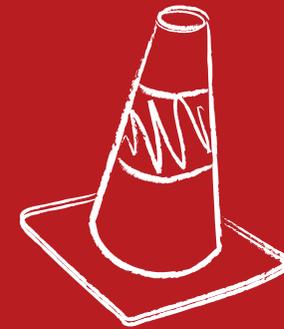


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Making roads safer for road workers Issue 2- February 2012
rowsaf.org.uk



★ Inside Special: HA Supplier Health and Safety Awards

Welcome...

Welcome to the second edition of *RoWSaFnews*. I am pleased that the first issue reached so many and that feedback has shown the benefits of explaining about the work RoWSaF is doing to improve safety for road workers.

I thought it worth a few words as Chair of the Trials Team - a group of industry practitioners who deal with road works management at close hand, Highways Agency staff leading on road worker safety and TRL technical support. Together we review current trials and consider proposals to improve worker safety and how best to drive forward our Aiming for Zero programme.

We need to keep in touch with reality on the ground and *operatives* doing the job may see risks that cause them the greatest concern in a different way. My challenge then is simple – if you feel we are missing something or that we should focus our attention on other aspects of road worker safety, please speak up.

Email your views to:
feedback@rowsaf.org.uk

We will report back
in Issue 3.

Paul Mitchell

Head of Health & Safety,
Highways Agency



High Level VMS Goes On Trial



A new High Level VMS vehicle alerting motorists to nearby road works

Vehicle mounted high level Variable Message Signs (VMS) have been trialled on the Highways Agency network to provide advance warning of road works ahead. HA Project Sponsor and Road Worker Safety Manager, Mark Pooley has the latest..

The Highways Agency has trialled a new way of providing advance signing at short term overnight road works using minor modifications to its Supply Chain's fleet of existing temporary traffic management vehicles. Three 18 tonne vehicles were used, each fitted with a light emitting VMS panel with the top edge five metres above road level. They were located on the hard shoulder and provided advanced signing of road works at 800, 500 and 200 yards.

The trial was carried out for the HA by TRL and A-One+ Integrated Highway Services on motorways in Area 12 in the Yorkshire and Humberside region.

The initial intention for the on-road trials had been to use trailer mounted high level VMS, but TRL investigation revealed that this would be a much more expensive way of providing high level signs compared to making minor modifications to existing TTM vehicles. There

was also a significant issue of stability of trailer mounted high level signs in high wind conditions. Only a large and heavy trailer would provide the necessary operational stability, resulting in much higher costs than for vehicle mounted high level VMS. A-One+ devised an effective way of upgrading existing vehicles which already had a high level VMS panel. All we had to do was to upgrade the existing VMS panels and control panel software so that the 'wicket sign' could be displayed. It was a simple solution.

The technique mitigates the risks of non-provision of wicket signs on the central reserve. If data analysis shows that the on-road trials were successful in terms of risks to road workers and road users, the project will deliver a major change in our management of road works to ensure significant safety improvements for road workers. The trials have also shown that the TTM can be installed and removed much more rapidly than the traditional use of four pairs of wicket signs on A frames at ground level, so it will also enable contractor time savings.

Further on-road trials are planned for 2012-13 to develop the technique.

mark.pooley@highways.gsi.gov.uk



No More Carriageway Crossings on M62 J25 to 30 Scheme

A TRAFFIC management initiative on the M62 between J25 and J30 is paving the way for better road worker safety. Dave Todd, Traffic Management & Network Operations Manager at Bam Nuttall and Morgan Sindall Joint Venture explains...

The two year Highways Agency scheme to transform a section of the M62 in West Yorkshire into a managed motorway would normally see road workers crossing live carriageways an estimated 70,000 times to install, maintain and remove temporary traffic management signs, for example on the central reserve.

Under a new Five Point Plan, pioneered by the Bam Nuttall / Morgan Sindall Joint Venture and our supply chain partners Chevron Traffic Management and Morelock Signs, road workers have not yet had to undertake a single carriageway crossing.



The M62 scheme

The Five Point Plan has already eliminated the need for 4,700 carriageway crossings on foot by road workers from the start of preparatory work in September 2011 and from October, when main construction work started, up to December 2011, contributing towards the Highways Agency target to significantly reduce live carriageway crossings.

The plan is the result of collaborative working between all our contract partners and we hope to see it become industry standard in other Major Projects over the next few years. It is a combination of existing ideas including the use of mobile lane closures for the installation of remote controlled temporary traffic management (TTM) signs on A frames and the installation of post-mounted TTM signs on the central reserve.

David Pilsworth, Highways Agency M62 project manager, said: "The use of remote control signs on our scheme has significantly reduced the number of crossings road workers have to make, reducing the risks associated with crossing the carriageway and increasing operational health and safety significantly. Initiatives like this are helping us to reach key targets as part of our Aiming for Zero safety campaign and we're delighted with the outcomes and performance so far."

dave.todd@morgansindall.com

Sign Simplification

Following on from November's article (Sign Simplification Trialled), IAN 150/11 has now been issued.

The new guidance allows the omission of 200 and 600 yard "wicket" signs on both the offside and nearside of the carriageway, as well as 'Detail A' where there is a hard shoulder.

This is at the approach to temporary traffic management for single lane closures on dual carriageways and subject, of course, to completion of a satisfactory risk assessment.

The new practice has the potential to reduce carriageway crossings by 40% and will also reduce supply chain time taken to set out and retrieve temporary traffic management. The new guidance is already being implemented at Connect Plus.

Simon Taylor, Connect Plus Services welcomes the new guidance: "The new layout was adopted on the M25 immediately following the issue of IAN 150/11. It enabled us to reduce the number of carriageway crossings for every closure where we have one lane closed, significantly reducing road worker exposure on the network."

ian.smith2@highways.gsi.gov.uk

Omission of Offside Warning Signs

A successful monitored roll-out to test the omission of offside advance warning signs for single nearside lane closures at relaxation scheme road works has completed in Area 3

The monitored roll-out of offside signs relaxation was supported by Enterprise Mouchel and Chevron Traffic Management and carried out over 15 nights on three-lane motorways with hard shoulders within the Highways Agency's Area 3.

EnterpriseMouchel's Network Delivery Manager, Steve Flint, said: "The monitored roll-out went extremely well

and the report shows that the results from the statistical analysis provide robust statistical evidence that there is no difference in the lane movement of vehicles resulting from the omission of offside advanced warning signs".

The report is now with RoWSaF Working and Steering Group members for acceptance. The next stage will be to prepare a draft Interim Advice Note (IAN) for consultation via RoWSaF's Technical Project Board (TPB).

The next issue of RoWSaF News will provide an update.



Testing the omission of offside warning signs

HA Supplier Recognition Awards

Four Health and Safety projects were recognised at the Highways Agency Supplier Recognition Awards in Warwick at the end of November for showing industry leading commitment to improving corporate and workforce health and safety.

This is the first year of the new scheme, which highlights the important contribution

made by HA's suppliers in supporting the operation, maintenance and improvement of our strategic road network.

The two winners in the Health and Safety category were Costain Carillion joint venture, for employee occupational health and welfare on the M1 Junctions 10 to 13 contract; and Costain for the health and safety practices put in place in delivery of

the M53 Bidston Moss scheme, which achieved zero RIDDOR-reportable incidents in the last 1.2 million worked hours.

Two further projects were highly commended - South West Highways Ltd for the development of a simple, low cost solution to making escape lanes safer, and CarillionWSP for the development of a new innovative IPV vehicle in Area 8.

CCJV Tackle Road Worker Health

We have always known that the "health" bit of "health and safety" was largely being ignored; health and safety professionals across the breadth of the country focused on safety matters when conducting site inspections for example, looking at scaffoldings, excavations, plant and equipment etc.

Costain Carillion Joint Venture (CCJV) considered that this had to be addressed on the M1 J10 to 13 site. The decision to provide a full time occupational health provision for the contract was made by CCJV and agreed at board level prior to the onset of the project so that it was set up from the very start.

CCJV decided that in essence all workers working on or near live traffic would be labelled as a "Safety Critical Worker (SCW).

Every worker must attend a site induction (whether SCW or not) and successfully complete a drugs and alcohol test prior to starting work on site. The medical covers checks in six areas: eye sight, blood pressure, chest and lung, hearing, cholesterol and urine.

So far the scheme has been a great success with over 2000 medicals carried out. By far the highest issue discovered was obesity, followed by back problems, impaired hearing and raised blood pressure.

We have spent a lot of time with our workers carrying out seminars and ad hoc training sessions which has been very well received. Our greatest success was catching one worker with the onset of prostate cancer; he is responding well to treatment.

Dean.Saunders@m1j10to13.com



HA Chief Executive, Graham Dalton congratulates the team

Costain Manage Confined Spaces on M53 Viaduct

The £89.9 million M53 Bidston Moss Viaduct Strengthening Scheme is on target to be the first scheme of its type to be completed on time and below budget. The complex civil engineering project involves numerous innovative design solutions and 100km of new weld in extreme confined space conditions, strengthening the 730m long multi span steel box girder viaduct.

The 3.7km of box girder, with box dimensions 1.5m x 1.25m, is housed within bespoke scaffold containment



Inside a strengthened box girder

protecting the road user, workforce and environment. An 'Advanced works Proposal' significantly reduced the risk to operatives by opening up internal diaphragms, improving access, airflow and allowing tracks to be installed, significantly reducing manual handling.

To enhance the safety of the confined space operations, the site appointed a full time rescue team to ensure a rapid response to any incident, on the structure. A full time Permit Controller grants access to the 604

individual boxes and is in constant communication with all workers, ensuring the 38 working gangs are effectively managed and co-ordinated over the 3.7km structure.

The rescue team are set up to respond within three minutes and deal with an incident appropriately. They are equipped to use respiratory protective equipment, a stretcher and resuscitation kit, all housed within a bespoke rescue vehicle for the project.

During 2011 the project received the highest HA MST (Motivating Success Toolkit) score for Health and Safety of 10/10 in all categories and has achieved over 1.2 million man hours in 34 months since project commencement, without a reportable accident.



The M53 Bidston Moss team receive their safety award

M53Bidstonmoss.project@costain.com

Carillion WSP Modify an IPV to Reduce Road Worker Risk

A redesigned Impact Protection Vehicle (IPV) has incorporated the latest health and safety innovations to produce a vehicle that encompasses current best practice.

Traditionally designed IPV's require one operative to work on the bed of the vehicle to pass equipment to fellow operatives whilst the vehicle is stationary in a live lane. Therefore, if the vehicle is struck from any side the operative is at increased risk. Following a series of IPV strikes, we engaged with our workforce to develop a redesigned



The refitted IPV

vehicle utilising the latest technology to reduce the risk of injury as a result of strikes. One key concern for operatives was when a vehicle is struck from the rear, not only will they be thrown towards the metal work at the front end of the bed, but equipment will also be thrown on top of them at force.

The 'well' in the new vehicle became a single movement opening / closing system (eradicating the need for anyone to be at the rear of the vehicle when in a live lane). The 'A' frame carrier and sign racks were then relocated to the rear and lowered so frames can be unloaded from ground level, improving visibility around the vehicle.

Purpose built steps, non-slip flooring, Actimo seating and a 360 degree CCTV system that automatically activates on deployment of the light arrow have also been fitted. CCTV recordings are being reviewed to understand driver behaviour near to the IPV to further improve safety and early results

show the new design provides a significant reduction in risk to operatives.

All works were undertaken by BL Searle, Highway Care and Alpha 60.
Xam.Sanchez@carillionwsp.com



Rear sign and rack storage

South West Highways Furrowed Escape Lanes

Our innovation scheme, 'Suggestions Worth Having', encourages staff to come forward with ideas to enhance service, efficiency and conditions. Road worker Nick George's idea proved to be a revelation, winning joint top prize in 2011 within South West Highways, alongside another health and safety project.

Nick and his colleagues are regularly required to enter gravelled escape lanes on the A35 to make good where drivers stray. Maintenance work to re-level the surfaces and sweep the adjacent carriageway is potentially hazardous, requiring a vehicle to be parked with its warning lights on to alert drivers that work is in progress.

The idea was to create visible furrows in the gravel across the escape lanes to highlight the material to drivers; deterring entry. South West Highways thought it was a great innovation and immediately implemented it.

Those involved later enhanced the original idea by deepening the furrows and applying hi-viz paint to increase visibility to drivers.

This simple solution to the problem has had an immediate impact and has helped to keep road maintenance teams on the A35 safer. Fewer drivers now enter the escape lanes and the frequency of re-leveling and sweeping operations has reduced by an incredible 75%.

SWH is really proud that this idea came from an employee who saw a health and safety problem and created a solution which benefits the public and his colleagues.

Andrew.Plumber@swhltd.co.uk

SWH works in Joint Venture with Balfour Beatty, as MAC Contractor for the 62 mile A30/A35 Exeter to Bere Regis network, which is managed by Connect Roads.



A furrowed escape lane

Improving Road Workers' Health

An HSE Construction Industry Supply Chain project aims to reduce and better manage occupational risks to workers' health. Dr Robert Ellis from the Health and Safety Executive explains...

In 2010/11, just over three quarters of the UK's estimated 2.3 million lost working days due to work-related illness or injury were due to health problems.

The construction industry accounts for a large proportion of work related ill-health - for example half of the annual 8000 UK work-cancer deaths are to construction workers – compare this with the 50 people who died from injury on construction sites in 2010/11.

Even when ill health caused by work is not fatal, it can be utterly debilitating and cause suffering not just to workers but also their families, friends, and colleagues. The most prevalent conditions in construction include lung diseases, noise induced hearing loss, vibration white finger, back pain and disability due to manual handling. These can be prevented.

A new Health and Safety Executive project aims to improve the control and management of health risks in the construction and maintenance of paving, roads and highways. It follows a series of meetings held in 2011 with the construction industry, suppliers, designers and other interested parties.

The project will:

- Engage clients, designers and CDM coordinators in assisting contractors and suppliers to identify and embed good practice;

- Review and collate available information, training, tools and guidance and address gaps in existing materials;
- Promote greater awareness and appropriate use of monitoring and health surveillance to reduce disease and ill health through effective management.

We launched the project on 6th October 2011 in London. People from across the construction supply chain attended and contributed to a lively discussion on what was needed to deliver this work - ideas included obtaining commitment from leading figures; a procurement process that creates a level-playing field; applying lessons learned from improving safety, and the importance of client engagement.

Three groups have been established to deliver the work overseen by organisations representing client, designer, contractors and CDM coordinators. They are:

- Risk Matrix: tackling guidance and training
- Health Surveillance and Monitoring: establishing good practice standards
- Client and Designer: looking at cost controls, contracts and designer input to health management.

This construction supply chain initiative will lead the implementation of practical measures to reduce ill health in construction to ensure that roadworkers' health is protected, not sacrificed. A web community has been set up to inform, and encourage engagement and comment on the work as it develops.

For further information e-mail:
prhlaunch@hse.gsi.gov.uk

Night Shift Working

Representatives of the Highways Agency's National Health & Safety Team recently visited Area 9 to see Night Shift Working in action. Their Steve Williams reports...

John McKenniff and I attended one of Amey's Lantra accredited 12a/b traffic management training sessions, accompanied by five apprentices who have just begun their training with Amey as part of their apprenticeship programme.

Following the training, we went onto the Area 9 network for a briefing session at the Doxey depot and then on to the A38/A5 Swinfen Island to oversee a minor resurfacing scheme on a dual carriageway, including the installation of the advance chapter 8 signing and lead in taper. We oversaw the laying of the cones and lamps for the length of the closure from a safe position on the back of the traffic management vehicle, witnessing the works at first hand and engaging with the workforce.

I was impressed with the standard of training on the day and was reassured by the 12a/b approach which requires additional supervision and mentoring over several weeks of additional practical assessment.

Amey's Principal Construction Manager, Paul Fillis, made us feel very welcome and was delighted we were able to join them to see their operations at first hand, to meet their teams and understand the effects of working at night.

steve.williams2@highways.gsi.gov.uk

New Taper Layout a Success

The new taper is being hailed a success by operatives from CarillionWSP's Area 8 contract

Shaun Moseley, Traffic Management Technical Officer for the Contract, has received positive feedback including how the new taper is easier to install, with the average time to install and remove taking around six minutes. With less cones required this means less manual handling and less exposure to traffic.

Simon Harradence, a General Foreman for CarillionWSP said of the innovative taper;

"The taper is much better for new TM operatives to install as it self-aligns towards the main longitudinal run rather than needing practice to get it straight. Since installing the new style taper we have not had any taper strikes and even if we did the new layout means it wouldn't leave gaps for traffic to drive through, making us feel much safer."



Simon Harradence: new taper much safer

Key Dates

9 February RoWSaF Trials Team.

14 March RoWSaF Working Group

27 March Principles Group

6 -7 March IOSH Conference and Exhibition, Manchester. The conference theme is 'Health and Safety: Changing Perceptions'. Visit: IOSH 2012 Conference and Exhibition

19 April Maintenance Community Steering Group

13 June RoWSaF Working Group

21 June Principles Group

12 July RoWSaF Steering Group

HSE Research

The Health and Safety Executive's research report 'assessment of current guidance on carriageway crossing on high speed roads' has been published.

The findings broadly support the present "rules" set out in CIS53 for crossing a carriageway on foot, but show that for many motorways, traffic flows make crossing impossible in practice for much of the day. In consultation with ROWSAF and other stakeholders, HSE will begin revising CIS53 to take account of changes in temporary traffic management practice and road design since CIS53 was published in 2000.

www.hse.gov.uk/research/rrhtm/rr885.htm

www.hse.gov.uk/pubns/cis53.pdf

Hard Shoulder Working

IAN 115/08, published in 2008, provided guidance for Working on the Hard Shoulder or Road Side Verge, introducing reduced traffic management and signage for all stops greater than 15 minutes. A Sub-Group of the Maintenance Community Safety Management Group was formed to provide a joint community response to the HA H&S Team. Working with the H&S

AIRSweb Progress



The HA has engaged with supply chain representatives to discuss potential improvements to the functionality of the AIRS Accident and Incident Reporting System which is used by the supply chain to report accidents and incidents to the HA's National Health and Safety Team.

Areas of improvement include the ability to modify own passwords and a simplification of AIRS drop down menus and pick lists to speed up data entry. A revised Interim Advice Note (IAN) is planned for Spring 2012 detailing changes to the current incident and near miss reporting processes.

Work is also proceeding to move the AIRS server outside the HA's firewall to facilitate easier access and remove constraints associated with HA checks and the requirement for contractors to pay for leased lines.

This will avoid the typically two month setup lead time plus costs of approximately £3k per line request. It is expected that this change will be implemented by March 2012.

European View on RWS

The Highways Agency is engaging in work across Europe to improve road worker safety. Their Paul Mitchell has contributed to the European Transport Safety Council's Thematic Report number 6, which considers how employers, Member States and the EU itself can improve road worker safety.

A key fact is that 40% of people travelling on roads at any given time are "at work" and are at risk of road collisions. For road workers, this is before they start work in what are acknowledged to be high risk locations operating on live carriageways. The reports' recommendations are far reaching and will require a combined effort to drive improvement. European collaboration on research on reducing risks to workers will avoid duplication and save money whilst targeting key risks during road works activities in all European Countries.

On behalf of the HA, Paul is leading work in collaboration with European Road Administrations to develop a call for research later in 2012 looking at Road Worker Safety and Interaction with Road Users, and on Use of Vehicle Restraint Systems.

www.eranetroad.org/

<http://rraf.info/>

www.etsc.eu/documents/Report%206.pdf

Team and Transport Research Laboratory (TRL) it was agreed that the IAN would be revised to introduce a risk based approach linked to location and activity. The revised document has been interpreted and implemented by the Maintenance Community and provides a risk based methodology to stopping on the hard shoulder or road side verge that allows assessment of

site specific conditions, together with dynamic risk assessment, to ensure that we actively manage the safety of road workers and road users at all times. Formal issue is planned for mid-2012, however, the HA has been positive in encouraging its Supply Chain to proactively adopt these principles.

maureen.gargan@telent.com

About Us

The Road Workers' Safety Forum (RoWSaF) is an industry group established in 2001, promoting the health, safety and welfare of road workers. Members are drawn from UK roads administrations, enforcement agencies, contractors, designers and their associations.

Contact Us

RoWSaF News welcomes contributions from all parts of the highways maintenance community. If you have any contributions then please contact s.wilson@bbcel.co.uk or call 01737 785147

Visit RoWSaF.org.uk

RoWSaF

The Roadworkers' Safety Forum
Making roads safer for road workers

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