

From: Central SHEQ Team

Date: 3rd February 2017

The Theme for February 17 will be: Underground Services

Your Health and Safety

Our Environment

Quality Requirements

What causes underground service strikes?

Underground services are damaged due to a number of different reasons. These can normally be down to:

- Undetectable pot ended cables
- Poor planning
- Inadequate Safe System of Works
- Changes to the RAMS
- Lack of information and inaccurate plans
- Lack of care around the services
- Not using or improper use of the Cable Avoidance Tool (CAT)
- Insufficient supervision
- Rushing to complete a section of work
- Poor digging techniques



The majority of service strikes are caused by a combination of all or some of the above and increasingly, there are cases where we are damaging cables we have already exposed.

Working Safely

- Wear flame retardant work wear and eye protection when excavating
- Communicate and consult with service providers



- Service Plans and drawings to be accurate, readable and available to all
- When checking and approving RAMS, particularly for excavation work, ensure all operations are included and the risks from buried services are fully assessed. Permits to Dig must be implemented with mandatory 'hold points' for conducting ground works.
- When any element of work is subject to changes to the RAMS, the potential impact of these changes must be considered and the RAMS revised as necessary to prevent risk of injury.

- Ensure adequate SSoW, timescales, isolations, protection of exposed services and diversions.
- Scan the area several times with a calibrated CAT & Genny before commencing works, ensuring only trained individuals use them using calibrated and serviceable tools.
- Cable Avoidance Tools must be calibrated to the manufacturer's guidelines (usually every 12 months) to ensure they are reading accurately. Trial holes, use safe digging practices and hand dig first to verify the service type, location, depth & condition
- Mark-up services on site (and maintain markings) ensuring the markings are visible to everybody
- Suitable supervision in line with the potential risk of the exposed services. High Voltage (HV) and High Pressure (HP) services will require a more senior and experienced level of supervision.
- Don't use mechanical digging or hand breakers within 500mm of any services.
- Always treat a cable as live until it has been proven otherwise by the service supplier.

If you strike a service:

1. Clear and secure the area.
2. Report to your supervisor and MWHT management team
3. Don't return to the area until you have been given clearance (some cables "trip out" when first damaged, only to re-energise later occasionally with a flash over/explosion.



If you are unsure at any stage of an excavation,
STOP and report to your supervisor

Further Information

[CDPR34 - Excavation Operations](#)

IF YOU SEE COLLEAGUES NOT FOLLOWING THIS GUIDANCE PLEASE STOP THEM. EXPLAIN YOUR CONCERNS FOR THEIR SAFETY AND ASK THEM TO MODIFY THEIR BEHAVIOURS.