

# ***Buried Services***

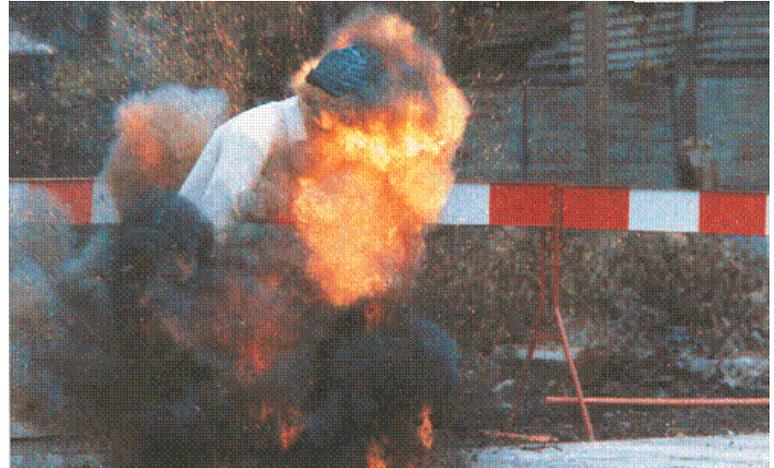
# Buried Service strikes

At present we are averaging one buried services strike a month.

This level of activity is likely to result in someone getting seriously injured or worse.

In the majority of cases we are not following the guidance provided in the Network Rail standard with respect to the planning or the delivery of the work.

The guidance is clear on the steps that need to be taken both prior to and during the work to ensure the safety of personnel as much as possible



# Step-by-Step process

1. Do a buried services check.
  - This can take some weeks to get the information
  - Whatever it says, assume that other buried services will be present
  - Record any buried services on a 'Location of Buried Services' summary sheet
2. Carry out a Site Survey
  - (i) Visual inspection
  - (ii) CAT and GENNY scan plus any additional scans
  - (iii) Mark up site
  - (iv) Add information to the 'Location of Buried Services' sheet
3. Responsible Person fills out and signs 'Permit to Dig' Form Part A
  - Checks buried services are detailed in 'Location of Buried Services' sheet
  - Provides site sketch with buried services marked on it
  - If no buried services present still fill out Part A and say so
  - Enters name of Competent Person who will be supervising the work
4. Authorising Person (different to Responsible Person) reviews Part A of Permit to Dig
  - Checks collated information – buried services report, sketch, location sheet
  - Signs Part B of the 'Permit to Dig'
5. Work Group is briefed on the work to be done
6. Competent Person fills out part C of 'Permit to Dig'
7. Work proceeds using safe digging practice

# Lessons Learned 1

From the incidents that have happened and looking at the Buried services process it is highly unlikely that the surveys can be done, and signed off, in the same shift as the work is delivered.

In many instances where cables have been struck, the CAT scan (it is rare that GENNY scans are done in these instances) has taken place immediately prior to the dig.

A comprehensive CAT and GENNY scan will take at least an hour and probably two. This needs to be planned into the time for the work.

Too often CAT and GENNY scanning is seen as wasted time or has not be planned properly. Time and money saved in cutting corners is lost many times over in the work lost and additional work needed to repair a damaged cable, forgetting the potential risk to staff from hitting a live cable.

# Lessons Learned 2

As part of the initial survey look at the area surrounding the excavation site  
Are there any Location cases or other equipment cabinets in the vicinity?  
Is there a signal box or other building nearby – do they have power and water supplies?

If there is equipment and buildings nearby that are supplied with power look to see where the supply comes from.  
Do the supplies cross the excavation area  
Are they marked on any maps  
Have you carried out a scan for them.

There are numerous examples of cable strikes on cables supplying equipment adjacent to the excavation site. Take the time to check the obvious.

# *Actions*

No CAT/GENNY Scans are to be carried out immediately prior to the work unless sufficient time has been planned for the activity and the checking and signing of forms by the Responsible person and Authorising Person

All Permits to Dig to be checked and signed by the Responsible Person and Authorising Person prior to the work commencing

Completed and Signed forms, with site sketches and Location of Buried Services sheet to be available to the Competent Person for briefing to the work group

If a work group is tasked with carrying out a CAT / Genny scan without sufficient time available they are to invoke the WorkSafe procedure.

# *Buried Services Can be Fatal*



Buried service strikes can kill or cause life changing injuries

Make sure you have taken the right precautions before digging

1. Has a proper survey, with sufficient time, been carried out
2. Visual inspection
3. Cat and Genny Scan
- 4 Site marked up

Have you been briefed on the position of any cables or services

Are they marked up

Do you know the safe digging practice

If the answer to any of the above is NO do not start work

Invoke the WorkSafe procedure

Better Safe than Sorry

This is the result of touching a live railway cable

Will **you test before touch**?

Will **you** be checking the **permit to dig forms** have been completed correctly and enough time allowed for the CAT and Genny scan to be carried out?

Will you be **stepping on any loose cables**?

All the electricity related accidents on the railway are avoidable if you follow the correct procedures



Always be sure the required plans and permits are in place, before you start a job or go on or near the line.



Always test before applying earths or straps.



Never assume equipment is isolated – always test before touch.

