

Service Stand Off Distances

May 2021



Why are we here?

In 2021 we have had 8 service strikes. 5 of these have involved damage by means of mechanical excavation **within the safe stand off distance for known services.**

We had taken the time to locate the services, and planned to avoid them, however we then used mechanical excavation within the safe stand off zone.



Why are we here?

Please watch this video of the consequences of hitting an electrical cable with an excavator



Why are we here?



Aftermath of gas explosions, following damage to underground gas service pipes



Breaking Ground

Remember Breaking Ground Includes:

Driving Pins



Excavation

Spiking Ground

Road Pins

Earth Rods

Installation of Fencing Posts



Topsoil stripping

Etc.



Stand Off Distances

Stand off distances for mechanical excavation (inc power tools)

- **500mm** from known services
- **1m** from High Voltage services and trunk mains
- **3m** from high pressure gas mains



For further information on locating and protecting underground services see CDGD34-03 Utility Services Avoidance Minimum Standards



Supervision

- Subcontractors must nominate a Front Line Supervisor (FLS) for each gang.
- This FLS is responsible for ensuring that work is conducted as per the RAMs, including enforcing stand off distances.
- The FLS is to remain at the place or work at all times while excavating around live services.
- If anything changes (e.g. ground conditions are not as expected, unknown services are located) the supervisor must stop the work and review and agree the new RAMs with the Site Manager prior to recommencement.
- The MWHT Supervisor should complete a check that work is being conducted as per the RAMs at the start of the work and after **at most** 30 minutes. Continued checks throughout the day should be made by MWHT supervisors to ensure work is proceeding as per the RAMs.



Our life saving commitments



Safe working environment

We will have approved RAMs in place, controls identified and complied with.

We will all ensure we follow Risk Assessments and Method Statements, question anything we are unsure of and all have the authority to STOP work if in doubt.



Slips, trips and falls

We will provide clear, marked egress and access routes to and around site and compounds.

We will all use access and egress routes, report any issues and maintain a high standard of housekeeping throughout.



High hazard services

We will only work around high hazard services where we have exhausted all possibilities to remove the risk through design or isolation.

We will all follow the RAMs, process controls and permits to break ground and stop work if the task changes.

e.g. high pressure gas mains and high voltage cables.



Plant stability and safety

We will provide plant that is fit for purpose, in good condition and set up safely.

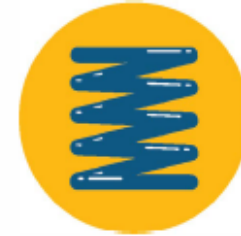
We will all have been trained, have the skills and proof of competency for the plant we are using.



People-plant interface

We will ensure plant and equipment is segregated with safety zones.

We will all observe plant safety zones and only approach plant once the operator has seen us and it is safe to do so.



Stored energy

We will always ensure stored energy is treated with great caution, particularly when commissioning or testing.

We will all follow RAMs and permits and cease work if anything changes.

e.g. any pressurised pipe work, electrically live systems and even coils of wire or steel banding that can spring loose.



Health & Wellbeing

We will always look out for each other and listen, making sure everyone feels valued, respected, supported and included.

We will all know where to get help and support when needed.

Emergency Response

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 within a few seconds, occasionally with a flash over/explosion)

If a gas pipe is fractured or starts leaking:

- Evacuate all personnel from the area
- Enforce a **no smoking ban** and a **no naked flames** ban
- Prevent any approach by members of the public or vehicles
- Inform the gas company immediately (Call 0800 111 999)

If an electricity cable is broken:

- Avoid all contact with it
- Do not attempt to disentangle it from digger buckets, etc
- Do not attempt to leave your cab. Stay put until you are told the cable has been made safe.
- Inform the electricity company (call UK Power Networks on 105).
- Keep everyone clear.

