

Best Practice in Avoiding Underground Services

Training Framework for Designers and Planners

“Avoiding Services and Utility Plant”



This guidance is issued to illustrate the required content of a suitable training program for designers and planners

Purpose

To enable anyone involved or connected with design, planning and/or scheduling of excavation works or works adjacent to underground services, to understand the risks of working close to such services, including how to access information that establishes their existence and how to avoid damaging them and any consequential personal injury or damage to adjacent services or structures/plant etc.

Who will benefit

Anyone involved in design, planning and/or scheduling of work adjacent to underground services.

What will be covered

- An overview of what pipes, cables and other underground services and apparatus are installed in the UK
- Reviewing the requirements of the Health & Safety at Work Act and HSE documentation, including the recommendations of what is a “safe system at work” as described in HS(G)47 “Avoiding Danger from Underground Services”
- An overview of the Ordnance Survey mapping system and annotations as used in the UK
- Understanding scales and general information such as the origin and age of the plans, and relating these to site conditions
- Understanding keys and legends found on services and third party apparatus plans
- How to obtain additional information from cross sectional drawings and other record sources
- Understanding the limitations of services plans (which should only be used to provide an indication that underground services are present) e.g. how current is the information, version references, variation between specific companies and districts within companies, effects of developmental changes to road layouts etc.
- Obtaining information of private services (cables and pipes) from the National Street-works Gazetteer, other online resources, or from premises owners/occupiers of their own underground services and apparatus
- Understand how to obtain information of high pressure pipelines e.g. Linewatch (www.LSBUD.co.uk) and how to arrange visits to site from Pipeline Inspectors
- Understand the risks associated with underground services, including working near or around them
- Understand the implications of working within the safety zone of high pressure pipelines and other critical installations
- Understand how to obtain information through other sources such as the ‘One Call’ systems, local utility offices, and digital CD / intranet based systems such as LinesearchbeforeUdig (www.LSBUD.co.uk)
- Understand the principles of avoiding underground services and reducing risks associated with any work around underground services, including diversions, isolations and options available to designers and planners to reduce risks.
- Understand the hierarchy of risk control “Eliminate, Reduce, Isolate, Control” (ERIC).
- Understand the need to remove risks through design, including diversions, isolations and the importance of early engagement with Utility and Third Party Owners and early planning to avoid and reduce risks
- Understand the procedures of work for a given client contract
- Anything specific for those scheduling the work e.g. timescales, notices, planning
- Understand what actions to take when plans are found to be incorrect

Checking Understanding

During the session delegates will practice reading and interpreting specific information from plans, drawings and online services, and identify what actions can be taken in design or planning works to avoid or minimise risks from underground services.

Duration

Four to eight hours depending on group size and prior experience.

Group Size

Any group size up to 12 providing exercises can be facilitated.