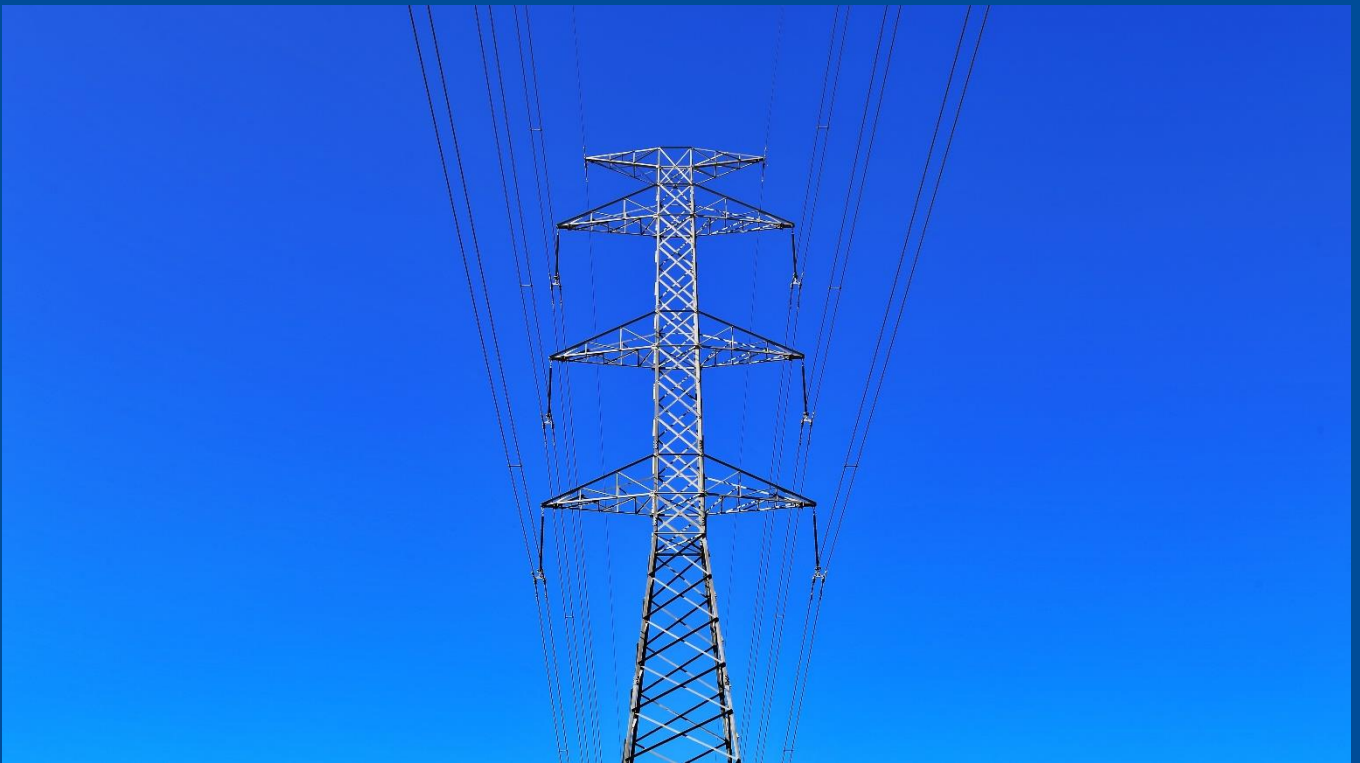




Improving
Performance,
Reducing
Risk.

Overhead Services

Guidance Note



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When working on a site, it is important to understand the potential for death or serious injury from contact with overhead power lines. This danger exists for both the operative carrying out the work but also others in the vicinity. Careful planning is required to ensure that accidental contact with overhead cables is avoided.

1.	How to detect overhead cables? Use your eyes! A visual inspection will identify the presence of overhead cables. Service drawings from owners/service providers will confirm presence/type of overhead service.
2.	What information do I need from service providers? The service providers/utility companies will be able to confirm the details/locations of their services, with a deadline for response ahead of a pre-commencement site investigation and always prior to the start of any construction work.
3.	What overhead serves should I be aware of? Overhead powerlines typically carry electricity of a high voltage, so are a serious potential hazard for the site risk register.
4	What checks need to take place on site before work starts? • All utility service drawings and plans should be checked. • The presence of overhead cables should be flagged on the ground underneath.
5.	If overhead power lines are present, what should be done to make the area safe? • If possible, the electrical power supply should be disconnected, isolated or temporarily switched off. • A permit to work system should also be in operation, with work planned as far away from the power lines as possible. • Barriers and restricted areas should also be created to prevent vehicles conflicting with overhead power lines.
6	What about manual handling of large materials? The height of the cables from the ground should be established and understood. To avoid inadvertent contact with overhead cables a maximum length for carrying long pieces of material (scaffold tubes, metal roof sheets, long ladders, etc.) should be set, which is less than the cable height, and incorporates a sensible tolerance allowance.

7.	How can an area with overhead power cables be made safe for lifting vehicles? A maximum height including tolerance area should also be set for lifting plant and mobile elevating work platforms (MEWP's). .
8.	What information needs to be in the works pack? There should be a detailed emergency plan and procedure for the site in case of accidents, explosion, fire etc. This should advise of the nearest hospital or accident treatment facility as well as the responsible first aider and procedures for treatment.
9.	Who is responsible for detecting overhead services? The existence of any services – underground or overground – should be advised by the client or landowner as part of pre-construction information. If the client doesn't know, they must commission appropriate surveys.
10.	Who is responsible for obtaining information? The Principal Designer should take responsibility for finding out relevant information about all services on site. Site exploration works should be commissioned, with accurate site plans drawn up. The client must ensure that the principal contractor has enough time to carry out site surveys and obtain information before construction work starts.
11	Do contractors have a duty of care to share information? All contractors have a duty to share information with those who need it, so if a contractor finds out about services, they must share this information through the Principal Contractor – who must ensure that this information is included in the construction phase health and safety plan for the project. To ensure that future risks are managed, information about residual underground and overhead services should be clearly recorded in the health and safety file for the project.
12	What responsibility do designers have regarding overground services? Designers have a requirement to reduce or 'design out' any risks arising from potential damage to services from construction works. By reducing risks to as low as possible or practical in the design, information about any remaining risk should be clearly provided to those carrying out the work on working drawings.
13	What are the principles of prevention? The main principle is to avoid risk whenever possible. By knowing where services are, you can design to avoid them where possible.
14	What if avoiding services is not possible? For building work, re-siting services away from the work area is a reasonable and practicable way of avoiding risk. Request that the service operator or owner achieve this having been given appropriate notice to undertake the works. Other options could be repositioning or redesigning structures to ensure that services are avoided or arranging for the supply to be disconnected while work takes place. If none of these are possible, then a protection zone/barrier could be created between the cables and works.

Do live electric cables need to be turned-off for work to take place safely?

Yes, overhead, or underground cables with an electricity supply will need to be 'dead' for work to take place safely. Contact the relevant electricity company as early as possible to allow them to isolate supplies in the area you are working. Plan the project schedule to allow sufficient time to accommodate this activity. If the cable cannot be turned off, an alternative safe way of carrying out work needs to be planned.

For more information on Health & Safety guidance and training, to arrange dedicated Health & Safety training for your business or speak to us about ongoing H&S support, please contact Jon Rensink on 07785 425295 or email jr@danielconnal.co.uk

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