

Contamination on construction sites

A new building currently under construction forms the second phase of an Energy Centre Development.

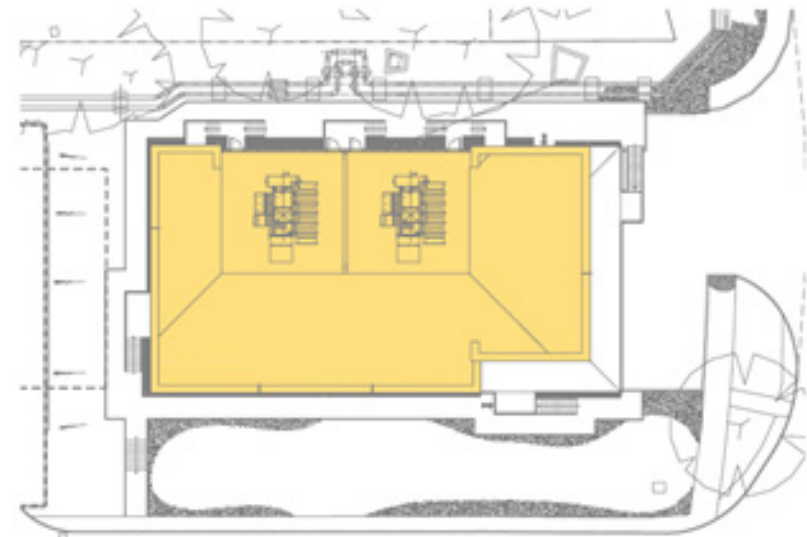
The building is located in an area with a large number of existing underground services including high voltage electricity supplies and sensitive data and comms cables. The very tight site is bordered by a road to two sides and over ground high-pressure pipe work along its western boundary.

At the start of the detailed design layout the method of construction of the building was challenged in relation to Health and Safety issues relating to excavation near to services.

The building layout went through a vigorous re-planning exercise to reduce the internal floor area and overall width of the building to the minimum possible in order to reduce works adjacent to underground services. The scheme was resubmitted for an amendment to the original Planning Permission, once the layout had been frozen.

Key Points

- Layouts should be challenged especially in relation to Health and Safety issues during construction. Planning permission's are not cast in stone and Local Authorities are willing to amend layouts for good reason, as part of the original approvals (within reason).
- As with most design work the more information and time taken at the outset to provide as detailed survey information as possible will have benefits in the long term.
- Avoidance of services by design layout is an important strategy to avoid service strikes which can cause injury and death, but also commercial and reputational risks.



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PD's and Designers should ask the client to provide all suitable contamination surveys on sites and any other pre-construction information. Otherwise the PC will need to obtain them which can delay projects, at the client's expense. Such PCI and Principal contractor actions and information should include:-

- undertaking exploratory investigations of the site to characterise contamination on site in terms of: type; concentration; extent and location.
- Ensure relevant permits are in place for any remedial works required.
- Agree the remediation strategy with the local planning authority.
- Do not stockpile contaminated soil unless it cannot be avoided
- If it is necessary, stockpile only on a hard standing area to prevent contamination of underlying ground.
- Take care when handling, storing and using oils and chemicals.
- Consider additional welfare requirements such as showers if dealing with contamination (e.g. asbestos, lead.)
- Agree what additional PPE is required for decontamination and/or working in contaminated ground.
- Cover stockpiled material to prevent windblown dust (potentially contaminated) and to prevent ingress of rainwater.
- Ensure a protocol is in place for managing 'hotspots of contaminated ground if they are discovered.
- Control surface drainage from stockpiled area.

