Facilities Directorate

UNIVERSITY OF LEEDS

BUILDING A SAFE ENVIRONMENT

Safety, Health and Environmental Requirements for Contractors

January 2021

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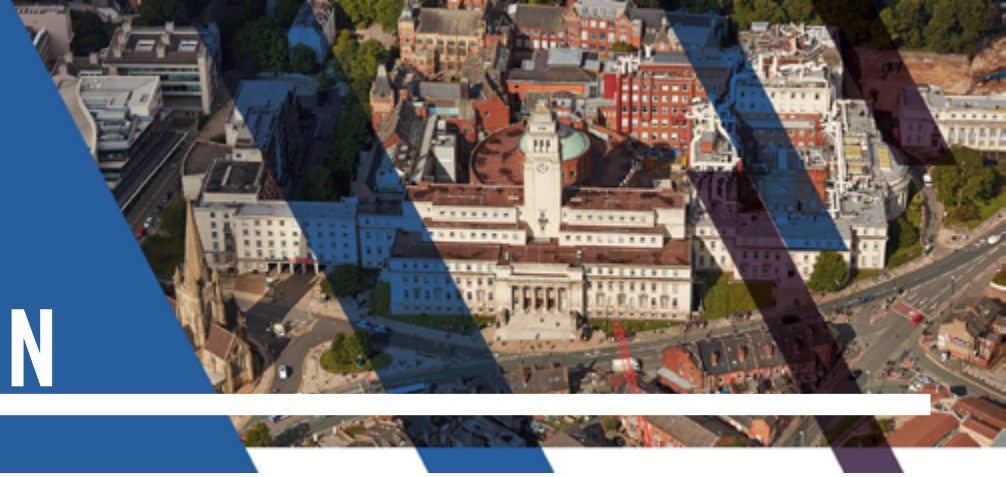
ABOUT THIS DOCUMENT



INTRODUCTION

The University estate is something of which we're immensely proud: Rich in architecture and character, it ranges from historic landmarks with listed status to modern iconic buildings, and a considerable amount of green space in between. We recognise the impact of providing high-quality facilities, not only in delivering award-winning standards of teaching and world-leading research, but also in providing an environment which is safe, welcoming, inspiring, and which should be accessible to all.

The preservation and development of our estate is therefore key to the University's ability to achieve its strategic goals, and we recognise we cannot achieve this alone. We rely upon a network of Contractors to undertake routine maintenance, attend to breakdowns, carry out compliance checks, as well as for refurbishing our estate and constructing new spaces. Much of this work is done in and around occupied areas where teaching and research are taking place, as well as in high-risk areas such as plant rooms, roofs and inside ducts.

Health, safety and environmental protection underlies each and every activity at University of Leeds. Everyone has a part to play in working together to achieve this, both by observing relevant legal standards and industry best-practice, but there's also a greater moral obligation to ensure our staff, students, and visitors go home safe and healthy each day, and that our environment suffers no adverse impact.

Above all, we will ensure the contribution to that work is done with the minimum of risk, but we'll also focus on quality, value, and in support of our sustainability initiatives. To achieve this we will lead by example, with adequately-resourced in-house staff, supplemented by appointing competent contractors, and by having processes that embody an ethos of continual improvement.

Maintaining people's safety and protecting the environment whilst we continue to operate is a significant challenge, and the following document is a fundamental step in overcoming that challenge: It sets out clear expectations of our Contractors, outlines the assistance we will provide to you, and how you can get further support.

Following these guidelines is mandatory but they should not be burdensome to put into practice. Together we will improve our campus without causing harm. Your contribution will make a difference.

Dennis Hopper,
Director of Campus Development

KEY AIMS

Our aims are simple: to protect the environment and ensure the health and safety of staff, students and visitors who may be affected by construction and maintenance activities on our estate.

This document sets out the expected standards of health, safety and environmental management and the means by which those standards should be maintained throughout each project.

It is:

- An introduction to some of the unique hazards on our sites;
- An outline of the procedures we expect you to observe whilst carrying out work for University of Leeds.

It is not:

- A list of legal requirements relevant to your work. We expect that you will already know and have access to this information;
- A project-specific information pack. This will be provided in the form of Pre-Construction Information, tailored to your work and which will allow site-specific control measures to be considered and implemented before work starts.

This document will be kept up-to-date to reflect any procedural or legislative changes, and therefore you must ensure that you are using the most current version, which is available at **estates.leeds.ac.uk/health-and-safety**

Finally, we believe in the benefit of a collaborative approach to tackling risks and would welcome your feedback and any suggestions to help improve our systems. Please get in touch with us at **fdhealthandsafety@leeds.ac.uk**

CORONAVIRUS (AND OTHER INFECTIOUS DISEASES)

The Coronavirus pandemic has introduced a new (and invisible) hazard to the workplace which needs to be controlled so that people are kept safe. Just like working at height, using power tools, or working with chemicals, there are simple precautions which can be taken to reduce the risks.

These currently include:

- Not coming to site if you have symptoms of COVID or are self-isolating.
- Minimising site attendance e.g. using Zoom or TEAMS to hold meetings etc.
- Maintaining a social distance of at least 2 metres wherever possible.
- Adopting good hand-washing practice.
- Wearing a face-covering in communal areas such as toilets, lifts, stairs and corridors.

University of Leeds is following advice from UK Government, Health and Safety Executive and industry bodies to make sure our control measures reflect good practice – and we expect you to do the same. You will need to consider the specific risks from COVID and record the control measures in your risk assessments.

We recognise that the approach to this (and other) infectious diseases can change quickly and often, and this might mean we have to temporarily change the requirements set out in this document. Whenever this is necessary we will provide regular updates to support you in keeping people safe.

BEFORE YOU START WORK

UNIQUE HAZARDS & CHALLENGES

You will be given specific information relating to your project prior to works starting, including risks posed by the existing University infrastructure.

However, it is important to share with you some of the more unusual challenges and hazards that may be encountered across the wider estate, and which may be present around your work area:

- We are open to the public which presents challenges in relation to unauthorised access. This includes previous examples of young people deliberately accessing site compounds and roof areas.
- There is limited space available on campus e.g. for large vehicles to manoeuvre, for site compounds, material storage, vehicle parking, drop-off and space to locate welfare facilities.
- Access is restricted to the Southern end of the Main Campus; access via Willow Terrace Road involves crossing a 7.5T weight-restricted bridge.
- There is a high volume of cyclists and pedestrians, including those who may be partially-sighted or blind, hard of hearing or deaf and others who may have reduced mobility.
- Works will often need to take place in or around occupied premises and there is a need to minimise the impact upon live teaching environments, including:
  - Maintaining existing fire escapes, access routes and entry points (including access for emergency vehicles and for mobility-impaired persons).
  - The maintenance of existing fire alarms and detection / emergency lighting / security systems / fire compartmentation and avoiding false fire alarm activations.
  - Maintaining site segregation and security whilst progressing construction work.
  - Minimising noise, vibration and emission of dusts and odours.
- There may be simultaneous adjacent construction/maintenance activities requiring co-ordination of activities by different contractors and/or our in-house maintenance teams.
- The use of compressed industrial and medical gases is widespread, piped and in cylinders. This includes Argon, Carbon Dioxide, Helium, Nitrogen, Acetylene and Oxygen amongst others.
- The potential difficulty in understanding points of isolation, limitation of isolations, vulnerabilities and possible unwelcome effects of unplanned isolations or interruption of services, as well as the possibility of live redundant services.
- Some equipment presents a danger even when isolated, such as capacitors within electrical equipment, compressed gases and liquids within pressure systems and rotating equipment within air handling equipment, emergency lighting with battery backup and equipment with secondary feeds or UPS backup.

- There is the potential for contact with biological, radiological and chemical substances – including residues within sinks, waste traps, benching, finishes, under parquet flooring and within waste pipes located above suspended ceilings.
- Laboratory processes include the use of Nuclear Magnetic Resonance (NMR) equipment which emits strong magnetic fields. These can be particularly hazardous if using ferrous tools or if individuals are fitted with a pacemaker. Objects likely to be made of ferrous material include keys, coins, watches, jewellery (including piercings) and can also include surgical implants.
- Some University processes and equipment involve radiation, nano-technologies and the use of lasers.
- Workshops can contain equipment such as robots that can start remotely or move without warning e.g. vehicle simulators, combustion engines and overhead cranes.
- Some roofs have limited edge protection, fragile materials, or the potential for effluent discharges that are potentially toxic to health; there are also microwave transmitters and antennas emitting non-ionizing radiation.
- There is a network of underground ducts where space is restricted and which may become confined spaces depending upon the work activity.
- We have live animals at our farms, as well as wildlife in our environment.
- We also share spaces with non-University staff who may be unaware of construction or maintenance activities, and who may have less awareness of the risks that their own work poses to those carrying out these tasks.

YOUR FACILITIES DIRECTORATE (FD) REPRESENTATIVE

Your Facilities Directorate Representative is your key contact at the University. They are responsible for managing the work on our behalf and will have oversight of progress, quality and budget. They will also liaise with other University departments to let them know about any works which might affect them.

FD Representatives will often have considerable technical knowledge, as well as knowledge of important features of our campus – such as asbestos, underground services, plant room locations etc. As well as providing you with relevant pre-construction information, FD Representatives can also help if you encounter any difficulties.

This document will require you to contact your FD Representative in advance of certain work activities as directed, for example raising permits to work etc.

WHO IS YOUR FD REPRESENTATIVE?

If you receive a University of Leeds Works Order or Purchase Order before you come to site, a named Facilities Directorate contact will be provided on the relevant order.

If you have been awarded work as a result of a tender process, a lead contact will be provided soon after award of contract.

OTHER IMPORTANT CONTACTS

This document will explain who you should contact if further support is needed, or in the event of an emergency. This page presents all of these contacts on a single page, which may be printed and brought to site.

HEALTH & SAFETY TEAM

0113 343 8824
fdhealthandsafety@leeds.ac.uk

Health & Safety team can help with reporting of accidents and dangerous occurrences, raising permits, arranging University inductions, and investigating difficulties with logging into site.

FIRE SAFETY TEAM

0113 343 8004 safety@leeds.ac.uk

Fire Safety team should be consulted if your works will impact upon the existing fire strategy for any occupied buildings.

ASBESTOS TEAM

0113 343 5952 asbestos@leeds.ac.uk

Asbestos team will provide access to asbestos surveys and registers, as well as arrange sampling if you uncover any suspect asbestos containing materials. They will also help arrange decontamination in the event that asbestos is disturbed.

ESTATES HELPDESK

0113 343 5555 eshelp@leeds.ac.uk

Estates Helpdesk will issue any keys and radios required for your work. They will log any reported faults with University equipment, or where urgent repairs to buildings are needed.

GROUNDS & GARDENS TEAM

0113 343 5981 eshelp@leeds.ac.uk

Grounds and Gardens team are responsible for managing and maintaining all of the University's outdoor spaces. This includes sports grounds, campus landscaping, and cleaning and maintenance of hard landscaping.

SUSTAINABILITY TEAM

0113 343 7032 sustainability@leeds.ac.uk

Sustainability team should be contacted in relation to any environmental concerns, especially hazardous waste, spills and unintentional releases, discharge to drains or damage to trees and other vegetation.

ESTATES SECURITY

0113 343 2222 security@leeds.ac.uk

Security are available 24 hours a day, 7 days per week. They will provide keys and radios if you have arranged to work outside core hours. There are trained first-aiders, will know the location of the nearest defibrillators, and can arrange to meet emergency services and guide them to your location if needed. They should also be alerted if you become aware of unauthorised visitors or suspected criminal damage or break-in.

PLANNING

Effective planning is key to ensuring work progresses promptly, within budget, and that health, safety and environmental risks are well-managed. The effort you devote to planning the works should be proportionate to the size and complexity of the project and the nature of risks involved.

As *Client* for the works, University of Leeds will provide you with:

- Clear information about the work to be carried out, including the function and/or operational requirements of the finished project, and your role within it.
- Existing information we hold, such as relevant asbestos surveys, as-built drawings, circuit diagrams etc.
- Details of any unusual or significant risks.
- A realistic timeframe and budget to allow you to plan and carry out works so that risks are minimised.

You will usually need to visit site in order to fully understand the project and any constraints which may shape how the work can be carried out.

CONSTRUCTION PHASE PLAN

Unless specifically instructed by us, you must prepare a Construction Phase Plan document prior to undertaking work. It should record the arrangements for managing significant health and safety risks associated with your work, and is the basis of communicating your arrangements with everyone involved in the project.

Any plan should be proportionate to the scale and complexity of the specific project you are working on. It should include:

- A description of the project such as key dates and details of key members of the project team.
- The health and safety aims for the project.
- Site rules.
- Arrangements to ensure cooperation between project team members and coordination of their work e.g. regular site meetings.
- Arrangements for involving workers.
- Site induction (in addition to the University Induction).
- Welfare facilities.
- Fire and emergency procedures (see also *Fire Safety*).
- Management of any of the following risks if relevant to the project:
  - Work which puts workers at risk of burial under earthfalls, or falling from a height.
  - Exposure to chemical or biological substances which could affect the safety or health of workers, or if the substance has a legal requirement for health monitoring.
  - Work with ionizing radiation.
  - Work near high-voltage power lines.
  - Work with a risk of drowning.
  - Work on wells, underground earthworks and tunnels.
  - Work carried out by divers having a system of air supply.
  - Work involving the use of explosives.
  - Work involving the assembly/dismantling of heavy prefabricated components.

The Construction Phase Plan must be provided to your FD Representative prior to works starting.

RISK ASSESSMENTS & METHOD STATEMENTS (RAMS)

We expect that all your work activities will be covered by a written site-specific risk assessment and method statement (RAMS), prepared by a competent person. It must consider the risks to those who may be affected such as students, University staff, construction workers and risks to the environment. It must cover:

- The risks likely to arise during construction work;
- the measures needed to protect those affected, by planning to provide and maintain
  - the right plant and equipment;
  - the necessary information, instruction and training; and
  - the right level of supervision;
- the resources (including time) needed to organise and deliver the work, including its management, monitoring and coordination.

Ambiguous phrases such as "…where appropriate", "…if necessary" or "…as required" etc. should be avoided – adequate planning will mean that specific control measures are known and made clear from the outset. Risks should be reduced to the lowest levels reasonably practicable.

The pre-construction information and any key design information, identifying risks that need to be managed during construction work, will be helpful in planning your work.

Copies of RAMS should be easily accessible by site teams, but may be held electronically.

You will be responsible for ensuring the adequacy of RAMS of any sub-contractors you engage.

University staff may ask to see RAMS prior to work starting. They must be available 5 days prior to works beginning unless otherwise agreed with your FD Representative. We will also check the implementation of any control measures as part of Contractor Monitoring (see *Monitoring and Reporting*) but despite these checks, you are reminded that the responsibility for a safe method of work remains with you.

OTHER THINGS WE NEED TO KNOW

In addition to the Construction Phase Plan and RAMS, you also need to give us advance notice of the following key activities so that we can put in place any additional controls such as keeping people away from the area, sequencing other works to avoid clashes and allowing everyone enough space, or amending evacuation plans from occupied buildings etc. This all takes time to arrange, so the sooner you can let your FD Representative know, the better.

The types of activity you need to tell us about include:

- Crane lifts.
- Working at height on mobile platforms inside university-occupied areas or outside in public areas.
- The erection and dismantling of significant scaffolds in areas adjacent to pedestrian routes.
- Works that will generate large quantities of dust, noise, vibration, vapour or noxious smells within occupied buildings.
- Manoeuvring construction plant or site vehicles in pedestrianised areas.
- Activities affecting emergency escape routes from an occupied building.
- The location of waste skips outside of construction site hoardings.
- Those requiring isolation of electric, gas, steam, water or safety critical equipment such as automatic fire detection and alarm systems.
- Demolition of structures or parts of structures, including the opening up for doors and windows.
- Any form of asbestos removal or need to work on or in proximity to asbestos containing materials.
- Storage of flammable fuels, oils or other hazardous substances in greater quantities then 50 litres.
- Any activity requiring a source of radioactivity or explosive substances being brought into, moved or removed from campus.
- Delivery or removal of materials and equipment by articulated vehicles.
- The need to enter any excavation with a depth greater than 1 metre.

If further control measures are needed to reduce risk and insufficient notice has been given, you may find that your programme is delayed.

COMMUNICATE, COOPERATE AND COORDINATE

Effective communication is the foundation of any project's success. As Client, we must give you clear information about the risks on our site so that you can make adequate arrangements to manage them (also see *Planning*). As a Contractor you need to tell us about the risks that might be associated with your work. You will also need to tell your workers this, and similarly they should tell you about any issues that they foresee. Communication should be ongoing throughout as the work progresses.

Methods of communication should be proportionate to a project's complexity and level of risk. This will likely involve:

For Contractors:

- Design team meetings.
- Pre-start meetings & progress meetings.
- User group / liaison meetings.
- Monthly Client reports.
- Ad-hoc updates to your FD Representative to report significant issues.
- Ongoing liaison with local University representatives e.g. faculty/school contacts in order to highlight day-to-day issues and managing expectations of work activities.

For Designers:

- Review, collation and issue of pre-construction information.
- Directly at design team and progress meetings.
- During design Health & Safety Risk workshops.
- The issue of drawings, incorporating annotated hazard and risk information.
- The collation, review and issue of a project H&S hazard and risk register (where used).
- The collation, review and issue of design and access strategies.
- The collation and review of Health and Safety File information.

It isn't uncommon to find yourself working in proximity to other construction projects, especially minor (reactive) maintenance works. As Client, we will tell you about this as best we are able, but given the reactive nature of some urgent repairs this cannot be guaranteed.

In these cases you must consider how your work might impact any adjacent contractors. They will have a likewise duty and you may need to work together in order to work out how you can both complete your work safely and in a timely manner. FD Representatives may only need to be involved if there are any difficulties.

You should not allow other contractors or University maintenance operatives access within your work location unless it has been requested by the FD Representative. People who are approved will then need to receive a site health and safety induction by the contractor controlling that site before entering, unless they can be accompanied at all times.

SAFETY BY DESIGN

Designers have responsibilities to ensure the health and safety of people installing any proposed structure, system etc. as well as thought given to how future maintenance work can be carried out safely. A summary is given below to help you recognise when these responsibilities may be relevant to you.

WHAT IS A DESIGN?

A design includes drawings, specifications and bills of quantities relating to a structure, product or mechanical or electrical system.

WHO IS A DESIGNER?

A designer is any person or company who prepares or modifies a design, or instructs someone under their control to do so. The person who selects products for use in construction is a designer. If a product is purpose-built, the person who prepares the specification is a designer and so are manufacturers if they develop a detailed design.

WHAT MUST A DESIGNER DO?

A completed design must meet, or exceed, the brief given to you by University of Leeds. However, designers are also in a unique position to reduce the risks that arise during construction work, the building's use, and risks that will arise during future maintenance work. By identifying and eliminating hazards through the design process people can be kept safe.

Designers must consider risks of installing/ implementing their design within a building.

Examples could include:

- Eliminating work at height by specifying product assembly at ground level, or being delivered to site pre-assembled.
- Reducing risk of manual handling injuries by breaking down loads into smaller sections, or by ensuring adequate clearance, floor-bearing capacity etc. for common mechanical lifting aids to be used.
- Reducing waste levels by aiming to maximise the re-use of materials and maximising the specification of recyclable materials, where feasible.

Designers also need to give thought to the use and future maintenance/repair of items they've designed. Consideration must therefore be given to things such as:

- Eliminating work at height by designing windows so that they can be cleaned from the inside.
- Allowing adequate provision for access equipment/lifting aids, including consideration of bearing capacity of floors, especially those above basements etc.
- Where items may have been craned into position during the build process, this will likely be unavailable during routine maintenance and there will need to be a strategy for access.

The design focus should be to eliminate risks where possible. If risks cannot be eliminated altogether, a designer should apply the principles below in deciding how to reduce or control the remaining risks – if possible, in the following order:

a. Provide a less risky option, e.g. switch to using paving lighter in weight, to reduce musculoskeletal disorders such as back problems.

b. Make provisions so the work can be organised to reduce exposure to hazards, e.g. make provision for traffic routes so barriers can be provided between pedestrians and traffic.

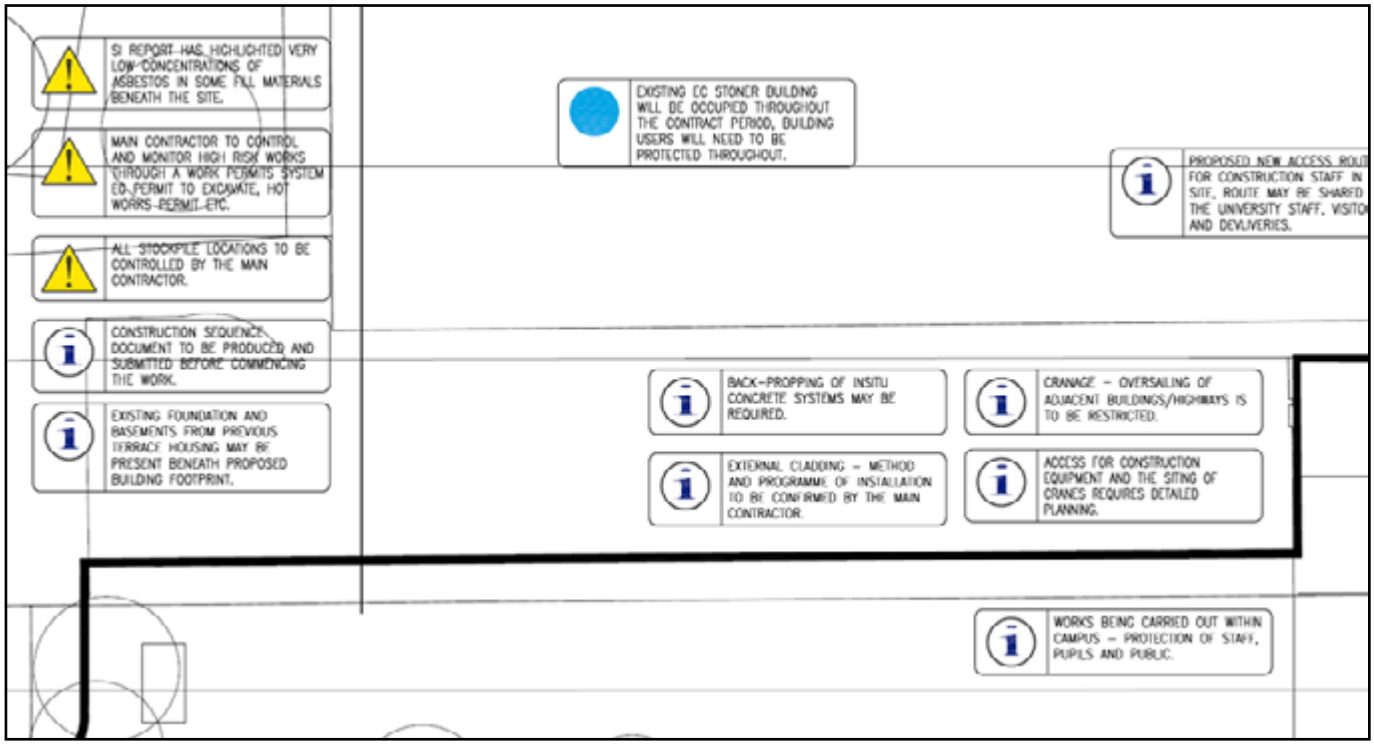
c. Only after all the previous measures have been tried and found ineffective in controlling risks to a reasonably practicable level, must personal protective equipment (PPE) be relied upon. For example, where Local Exhaust Ventilation is not wholly effective to control dust or fumes, Respiratory Protective Equipment might need to be specified.

d. Ensure that those responsible for planning and managing the work are given the information they will need to manage remaining risks, e.g. tell them about loads that will be particularly heavy or elements of the building that could become unstable. This can be achieved through providing key information on drawings or within models, e.g. by using Building Information Modelling (BIM).

When addressing risks, a designer is expected to do as much as is reasonable at the time the design is prepared. Risks that cannot be addressed at the initial stage of a project may need to be reviewed later on during detailed design. On projects involving more than one contractor, the principal designer will lead in managing the review process.

We know there will be residual risks which cannot be eliminated. The University's preferred option is for significant risks to be highlighted by means of annotated pictorial symbols and notes on drawings or within models as appropriate throughout each stage of the project development e.g. 'tender', 'construction', and 'as-built' (see Figure 1 below).

Fig 1: Extract from design drawings



A suggested format is as follows:

Health and Safety Symbols	
	Indicates a residual risk as a Warning.
	Indicates a residual risk requiring a Prohibitive Action.
	Indicates a residual risk for Information.
	Indicates a residual risk requiring a Compulsory Action.

Examples	
	Site Investigation Report has highlighted very low concentrations of Asbestos in some fill materials below the site.
	Weak bridge (7.5 tonnes) crossing the public highway. Construction traffic should not utilise this route.
	Existing retaining structure to be maintained. Potential support or underpinning required.
	Existing building will remain open throughout the contract period. Building users/visitors will need to be protected.

For larger/more complex projects, designers may also wish to record significant hazards within a Project Hazard and Risk Register, usually owned and created by the Principal Designer.

UNIVERSITY INDUCTION

Facilities Directorate requires all Contractors under its control to complete a University Induction prior to their work beginning on site.

Aimed at those working on site, its purpose is to highlight some of the unique hazards associated with our estate, set out basic site rules to be followed, and outline the framework which exists to keep people safe and protect the environment.

It does not replace the need for project-specific pre-construction information, which will still be provided in good time to allow you to plan your work.

The induction is available online and can be completed at a time to suit you prior to works starting on site. There is a short quiz at the end which everyone needs to pass to show that key details are understood. In total it should take no more than 90 minutes to complete and will be valid for up to 2 years.

For details of how to access the course, please contact Estates Business Support Office esoffice@leeds.ac.uk / 0113 343 1234

For some smaller projects with low risks, a Local Induction may be given by a representative from Facilities Directorate, which may include Project Managers or Technical Officers. This will cover the specific hazards relevant to the intended works.

CONTRACTOR MANAGEMENT SOFTWARE – SOTER

SOTER is a bespoke software package which allows contractors to sign in and out of our sites electronically, via a smartphone or any computer with internet access. It also allows us to issue permits, control access to higher-risk areas, and issue keys, radios and equipment.

You will be given a user ID and shown how to log-in at the completion of your Induction.

Where your site is entirely segregated by a physical barrier or hoarding, it may be possible for only Site/Project Managers to be inducted and use SOTER. Where this is suitable, it is expected that the lead contractor (or Principal Contractor if appointed) will provide site inductions to all sub-contractors and ensure they follow the requirements set out in this document.

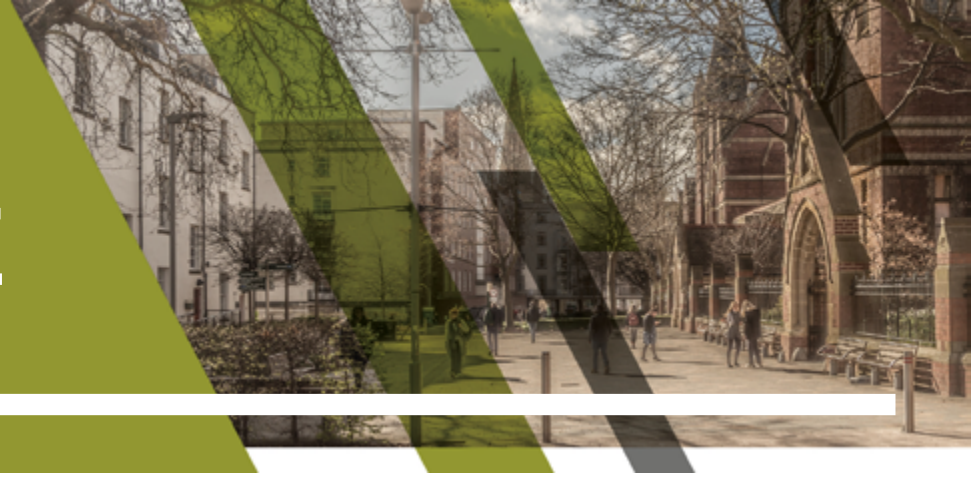
If works are not/cannot be segregated then each contractor and any sub-contractors should complete a University Induction. This may be relaxed at the discretion of the Facilities Directorate where contractors' (or sub-contractors') attendance is of short duration and their work can be supervised by someone who has attended the University Induction.

IDENTIFICATION

At the completion of your Induction, you will be directed to obtain a Facilities Directorate *Approved Contractor Identification Card*, issued by the Print and Copy Bureau at a cost of £10.00. Obtaining and carrying these cards is mandatory. Checks will be made during any site inspections.

Operatives are also expected to wear company-branded PPE and clothing.

GETTING HERE & AROUND



The Main University Campus is on the edge of Leeds city centre and comprises around 180 occupied buildings. Our neighbours include Leeds General Infirmary, The Dental Institute, residential properties, and we're bordered by two major roads. There are more than 38 000 students and almost 9 000 members of staff.

This means there will be high numbers of pedestrians around the University estate, some of whom may have impaired mobility, be blind or partially-sighted, deaf or hard of hearing, young people who may not recognise the dangers from vehicles, and those whose first language isn't English and may not understand written warning signs.

Our campus is designed to promote walking, cycling and the use of public transport to get around. There are many pedestrianised areas, designated cycle paths and only limited parking and access for vehicles.

Vehicle access is strictly controlled either by a physical barrier, or through Automatic Number Plate Recognition (ANPR).

WHERE, WHEN & HOW?

- Your FD Representative will advise on the location of your works and the most suitable access point for vehicles/deliveries.
- The Willow Terrace Road entrance is strictly limited to 7.5 tonnes (due to a weak bridge).
- Pedestrian traffic will be heaviest from 10-to until 10-past each hour, which coincides with the start and end of lectures during the day (08:00 until 18:00). You should seek to avoid driving on campus during these busy times.
- Delivery schedules should be discussed with the FD Representative if disruption to adjacent projects or the University road network is foreseeable.
- Priority must be given to pedestrians, wheelchair users, cyclists and other non-motorised vehicles at all times.
- Vehicles must not exceed 5mph in pedestrian areas or 10mph on University roads.
- You must not use handheld mobile phones whilst driving.
- You must not leave your vehicle engine running unnecessarily while it is stopped. If the vehicle is likely to remain stopped for more than a couple of minutes you should apply the parking brake and switch off the engine to reduce emissions and noise pollution.
- All contractor and delivery vehicles must be covered by appropriate vehicle insurance, and their operators in possession of valid Public Liability insurance cover not less than £10 million.

PARKING

- Vehicles will be allowed up to 40 minutes free parking each day to allow collections & deliveries.
- Parking permits are required for longer stays and can be arranged by your FD Representative (restricted to one permit per project, by agreement).
- Parking is not allowed:
  - In bays for drivers with disabilities, unless the appropriate Blue Badge is held & displayed.
  - On double yellow lines.
  - Adjacent to drop kerbs provided to assist those with reduced mobility to make full use of the Campus.
  - In yellow hatched areas.
  - In delivery areas – unless specifically unloading / loading.
  - Within construction site compounds (other than for construction plant).
  - In locations which block final exit routes.
  - In locations which block access routes.

Unauthorised parking may result in a Parking Contravention Charge of £80.

- Vehicle drivers are expected to report any collisions, accidents and emergencies either via FD Representatives, University staff in the local area, or through Security on 0113 343 2222.

KEYS & ACCESS

Your FD Representative will provide you with the necessary keys to access those areas which are locked and unattended. Please ensure you lock any doors behind you to prevent unauthorised access, including when you have left the area. You may also be directed to collect keys from local departments.

Access to higher risk areas such as roofs, ducts and plant rooms etc. is strictly controlled via a permit system where your risk assessments and method statements will be reviewed prior to issue (see *Permits & Authorisations: High Risk work*).

WORKING INSIDE RESIDENTIAL ACCOMMODATION

Unless reacting to an emergency you MUST provide a minimum of 48 hours' notice of your intention to carry out work to the appropriate residential site office, and you will normally be asked to begin works after 10am. No advance notice is required for emergency works.

We take the privacy of our residents seriously and therefore if you are likely to need to take photographs inside residential accommodation, you should make this request as the same time as the initial notification of work.

Upon arriving at the accommodation, you must report to the site office and will be asked to sign in. Any keys required will be provided to you but they must be returned upon completion of work, or at the end of each day (whichever is soonest). You may be charged for replacing any lost keys and/or locks as necessary.

Before you enter a property you must:

- Knock on the front door of the property or use a door-bell/entry-phone where available.
- Wait a reasonable length of time for a reply.
- If there is no response, knock again and wait for a second time.
- If there is still no response you can let yourself into the accommodation (using keys etc. provided), clearly announcing your arrival and the purpose of the visit e.g. "Heating Engineer, come to fix the boiler".

You should repeat this "double-knock" again where access is required to rooms within a property, including kitchens, study/bedrooms and en-suite facilities.

If the room is occupied and the occupant is asleep, then you must vacate the room immediately, and report back to the site office.

If the occupant answers, they should be allowed a reasonable time to vacate the room, if they wish. If you encounter an irate occupant, then you must immediately vacate the room and report the incident to site staff.

You MUST only move those items required for the work to be completed and MUST leave the room locked and as found, with all items in their original place.

If work requires further investigation in adjacent rooms, you must seek authorisation from site staff before entering those areas.

Upon leaving the flat/room, you must leave a completed copy of a job completion slip, to inform occupants of the status of the works, whether completed, or incomplete, e.g. awaiting parts. If the work remains incomplete, you must ensure that all equipment is left in a safe condition e.g. isolated / disabled.

At the end of your visit you must:

- Report back to the site office.
- Inform site staff as to the job status and provide a completed copy of the job completion slip.
- Return all keys.

In the event of an emergency response required out-of-hours (gas leak, water leak, loss of lighting, or loss of central heating plant etc.), the arrangements outlined above must still be applied, but the main security office at 175 Woodhouse Lane will be the point of contact for the issue and receipt of keys.

EMERGENCY ARRANGEMENTS

AMBULANCE

If you need to call an ambulance to our site, please call 999 (or 9 then 999 if using a University landline phone).

If you, or someone else present is able, please then also let our Security team know about the ambulance's likely arrival and we can help guide them to your location: 0113 343 2222

FIRE

The University's emergency instructions are as follows:

- If you spot a fire, alert those around you and break the glass of a manual call point before promptly evacuating the building.
- If it is safe to do so, call the University Security Services on 0113 343 2222 who will coordinate the wider University response.
- If you hear a continuous alarm:
  - Stop what you are doing.
  - If safe to do so, make your work area safe (to prevent trip hazards/obstructions, etc.) and ensure fire doors are closed.
  - Follow fire exit signs to leave by the nearest exit.
  - Go to the nominated Assembly Point.
- If you are working outside a building which is being evacuated then you should stop your work and move to a safe place away from the building.
- If you suspect your work (dust, heat, smoke, etc.) has caused the alarm activation or you have accidentally struck a call point or detector you must still evacuate, but immediately provide details to Security 0113 343 2222.
- Await instruction to re-enter the building from the University Fire Warden(s).

FIRST AID

You are responsible for providing adequate numbers of trained first-aiders and first aid equipment on site sufficient for your workers and any likely numbers of sub-contractors and visitors. The equipment should be readily available.

If specialist first aid instruction or training is required, for example in dealing with the effects of suspension trauma, or rescue from restricted spaces etc., you should ensure that either you or appropriate subcontractors have received the necessary training and are present on site.

AUTOMATIC EXTERNAL DEFIBRILLATORS (AEDS)

An AED is a portable device which acts to restart or correct the heart by applying an electric shock to the chest. They are intended to be used when a casualty suffers cardiac issues such as a heart attack.

They give automated instructions to the operator on what to do and are designed so that they will only operate under appropriate circumstances so they cannot be used incorrectly. The quicker lifesaving first aid and a defibrillator are used on a casualty, the better the outlook for survival.

The University has a number of defibrillators located across the main campus – please see **here** for locations.

PERMITS & AUTHORISATIONS: HIGH RISK WORK

We have identified some areas of our estate and certain work activities where we consider that additional layers of control are needed. This is achieved by the use of *Permits to Work* and *Access Authorisations*. They allow us to consider the proposed work, how it might impact the University, and whether we need to provide further measures to ensure safety.

Some permits/authorisations will be issued by your FD Representative. Others, as detailed below, will only be issued by contacts within specific Schools or Faculties.

PERMIT TO WORK

You may already be familiar with the concept of a permit to work. It requires an application to be made to your FD Representative outlining the intended works, along with Risk Assessments/ Method Statements and evidence of specific competencies, explaining how the work will be carried out safely.

We will review the information supplied to ensure the necessary arrangements are in place. On occasion, further information may be requested prior to works beginning. This means that any permit application needs to be made in good time, and at least 2 working days prior to works commencing.

Works requiring permits are:

- Hot Works (e.g. welding, braising, cutting using oxy-acetylene etc.).
- Work on pressurised systems (including steam distribution and compressed air).
- Work in confined spaces.
- Work on low voltage systems.
- Work on high voltage systems (dead working & live testing only).
- Breaking ground or excavation.

ACCESS AUTHORISATION

Access to higher-risk areas of our estate is strictly controlled. Some areas contain physical risks, such as on roofs where there is a risk of falling, whilst others may have chemical or biological risks, such as laboratories. Work outside University core hours is also higher-risk, and the ability to control our keys is essential.

In order to work in these areas you will need an Access Authorisation. Again, this will require submission of necessary Risk Assessment/Method Statements to your FD Representative prior to works commencing.

The appropriate person to grant an authorisation will be determined by the area type:

Access requiring authorisations from FD Estates staff (FD Representative, or Health and Safety team):

- Access into service duct spaces (once assessed as a non-confined space).
- Access onto flat roofs.
- Access into plant rooms or risers.
- Access to high level lighting rigs.
- Access into switch rooms and substations.
- Out of hours access (outside of 8am – 5pm Mon-Fri).
- The issuing of keys.

Areas requiring authorisations from individual Faculties & Schools:

- Access into radiation areas.
- Access into NMR rooms.
- Access into laser rooms.
- Access into operational biohazard / chemical laboratories (including preparation rooms).
- Access into operational engineering workshops or similar.
- Access into designated clean areas.

You should make contact with your Faculty or School representative in order to discuss access arrangements at an early stage. Departmental inductions may be required prior to you working in some areas.

You should consult your FD Representative if you are unsure how to proceed.

SITE SET-UP

Unauthorised access to your work area and any compound must be prevented. Where work in a single location will last longer than 1 day, we expect Heras fencing or solid hoarding to be used. For shorter durations, pedestrian barriers will often be adequate. Hazard warning tape and cones have proved to be ineffective and are therefore not accepted even for short duration work.

Appropriate signage warning persons not to enter site must be used where your site will be left unattended, together with emergency contact details of the Site Manager and your FD Representative.

Any works on roads, footways and verges must be adequately signed, lit and guarded in order to protect pedestrians and passing traffic (see also *Traffic Management*).

Areas allocated for site compounds are to be agreed with the FD Representative prior to starting on site. Consideration should be given to safe vehicle movement, positioning of waste skips, storage and welfare cabins, availability of temporary water and power supplies and the impact on the immediate buildings and surroundings.

HERAS FENCING

Where Heras-type fencing is used you should ensure:

- Debris netting is considered where necessary (additional bracing may be necessary).
- Feet are designed, positioned and/or conspicuously marked to prevent trips.
- Panels are secured with two couplers at each end.
- Gates or doors in panels are padlocked when the site is unsupervised.
- Infill panels or similar are fitted to prevent snagging of clothing, etc.
- Open ends of fencing have a 'return' to increase stability and security.
- Any sloping ground does not create gaps under the fence through which a person (including a child) could access the site.

CUTTING, SAWING & GRINDING ETC.

Cutting, sawing, grinding and welding will undoubtedly result in significant levels of noise, vibration and dust which is a nuisance as well as a health hazard. You should prepare materials off-site to the extent possible. Where these activities cannot be avoided on site, you must provide such screens or enclosures to minimise the number of persons exposed and the exposure level.

HOUSEKEEPING

You must keep your work area in a clean and orderly condition to reduce the chance of injury through slips, trips, and falls.

Cordless tools should be used where possible to mitigate the need to use cables. Where cables are required for temporary lighting or mains-powered tools, they should be run at high level, especially along corridors.

You must make adequate arrangements for waste collection within your site so that it does not accumulate. You may need to provide skips and/or bins for this and assign responsibility for waste removal. Any waste not cleared will be removed by the University and the cost charged to you plus an administrative fee (see *Waste*).

Deliveries should be planned to minimise the amount of materials kept on site.

External slippery surfaces should be treated with stone (mud) or grit (for ice) or provide a temporary covering.

Contractors should identify changes in level throughout their site and consider installing ramps. If this is not feasible, markings and/or signs should be used to warn workers to look out for the change in level.

MONITORING AND REPORTING

BY US

We will monitor the performance of our Contractors via meetings, site visits, investigations of accidents and dangerous occurrences, and through reviews of completed works. The frequency of monitoring will be determined by a project's duration and the level of risk posed.

Monitoring helps the University better understand the challenges, risks and opportunities involved with work on our estate. It also provides you with an opportunity to input into better ways of working.

You will be expected to provide any University representative the necessary time and facilities so far as is reasonable in order to carry out monitoring work.

BY YOU

You are required to monitor your own health, safety and environmental performance and that of any of your sub-contractors:

- For works lasting more than 1 day, a daily site check should be undertaken by the Site Manager/Supervisor and the findings recorded.
- For works lasting 30 days or more, a health, safety and environmental inspection should be carried out at least every 2 weeks by a competent practitioner. The first inspection should be carried out within the first 2 days of starting on site.

Findings of any inspection must be recorded and kept (or made available) on site whilst work is taking place. Copies may be requested for review by the University.

BY EVERYONE

It is possible that you may see unsafe practices by others around the University estate. If it is safe to do so, we encourage you to raise the issue directly with those creating the risk in order to help keep people safe. You may want to share some of the solutions that you've used for similar issues.

If you are approached about your performance, please remember that this input might prevent a serious accident or ill-health. Consider what is said and whether improvements should be made. We want to create a safe environment for everyone.

If any further assistance is needed, please get in touch with a member of the Health and Safety team, or your FD Representative (see *Other Important Contacts*).

OUTCOMES

Positive Behaviour

The University wishes to identify and share examples of positive safety behaviour and initiatives on its projects. Staff, contractors and consultants are therefore encouraged to report observations of exemplary behaviour to their FD Representative, or a member of the FD Health and Safety Team.

Examples may be shared with a wider audience, including University staff and other Contractors. It may also be included within our Contractor Induction.

Improvements

You may be asked to carry out remedial action in order to improve health, safety, or environmental concerns, and any timescale will be agreed with the University representative.

This may be done verbally, via email, or a *Corrective Action Notice* (which is not an enforcement notice).

Enforcement notices are used to formally address more serious issues. Issued sparingly, they are reserved to focus the attention of the organisations' senior management in relation to a significant deficiency:

Improvement Notices – are issued for cases of significant or repeated non-compliance with legal or client requirements, a risk of injury and/or damage to property.

Prohibition Notices – are reserved for the most serious issues where there is a clear and immediate risk of serious personal injury, or damage of plant and equipment.

Facilities Directorate reserves the right to immediately exclude individuals or organisations from working on our site. We may also remove Contractors from our Register of Approved Contractors for a minimum period of 6 months.

ACCIDENT/INCIDENT REPORTING

You must record all accidents, incidents, and near-misses[1], which arise out of the works in areas under your control. You are reminded that this includes issues affecting the environment as well as people and equipment.

You must report the following items to your FD Representative or Health and Safety team by the quickest available means (see *Other Important Contacts*):

- Any incident which has (or could have) impacted upon University staff, students, visitors, our assets or the environment.
- Any RIDDOR-reportable incidents.
- Any incidents reportable to the Environment Agency.

If an incident occurs outside core hours, you should contact Security in the first instance (see *Other Important Contacts*).

The resources you employ to conduct any investigation should be proportionate to the risks and their potential consequences, not just the actual effects experienced. Copies of the relevant investigation reports should be provided to your FD Representative and the Health and Safety Team.

HEALTH AND SAFETY EXECUTIVE

Your work may be visited unannounced by Inspectors from the Health and Safety Executive (HSE). If you receive a visit, you must inform your Facilities Directorate Representative or the Health and Safety Team, regardless of the outcome.

If enforcement action is taken, such as a Notification of Contravention, Improvement or Prohibition Notice, you will need to explain to us the reasons for the notice and any actions you intend to take as a result.

You must comply with the directions of any letter or enforcement notice from HSE, or appeal against it within the relevant period, usually 21 days. You may be required to attend a meeting with Facilities Directorate representatives relating to these issues.

[1] A near-miss is regarded as an event which did not cause harm or damage, but had significant potential to do so.

A-Z OF CONTROLS

ASBESTOS

The dangers from inhaling asbestos fibres are well-known. Its presence must be presumed in any University building constructed prior to the year 2000.

Anyone carrying out works which are intrusive to the buildings' fabric must have received documented Asbestos Awareness training. This should be provided by a UKATA-accredited training provider and repeated at least every 3 years. It should be supported by annual refresher training, although this may be included as part of other health and safety updates and undertaken in-house by a competent person.

Where your work is liable to disturb the fabric of any pre-2000 buildings you will be provided with access to the relevant Asbestos Survey in advance of works. If the correct survey is not immediately available, this will be arranged by the University asbestos team and a copy provided to you.

We recognise that planned works may sometimes have to be adapted or modified to accommodate unforeseen issues once on site. You must ensure that the location of any intrusive activities are covered by a suitable asbestos survey.

We do not routinely label Asbestos Containing Materials (ACMs) across campus, although coloured mastic is used to identify areas where ACMs may be present i.e. that could not be accessed during surveys/removal work (red mastic for floors and grey on walls). If you do need to remove equipment sealed by coloured mastic, or if you are unsure about whether asbestos might be present, you must contact the Estates Asbestos Management Team (0113 343 5952) for further advice.

In the event that suspected ACMs are uncovered/ inadvertently disturbed, work must cease immediately in the area, ensuring unauthorised access is prevented whilst passing details of the incident to the Asbestos Management Team by telephone as soon as possible.

CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH (COSHH)

Every Contractor has a legal duty to prevent exposure to hazardous substances which might be used as part of their work (e.g. glues, mastics, or other chemicals etc.), or generated by the work (e.g. fume from welding, or wood dust from cutting, or sanding timber).

As well as protecting your own workers, and those of any sub-contractor you appoint, we expect there to be due consideration of others if hazardous substances are likely to be present e.g. by controlling dust at source, providing local exhaust ventilation for fumes etc.

Hazardous materials must be handled, stored and disposed of appropriately, following the directions provided in the product's Safety Data Sheet.

Secondary containment (e.g. bunding) is required for all oils or environmentally hazardous substances and be capable of containing 110% of the largest container's capacity, and 25% of the total container capacity (where more than one container is stored at any time).

Some work may need to be carried out outside core hours if fumes or strong odours are likely to affect others, particularly building occupants. You should liaise with your FD Representative to discuss this in advance of works beginning in order to properly sequence your work.

DEMOLITION AND DISMANTLING

A written demolition plan must be produced prior to works beginning, and this may require significant input by others e.g.

- A structural survey by a competent engineer.
- An asbestos survey (or surveys) being obtained by the University's Asbestos Management Team, with UKAS-accredited analyst's results.
- Sampling of paint to determine presence of lead etc.

Each of these contributions may take time to procure and produce, and therefore allocating sufficient resource to planning these types of work should be made both in terms of timescales and budget.

Evidence of the competence of those undertaking demolition work, such as certificates or skills cards should be kept on site whilst the work is taking place.

Any waste materials arising from demolition/ dismantling must be sorted for recycling in line with your contract brief (also see *Waste*).

ENCLOSED AND CONFINED SPACES

We have established safe systems of work for accessing and working in both substantially enclosed spaces and confined spaces (see *Permits & Authorisations: High Risk work*).

Examples of our enclosed spaces (by their physical nature) include underground service ducts, drains/ inspection chambers, water tanks, excavations, wells, lift pits, silos, hoppers, boilers, and roof voids.

Before any access into a substantially enclosed space is permitted, an assessment will be undertaken by an Estates Appointed Person (arranged by your FD Representative) to determine if the planned work could foreseeably create any of the following risks:

- Fire or explosion.
- Loss of consciousness arising out of increase in body temperature.
- Loss of consciousness or asphyxiation arising from gas, fume, vapour or lack of oxygen.
- Drowning arising from increase in level of a liquid.
- Asphyxiation arising from a free-flowing solid, such as sand or grain etc.

If any of these risks are foreseeable, the space is considered a confined space. All access to, and work in, a confined space must be controlled under a Confined Space Permit to Work (through liaison with your FD Representative, Appointed Person, and FD Health & Safety Team).

If the assessment confirms the space is not a confined space then appropriate access authorisation arrangements must still be followed. RAMS should be prepared as usual (see *Risk Assessments & Method Statements (RAMS)*), but must specifically consider arrangements to rescue any casualty from the enclosed space. Relying only upon emergency services to perform a rescue is not acceptable.

It is important that any changes to your intended method of work are agreed in advance with your FD Representative. This is to prevent any of the risks specified above being inadvertently introduced, and unknowingly creating a confined space.

ENGLISH AS A FOREIGN LANGUAGE

At University of Leeds we value the contribution of students and colleagues from over 170 different countries, recognising different perspectives help us best achieve our aims. We know many contractors will feel likewise.

Where non-English speaking operatives are engaged to work on site you shall ensure that at all times someone capable of translating for them is present on site (typically one 'translator' for every five operatives). Translators should be capable of instructing non-English speaking workers in safety and operational matters, including technical issues as relevant. You should carry out checks to ensure that key safety information has been understood.

The translator(s) shall remain on site at all times whilst the non-English speaking personnel are present.

EXCAVATIONS

University of Leeds considers excavation to any depth to be high-risk and is therefore controlled via a permit-to-work system (see *Permits & Authorisations: High Risk work*).

Risks involved include:

- Striking live underground services, such as gas, water and electricity.
- People, plant and materials falling into excavations.
- Collapse of an excavation, trapping people.
- Work in a confined space.

Expected control measures include:

- Identifying the presence of buried services, through desk-top studies as well as physical inspection (e.g. CAT and genny).
- Assessing whether the excavation could become a confined space.
- Marking known services using waterproof paint.
- Prohibition of mechanical excavation or power tools within 1m of services.
- Provision of edge protection or barriers to prevent falls into the excavation.
- Provision of stop-blocks to prevent vehicles driving into excavations.
- Preventing any construction materials (including excavated material) from falling into the excavation.
- Preventing the excavation from collapse e.g. by use of proprietary shoring systems, (inspected at the start of each shift), or battering back, stepped excavation etc.
- Safe access to/egress from the excavation e.g. by use of tied ladder etc.

Re-instatement

- Take care not to damage services.
- Put back any warning tape, or tiles in their original position (unless this is incorrect, in which case they should be re-located).
- Services must not be buried, or encased, in concrete.
- Provide information so that service drawings can be updated, to include your works but also to correct any inaccuracies you may have detected.

EXISTING SERVICES/ INSTALLATIONS

The majority of works on site will involve work with, on, or near the live services/installations supplying the existing infrastructure. We expect the following standards to be adopted as applicable to your works:

REDUNDANT SERVICES

The presence of live redundant services on campus is possible, especially electrical cabling above ceiling grids. You are required to make reasonable enquiries as to the likelihood of their presence in your work areas e.g. by visual inspection by a competent person prior to works.

As part of your contract we expect all redundant services to be removed from the area you are working in, stripped back to the supply point. On occasion this may involve work beyond the immediate boundaries of your site. These cases should be discussed with your FD Representative in order to arrange necessary access. In the event that you encounter any redundant services not detailed within the contract, your FD Representative must be notified with a view to authorising their removal.

On the rare occasion that redundant services are to be left in-situ (e.g. when encased in concrete), this must be agreed in writing by the Facilities Directorate Head of Engineering and details recorded in Operations & Maintenance manuals or Health and Safety files as appropriate (see *Health & Safety File, and Operations & Maintenance Manuals*). Any redundant services left in-situ should be labelled/tagged so they are clearly identifiable.

CEILING GRIDS AND RISERS

Any work above a suspended ceiling grid or when opening a riser will likely disturb dust and in some areas faeces from pigeons or vermin etc. Therefore, we expect that anyone carrying out these tasks will wear a face-fitted FFP3 mask.

ASSETS

There are an estimated 80,000 items of plant and equipment across the University estate which require maintenance and inspection.

In order that this work is identified and can be carried out efficiently, you must record details of any new assets introduced to our estate, and any items removed. The Facilities Directorate will explain the correct format for providing this and agree an appropriate timescale.

Some of our assets are remotely and automatically controlled through a Building Engineering Management System (BEM). You must not work on or isolate any aspect of the BEM without the necessary authorisation from the FD Representative.

ELECTRICITY SUPPLY & ELECTRICAL EQUIPMENT

You **must not** carry out work on any live (or energised) systems, or so near to a live system that danger may arise, unless:

- It is unreasonable in the circumstances for them to be dead; and
- it is reasonable for you to carry out the work whilst they remain live; and
- suitable measures and equipment are provided to prevent injury.

In any event, we do not permit live working on High Voltage systems, although live HV systems can be tested (arranged via a permit to work).

Depending on the job, we may arrange the isolation of systems before you come to site. In this case we will provide a written Isolation Certificate to you confirming this.

Where you need to isolate any live system, this will require the written permission of your FD Representative. We expect all practical steps to be taken to prevent circuit conductors and electrical equipment being made live whilst work is in progress, such as lock-offs etc. Also 'Approved type' caution and warning notices are to be displayed, incorporating the date, name and contact details of the individual who has carried out the isolation.

Systems must be proven dead and this recorded prior to beginning the work.

You shall not enter any substation, switch room or similar area without permission from the University's Electrical Technical Officers or Authorised Person, who will issue any necessary Limitation of Access or Permit to Work (see *Permit to Work*).

Where any need is identified for live working, including testing and commissioning, maintenance of batteries etc., this will be controlled by a permit to work issued by the Facilities Directorate. Risk assessments/method statements will be required in advance and subject to scrutiny. See *Permit to Work* for more information.

FIRE ALARMS & EXIT ROUTES

You will be provided with the available fire-risk information relevant to the building or area you will be working in as part of pre-construction information. You must identify if your work requires the temporary closure, or restricts the use, of designated evacuation routes, fire exits or muster points (regardless of duration). Where this is the case you must inform your FD Representative and, in liaison with the Fire Safety Team, ensure that any alternative evacuation routes etc. are agreed and then clearly marked *before* work commences (see also *Fire Safety*).

It is vital that existing fire alarm systems are not disabled (on purpose or by accident), for instance during work on electrical systems during refurbishment work. If isolation is required, alternative arrangements need to be provided and agreed in advance with the FD Representative and the Fire Safety Team.

Where your work involves the installation of a permanent fire alarm system, this activity must be prioritised for completion. Only contractors specifically-approved for this work by the University can make the connection to the existing fire alarm systems to avoid it becoming corrupt which may lead to significant failures across campus. If an alarm system is already in place, you must ensure it remains operational for as long as possible.

FALSE ALARMS

The vast majority of rooms and shared spaces inside the University benefit from automated fire-detection which may be inadvertently triggered by construction activities.

In an effort to reduce the number of false alarms, you must not undertake any hot or particularly dusty work within a building with a 'live' early-warning detector. Where these types of tasks are planned, you should contact the FD Representative who will liaise with the Fire Safety Team with a view to isolating particular fire detection heads from the system or changing the head from 'Smoke' to 'Heat'. If this isn't feasible then you may be instructed to "bag off" the detector head with a clean polythene bag. These should be reinstated at the earliest opportunity and prior to vacating the site at the end of each shift.

Before commencing any work involving a naked flame/sparks with the potential to start a fire, you should follow the University's Hot Work Permit procedure (see *Permit to Work*).

GAS

As well as natural gas, the University has many other gases in use across its estate, including Helium, Nitrogen, Acetylene and Oxygen. Whilst some are highly flammable, others are chemically inert, yet could be fatal where they deplete the levels of breathable air.

We will provide you with information about the location of gas pipework in advance of your works which will allow you to avoid disrupting them.

Where gas pipework needs to be removed or modified, isolation will be required. Pipework should already be adequately labelled/identified although, if not, clear identification should be made by a competent person.

Depending on the job, we may arrange the isolation of systems before you come to site. In this case we will provide a written Isolation Certificate to you confirming this.

Where you need to isolate any gas system this will require the written permission of your FD Representative. We expect all practical steps to be taken to prevent the supply being reactivated whilst work is in progress, such as lock-offs etc. Also 'Approved type' caution and warning notices are to be displayed, incorporating the date, name and contact details of the individual who has carried out the isolation.

PRESSURE SYSTEMS

Pressure systems may still pose a risk of danger even when isolated owing to the possibility of stored energy.

Depending on the job, we may arrange the isolation/de-pressurisation of systems before you come to site. In this case we will provide a written Isolation Certificate to you confirming this.

Where you need to isolate any pressure system this will require the written permission of your FD Representative. We expect all practical steps to be taken to prevent the supply being reactivated whilst work is in progress, such as lock-offs etc. You will also need to have considered how any stored energy in the system will be dissipated, or otherwise controlled so as to prevent injury.

Also 'Approved type' caution and warning notices are to be displayed, incorporating the date, name and contact details of the individual who has carried out the isolation.

TREES, GROUNDS AND GARDENS

Our trees, plants and vegetation play an important role in creating a welcoming atmosphere for the University. They also help to improve air quality by absorbing carbon dioxide and therefore it is important that they are not adversely affected by construction or maintenance work wherever possible.

Any works to, or in close proximity to, trees (including storage of materials) will require the approval of the FD Grounds & Gardens Team Leader prior to commencement (see *Other Important Contacts*).

Any trees within the site boundary or likely to be affected by traffic must be protected with a fenced boundary. If tree loss is unavoidable, removal must be agreed with FD Grounds & Gardens in advance. Any unplanned damage to trees or vegetation must be reported to the Sustainability Team at the earliest opportunity.

WATER

Facilities Directorate has an in-house Water Hygiene team responsible for managing risks from legionella arising from storage and distribution of water on the University's estate. You should liaise with them via your FD Representative if your work involves the modification or extension of hot or cold water services, ensuring the design and installation follows established good practice so that the system is safe and can be used without risks to health.

Where appropriate, the area being worked on shall be drained and isolated from the main system. If this is not possible and parts of the building remain operational then weekly flushing shall be undertaken to all outlets throughout the duration of the contract. Requirements for flushing and record-keeping will be explained prior to works beginning.

Hot and cold mains distribution pipework should be run separately wherever possible in order to reduce the possibility of Legionnaires Disease. Cold water pipework shall be insulated where it is felt that heat from adjacent services could be transmitted to the cold water main.

On all hot and cold services, rubber flexible connection pipes, oil-based sealing compounds, hemp, or similar must not be used.

FIRE SAFETY

Fire arising from construction activities can be devastating. Fires can and do kill and injure as well as causing significant financial loss. The potential dangers are particularly severe during construction, where higher-risk activities such as hot work are frequently combined with circumstances where fires can spread quickly and escape may be difficult.

APPROACH

- Risks from fire should be eliminated or reduced through approach to design e.g. specification of materials, or construction method etc.
- Planning must reduce risks from fire e.g. by phasing works to reduce accumulation of combustibles, allowing for fire compartmentation, and working progressively to install protective measures in line with building progress.
- A Fire Management Plan should be produced which is updated as the project progresses, including how any fire alarms within the confines of your site will be managed out-of-hours.
- Where parts of a building are under construction/ refurbishment whilst occupied, your plan must set out what arrangements are in place to ensure the building is safe to occupy. This must be consulted and agreed upon with the University's Fire Safety Team prior to commencement of work on site (see *Other Important Contacts*).

You will need to provide specific Fire Safety documentation upon completion of your works (see *Fire Safety Manual and Information*).

EXPECTED CONTROL MEASURES

- The burning of any waste materials on site is prohibited.
- Re-fuelling petrol or diesel-powered plant & equipment should only be carried out in the open air, away from escape routes and not whilst on a scaffold.
- Temporary lighting should be mounted so as to prevent inadvertent damage and becoming an ignition source.
- Electrical items such as computers, lamps or heaters should not be inadvertently covered.
- Oxy-fuel welding/cutting equipment should be equipped with non-return valves at the torch inlet and flashback arresters at the outlet from the gas cylinder. Cylinders should be stored upright and prevented from falling.
- Electrical extension cables should be regularly inspected to ensure there is no mechanical damage which may become an ignition source.
- Site security must be adequate to prevent unauthorised access.
- Flammable liquids must be removed from site or securely stored when not in use.
- Adequate drip-trays and bunding must be provided if decanting flammable liquids.
- Consider how spills of flammables will be dealt with, and how waste will be disposed of.

- Install stairs as early as possible to allow quick evacuation without using ladders. Multi-lift scaffolds should use a proprietary stair tower which remains un-sheeted e.g. Haki staircase.
- General fire-precautions must be available. On fully-segregated sites, you will be responsible for devising and managing escape routes, providing fire-fighting equipment and an alarm, any emergency lighting, and considering who would be responsible for informing the wider university.
- If your work is carried out amongst other University operations, you will need to be aware of the nearest fire escapes and alarm points. Your work activity will determine whether you need to provide additional fire-fighting equipment.
- Under no circumstances shall University fire extinguishers be used in respect of Hot Works, other than in the event of a fire.

FLAMMABLE LIQUIDS & LPG

You should not use flammable liquids where non-flammable alternatives are available. If this isn't feasible then you should aim to reduce the quantities of flammable liquids used or held in University buildings and remove them on a daily basis. Should it be envisaged that quantities of flammable liquids greater than 50 litres are required to be used/stored, then this must be with the written consent of the FD Representative and in liaison with the Fire Safety Manager.

Compressed gas cylinders shall be securely stored in a dry, safe place on a flat surface in the open air. They must not be stored inside University buildings. Cylinders may need to be removed from site at the end of each shift if inadequate overnight storage is available.

NOISE AND VIBRATION

Construction activities should have a minimal impact upon the University's normal operation. Noise and vibration can be a major source of nuisance and severely disrupt learning and research programmes, particularly when works are undertaken within, or close to, occupied buildings.

You must ensure that any particularly noisy work, such as breaking, hammering, drilling, scaffold erection with power tools, etc. is brought to the attention of the Facilities Directorate Representative and any staff working within any adjoining areas that might also be affected. This should be done prior to the contract starting so that we can consult those who may be affected.

You should consider noise and vibration in selecting tools and machinery, looking at alternative processes and/or equipment which produces less noise and vibration. Tools should be marked with their anticipated noise and vibration levels where possible, appropriately silenced and well-maintained to reduce emission levels.

Due regard should also be given to permissible times for carrying out noisy work, and other restrictions which may be imposed by Local Authority Environmental Health Officers.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment is the last resort of protection for workers, and risks should be controlled by other means wherever possible.

Where PPE is required you must ensure that the workers under your control are provided with, and correctly wear, the PPE as identified in risk assessments.

Adequate storage should be provided for re-usable items and copious spares of disposable ones should be available.

We expect contractors to be clearly identifiable through the use of clothing and/or PPE branded with company names or logos.

PLANT

CRANES

A crane lift is deemed by the University to be a high-risk operation. A competent person must prepare a lifting plan (including an annotated site diagram) and provide this to the Facilities Directorate Health and Safety Team for comment not less than 5 days prior to the lift.

Lifting equipment and accessories must be thoroughly examined prior to use and then again periodically (usually 6 or 12 months depending upon the specific equipment, or sooner if exceptional circumstances have occurred which impact upon safety).

Copies of records of thorough examination must be held on site, although electronic storage is acceptable.

MOBILE PLANT

All items of mobile plant (e.g. dumpers, excavators, MEWPs etc.) shall be inspected prior to their first use on the University's sites to ensure they are in a safe condition. This includes functional parts including wheels, tracks, booms, hydraulics etc. as well as safety-critical features such as mirrors, CCTV, emergency stops etc.

Periodic inspections must then be undertaken whilst the item of plant remains on site with the purpose of identifying whether the equipment can be operated, adjusted and maintained safely and that any defect, damage or wear can be determined and addressed before it results in unacceptable risks.

Evidence of inspections, maintenance and testing should be available on site for review. Electronic access to these records is acceptable.

University of Leeds requires all operators of mobile plant to hold a current Construction Plant Competence Scheme (CPCS) certificate for the category of plant they are operating, and IPAF certification for operating MEWPs. Copies should be available on site for review.

SCAFFOLDS

ACCREDITATION

All scaffolding contractors are required to be members of the National Access & Scaffolding Confederation (NASC).

Facilities Directorate requires all scaffolders to hold current Construction Industry Scaffold Record Scheme (CISRS) certification relevant to their role.

INSPECTIONS

An inspection of the scaffold must be carried out prior to first use. This can be in the form of a scaffold handover sheet completed by the scaffolders. A copy must be kept on site, including the results of any pull-out testing of ties. Facilities Directorate expects you to have reviewed the scaffold with the scaffolders prior to accepting handover.

Subsequent scaffold inspections must be undertaken by a competent person every 7 days (or sooner in the event of exceptional circumstances likely to affect safety such as severe weather, vehicle strike etc.). Copies must be kept on site.

In addition, all scaffolds should display a completed 'scafftag' to enable a rapid check whether the scaffold has been inspected and is available for use. Partially completed scaffolds must have prominent warning signs prohibiting their use.

ESSENTIAL FEATURES

Members of the public in the vicinity of scaffolds should be protected: Fans over access routes, brick guards on working platforms and debris netting fitted are examples of measures that should be considered.

Wherever possible, scaffold access should be by stair tower rather than ladder. When pricing for scaffolds, separate costs should be provided for installing stairs. If ladders are to be used, they should be contained within a ladder tower. Where internal ladders are used, ladder access points must be protected by ladder gates (rather than trapdoors) where reasonably practicable.

Scaffolds must also be protected to prevent unauthorised access e.g. using physical barriers to the level of the first lift and considering any existing features (walls, street furniture etc.) which may facilitate unauthorised access. Ladders or other means of access must be removed when work ceases each day. Over-boarding of ladders is acceptable if securely clipped or a locked cover plate is fitted.

Scaffolds should not be placed on existing roofs until structural information confirming the load bearing capacity of the roof has been received. Scaffold design (weights, location of standards, etc) must be coordinated with the structural design. It is your responsibility to ensure these designs are coordinated but you will be assisted by the FD Representative, Lead Designer or Principal Designer (where appointed).

Any providers of hoists or mast-climbers should preferably be directly appointed by you. You are responsible for ensuring that the hoist design and inspection history complies with the relevant standards.

Where hoists are to be attached to scaffold structures, you must provide specifications of the hoist to the scaffold designers during the tender stage to ensure that scaffold designs (and quotations) account for the additional loadings and design features (such as gates).

TUBE & FITTING SCAFFOLDS

All tube & fit scaffolding should be erected in accordance with the latest editions of NASC guidance documents TG20 and SG4 and should have an accompanying TG20 Compliance Sheet.

Any scaffolds which do not meet or fall within the scope of TG20 should be designed by a competent scaffold designer. Any design proposal should be discussed with the Facilities Directorate Representative as early as possible. A copy of the design should be kept on site.

SYSTEM SCAFFOLDS (LAYHER, CUPLOK, VAN THIEL ETC.)

In addition to relevant CISRS training, those using system scaffolds should have had appropriate product training.

System scaffolds should be erected in accordance with manufacturers' instructions unless a separate design by a competent person has been undertaken.

The combination of different system scaffolds, or system scaffolds with tube & fitting components is prohibited unless explicitly detailed in manufacturers' instructions.

MOBILE TOWERS

CISRS training is not required, but anyone erecting/dismantling or inspecting tower scaffolds must be competent to do so e.g. by holding current PASMA training.

If used externally, towers must not be used when wind speeds exceed 17 mph. Hearing leaves rustle on the trees is an indication of this speed, or measurements can be made using a hand-held anemometer.

Toe-boards must be fitted to prevent items falling from height and a copy of the scaffold manufacturer's instructions must be available on site.

TOOLS AND MATERIALS

TOOLS

All equipment brought to the project must be provided in a safe-to-use condition and the operator competent in its use.

Cordless battery-powered tools are preferred. Any mains-powered tools should be limited to 110V where possible. Portable electrical equipment should be PAT Tested at appropriate testing intervals, including battery chargers where these are used on site.

Cartridge fixing tools such as nail guns etc. are not to be used on University premises without the prior permission of an FD Representative.

MATERIALS

The ability to store materials on site is limited and where possible they should be brought to site 'just in time'. Where storage is available, an area will be designated by the FD Representative. Items are to be stored safely and under cover to prevent deterioration.

All materials must be safe and used in accordance with manufacturers' instructions.

You are responsible for the security and loss of any items brought to site.

RADIOACTIVE MATERIALS

Under no circumstances are sources of ionising radiation (radioactive material or x-ray generators) to be brought on to, removed from, or relocated within University property without the prior consent of the University Radiation Protection Manager, contacted via your FD Representative.

Work on existing equipment containing radioactive material or x-ray generators can only be undertaken by contractors with the necessary competence to work on such equipment and with the consent of the Radiation Protection Supervisor responsible for that equipment.

Hazard warning notices will be prominently displayed in areas where this type of equipment is in use. Access can only be gained with the express permission of the Radiation Protection Supervisor responsible for that area and then under appropriate supervision.

TRAFFIC MANAGEMENT

In addition to those requirements set out in *Getting Here & Around*, there are additional requirements for construction sites.

A construction logistics plan (CLP) should be drawn up before works begin to consider and then reduce the impact of construction traffic, including the delivery of materials, removal of waste and workers going to/from site. It should include:

- Details of intended access routes to site for vehicles and pedestrians.
- How and where vehicles will park or wait to unload.
- How and where vehicles will be able to turn and leave site.
- Peak times of pedestrian and vehicle traffic in the local area.

If there will be vehicles operating within your work area you will need to provide a separate site traffic management plan showing how vehicles and pedestrians will move around safely.

Reversing should be avoided where possible by providing turning areas or specifying one-way routes.

Deliveries to site should avoid peak pedestrian times wherever possible.

Crossing footpaths or other pedestrian areas should be avoided. Where it cannot be avoided it should be adequately controlled through the use of gates, barriers and/or vehicle marshals. Restricting delivery times will likely assist.

Construction plant and HGVs must be fitted with an audible reversing alarm to alert pedestrians to their movement. Drivers should also have all-round visibility around their vehicle and will often require additional mirrors and/or CCTV cameras. Where this is inadequate signallers may be required to control third-party risks or assist in the accurate positioning of vehicles.

Where significant amounts of mud and debris are likely to be carried on to the road network, you should allow for wheel washing facilities on site and road-cleaning operations.

If your work area encroaches onto access roads within the curtilage of the University campus you should provide adequate signage and barriers to safely direct traffic around the work area, by agreement with the FD Representative.

WASTE

The University is committed to managing the waste it produces to minimise the impact on the environment and on people's health. We expect you to contribute to our success in this area.

Waste will likely be generated from almost every job you undertake, including packaging, surplus materials and off-cuts, any removed equipment, plant and debris arising from refurbishment, together with by-products of the work process itself, such as slurries, and dusts as well as any leaks or spills.

Waste is categorised as either Hazardous and non-Hazardous: It is considered hazardous under environmental legislation when it contains substances or has properties that might make it harmful to human health or the environment. This does not necessarily mean it is an immediate risk to human health, although some waste can be.

It is important that waste is managed properly. In particular you must:

- Prevent contamination or pollution to ground waters, drains or land.
- Prevent roads and pavements from becoming unduly muddy and ensure they are kept free of debris.
- Ensure waste is stored securely until its disposal, and avoid it becoming a fire hazard.
- Ensure chemicals held on site are stored in a safe and appropriate manner and that facilities are in place to deal with any spillage which may occur.

The waste that your work is likely to produce should be identified during planning and you must arrange for the appropriate storage, transport and disposal of waste prior to works beginning (including any accidental release or spills). This should be recorded in a Waste Management Plan.

Hazard warning labels on product packaging (usually orange diamonds) will be helpful to identify how and where hazardous waste might be produced. Hazardous and non-hazardous waste must not be mixed for disposal.

You will be provided with project-specific information in relation to targets for recycling.

No waste is to leave the University premises without full compliance with all applicable legislation such as your environmental Duty of Care requirements, for example, by using licensed waste carriers and the production of Waste Transfer or Consignment Notes which correctly identifies the waste.

You are expected to designate areas for waste collection within your site and provide skips and/or bins where needed.

SKIPS

Skips shall be the covered and lockable type and located in an area agreed by the FD Representative; typically not within 6m of:

- A glazed façade.
- A licensed petroleum store.
- A gas cylinder store.

DISPOSAL TO DRAIN

No waste can be disposed of via the drains (either enclosed or surface) unless we know that it will not harm or damage people, the environment, the sewerage systems or those that work in them. Items prohibited for disposal via drains includes substances which are:

- Environmentally hazardous substances.
- Corrosives (acids and bases) (unless between pH 5.5 and 11.5).
- Oil and grease including mineral oils and oil emulsions (unless below 0.5g per litre).
- Paints and varnish.
- Live microbiological cultures.
- Metals and their compounds.
- Cyanides / cyanide-containing compounds.
- Phenols, cresols and simple derivatives.
- Tar and tar oils.
- Organo-halogen compounds, including pesticides, herbicides (their residues) and degreasing agents.
- Those which cause a nuisance (e.g. smell).
- Any which produce flammable, harmful or toxic vapours (e.g. solvents, petroleum spirit).
- Have the potential to interfere with its free flow (i.e. block the system) (e.g. solids, sediments, nappies).
- Could detrimentally affect the treatment and disposal of sewer contents.
- Could have a detrimental affect on any watercourse, estuary or coastal water into which the treated effluent will eventually be discharged (Substances with H Statements).

In addition, the University holds a list of prohibited substances which must not be disposed of via our drains. This is updated regularly and can be found **here.**

In the event of any unplanned release, spill, or discharge into drains you must:

- Use the spill kit as identified in your risk assessment.
- Call for extra support where necessary via Estates Security on 0113 343 2222, giving details of the location, name, quantity, and nature of the substance along with any action you have taken so far.
- Report the incident to your FD Representative and Sustainability team so that a record can be made.

WELFARE FACILITIES

University of Leeds and its Contractors have a joint duty to ensure suitable welfare facilities are provided for the duration of any construction or maintenance work.

Specific arrangements will be confirmed through conversation with your FD Representative prior to works beginning in order to allow any equipment to be brought to site in good time.

IN GENERAL

For short durations, or where work is carried out at multiple locations around our estate, existing University facilities may be sufficient:

- Toilet and hand-washing facilities are available in each building and should be clearly signposted.
- You must not use toilets in student rooms in residential accommodation, although staff facilities should be available.

There are also numerous cafes and shops on campus which you are welcome to use, although you should refrain from wearing dirty PPE, boots or clothing if you do.

You are not permitted to enter any of our bars licensed to sell alcohol – even to purchase soft drinks.

We expect you to leave all facilities as you would wish to find them.

For longer projects, or where additional facilities such as showers etc. are required you may need to provide separate welfare facilities (at least 1 toilet for every 7 workers).

Where mobile units are provided, they should be connected to mains water, drainage and electricity where possible. Tanked water is permissible for short-term work. Chemical toilets are not permitted.

Mobile units should be cleaned regularly, and an adequate supply of consumables kept.

Where your work lasts longer than a single working day in one location, you will not be permitted to begin work until your site set-up has been reviewed. This will include a review of your welfare arrangements (see also *Monitoring and Reporting*).

WORK AT HEIGHT

Whilst it should be avoided wherever possible, some work at height at the University is inevitable.

We expect your work at height to be planned by a competent person, including the selection and use of access equipment, and the provision of appropriate supervision. We will supply pre-construction information in advance which will allow you to formulate these plans.

HIERARCHY OF CONTROL

We expect you to follow the hierarchy of control:

a. Minimise the time spent at height, e.g. by pre-assembling components at ground level, using reach-and-wash equipment for window cleaning etc.

b. Prevent people from falling by using physical barriers such as scaffolding edge protection.

c. Where (b) cannot be achieved, prevent people from falling by using work-restraint harnesses clipped to an appropriate anchor point.

d. Where (c) cannot be achieved, minimise the distance of any fall e.g. using crash-decks, safety nets or fall-arrest harnesses.

e. Where (d) cannot be achieved, minimise the consequence of a fall e.g. providing soft-landing systems such as airbags.

In any event, planning of your work must include how any casualty would be rescued from height as emergency services cannot be relied upon to achieve this in isolation.

Ladders should be generally considered as a means to access places at height. Where no other work equipment is suitable, working from a ladder should only ever be short duration (30 mins or less) and only when three points of contact can be maintained at all times. Other equipment such as podium towers, or proprietary hop-up systems will often be more appropriate and should be planned and budgeted for.

ADDITIONAL HAZARDS

As well as a risk of falling from height some roofs on our estate will have additional hazards such as emissions from fume extraction equipment (from laboratories), and radiation from telecommunications infrastructure. Access to roofs is strictly controlled and you should not attempt to work on any roof without prior written authorisation from the FD Representative (see *Access Authorisation* for more details).

You must also consider risks to others, especially materials or tools falling from height. This may require tethering of tools and/or creating exclusion zones below your work, using physical barriers to demarcate the work area.

If mobile-elevated working platforms are used there will often be risks of collision associated with manoeuvring into position. You must consider how these risks will be controlled, which may involve requesting a temporary/partial road closure or diverting pedestrian traffic for a short time. Planning will help you to select the best control measures and implement them promptly so that works can go ahead as intended.

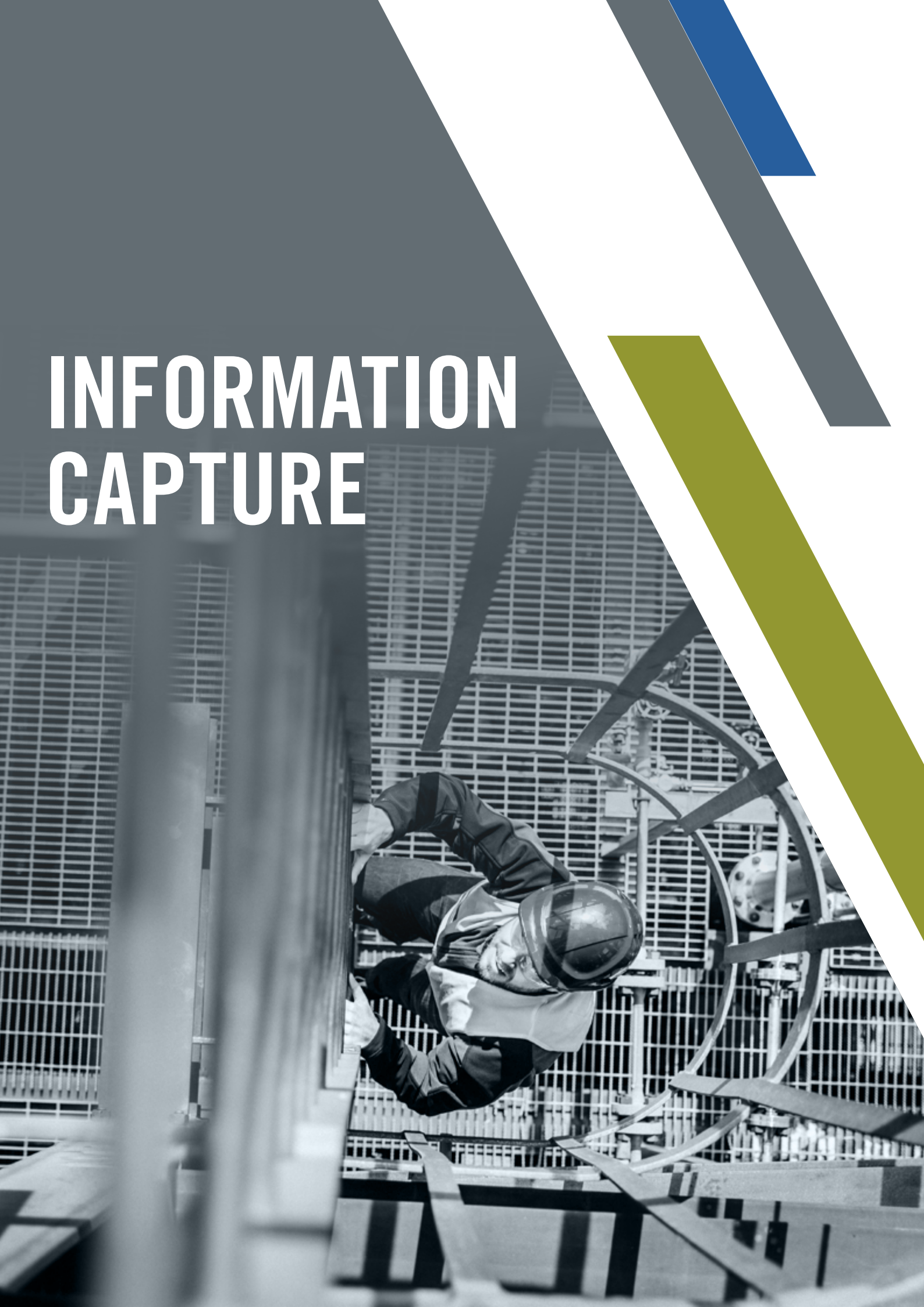
YOUNG PEOPLE AT WORK

A *Young Person* is defined as anyone under the age of 18 who has reached school-leaving age. A *Child* is anyone who has not yet reached the minimum school leaving age (the school year in which they turn 16).

We support the development of Young People working in construction and maintenance and welcome them on our estate. You will need to take appropriate precautions to manage their safety owing to a lack of experience and/or physical capabilities.

You may not bring any child to your site without prior permission from an Assistant Director of Estates.

INFORMATION CAPTURE



HEALTH & SAFETY FILE, AND OPERATIONS & MAINTENANCE MANUALS

Future works on the University estate is unavoidable in order to maintain, renovate and refurbish, as well as repair.

Information about the work you have undertaken will be important for others to know and will help them understand what precautions must be taken (and have already been taken) in order to ensure the health and safety of themselves and others, e.g. location/condition of buried services, loading capacities of floors to allow MEWPs to clean high-level windows etc.

Photos taken during the construction phase will often be useful to help explain exactly what others can expect to find.

The type and format of information you are required to provide will be determined by the scale of the project you are working upon, and will be made clear to you by your FD Representative in advance of your works beginning.

Payment of any fees due to you may be withheld or reduced if the required information is not supplied within a reasonable period.

FIRE SAFETY MANUAL AND INFORMATION

University of Leeds requires suitable and sufficient fire safety information to be provided prior to a project's completion in order to allow safe occupation, and maintenance of the building's fire safety systems.

For all projects we expect a Fire Manual to be produced which includes:

- The as-built fire strategy, or changes to any existing strategy.
- Fire-Stopping register, including photos.
- Additional information as outlined in the Client brief, echoing requirements of the relevant Building Regulations.