VISUAL STANDARDS BHS HSI 140

Safety, Health, Environmental and Wellbeing Visual Standards

Safe People
Happy People
Sustainable Business

March 2023 - BHS-HSI-140 RevE

1. Introduction

Welcome to our health, safety, environment and wellbeing standards handbook. This is a condensed version of the requirements in our Health & Safety and Environmental Management Systems.

Excellent Health, Safety & Environmental performance is a shared responsibility, and our aim is to create a safe site and a safe environment where everyone is happy to speak up about safety. We genuinely want everyone to keep each other safe and healthy, even improve our health, and not harm anyone or the environment around us.

All personnel are expected to follow our standards on every Bridges or client site. This includes our sub-contractors, who must show that they have appropriate health, safety, wellbeing and environmental systems in place and monitor and control their activities in line with our standards.

Our SHEW requirements do not take the place of legislation, Approved Codes of Practice (ACOP) or Health and Safety Executive (HSE) guidance, or any other authorising bodies, but must instead be followed alongside them.

A selection of Bridges **Essential Standards** have been referenced throughout this document. You can find the full list of Essential Standards and other useful information available on the Bridges Intranet or at **www.bridgessafety.co.uk**

2. STAR - Stop, Think, Act, Review

Everyone at Bridges is empowered to **STOP** work if they feel the task they are being asked to perform is unsafe.

As part of this, we encourage EVERYONE to undertake a dynamic risk assessment before undertaking evey task.

STOP - Before starting a task, STOP for long enough to consider what you are doing.

Think - What could go wrong? Who could be harmed? Is there a safer way of doing it?

ACT - Make the changes before undertaking the task.

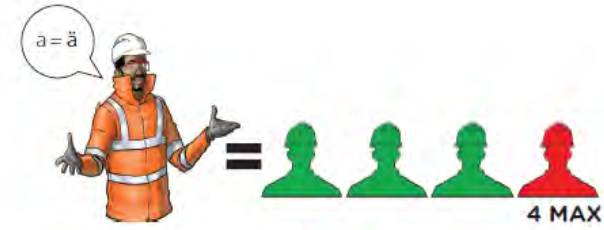
Review - Was the task completed safely, is their learning that could help someone else?

3. Language

Workers whose first language is not English must be able to demonstrate they have a basic understanding of both written and spoken English.

If a worker cannot demonstrate this basic understanding, their employer must:

- Translate the induction, risk assessment, method statement and briefings for them.
- Assign an English-speaking worker who can translate and communicate to a group of workers (maximum of four in a group).



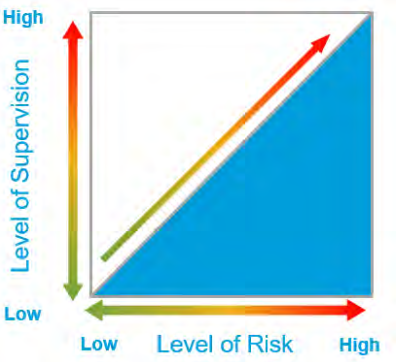
4. Supervision

The primary role of a Supervisor is to effectively manage those in the team, overseeing effective performance in compliance with both the organisational arrangements and legal compliance.

The supervisor role is regarded as a critical appointment.

Adequate supervision is essential and therefore, all work must be:

- Supervised by a person who is competent to do so (i.e. has sufficient skills, knowledge, training and experience)
- The ratio of supervision to operatives and sub-contractors will be based on a risk assessment of the specific works being undertaken.
- Non-Working supervisors will be appointed based upon risk assessment, the management requirements of the project and Bridges appointed role.



Increased supervision levels must be provided if the project team are young, inexperienced, or starting a new work activity.
Even experienced workers may need an appropriate level of supervision if they do not have some or all the skills, knowledge, training and experience required for the task and the risks involved.

Other factors that should be considered when assessing the level of supervision needed include:

- The level of individuals' safety awareness
- The level of knowledge to complete the activity or task
- Physical capability
- Hazards and the associated level of risk
- Number of work activities or work fronts
- Location and environment of work activities including distances and remoteness i.e. gangs in different locations
- Number of people, plant, equipment and materials involved in each activity
- Duration of works, time pressures, shift patterns and reactive situations
- In all cases the maximum ratio of supervisor to worker will be no less than 1:8

All Supervisors must provide regular briefings to their teams.

5. Health and Wellbeing

Bridges takes a zero compromise approach to health and wellbeing. People should not be negatively impacted by the health risks of the work they perform and their health and wellbeing should be positively impacted by personal medical assessments and campaigns.

5.1 Health surveillance

A routine of ongoing health assessments is required by legislation for those exposed to specific health risks at work, such as dust, noise, vibrating tools or equipment and chemicals.

5.2 Safety critical worker medicals

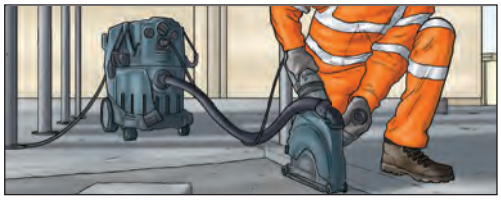
Workers who suffer from certain illnesses or conditions can compromise their ability to perform safety critical tasks and be a safety risk. Workers in such positions must have regular safety critical worker medicals to ensure they are fit to perform their tasks.

5.3 Personal medical assessments

An individual and confidential assessment that gives an overview of workers' health and lifestyle, as well as practical advice to enhance their general health. e.g. weight check, blood pressure test, lung functioning, etc. All assessments can be booked through Bridges HR Department.

5.4 Dust management

Where it has not been possible to design-out dust creation, on-tool extraction (OTE) or suppression equipment must be used.



5.5 Face-fit testing

Quantitative and qualitative face-fit testing must be provided by the employer and this shall be assessed according to health and safety requirements and risk assessments to ensure legal compliance.

Workers should provide a certificate of fit testing as evidence during induction.

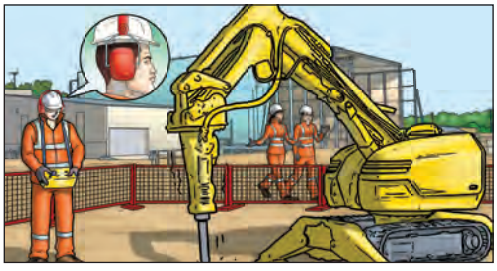
Workers must be clean shaven and carry out daily fit checks and maintenance of respiratory protective equipment.

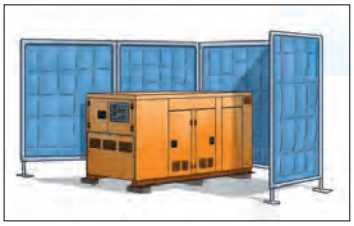
5.6 HAVS (Hand Arm Vibration Syndrome)

- Plan work to eliminate, or at least reduce, HAVS as much as possible.
- Workers must be trained on how to use equipment properly to reduce unnecessary or avoidable vibration.
- Full health surveillance needs to be in place if 100 points is regularly exceeded.
- Accurately record daily exposure points

5.7 Noise

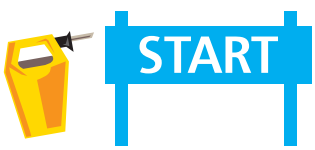
- Plan work to eliminate, or at least reduce, noise as much as possible.
- Operators using noisy machinery or equipment must wear appropriate hearing protection.
- Those who work near noisy machinery or equipment must also wear appropriate hearing protection.





5.8 Drug and alcohol testing

Bridges can test for drugs and alcohol:



• Before work on site begins.

• Randomly or unannounced.

•After an incident has taken place or if someone is suspected of being unfit for work.

Those who refuse to take a drug and alcohol test will be removed from site.

6. Controls

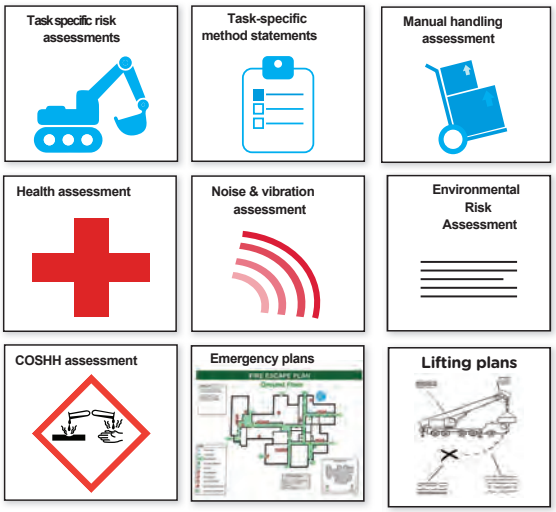
6.1 Risk assessment and safe systems of work

All work must be covered by detailed Risk Assessments and Safe Systems of Work

All internal Method Statements and Risk Assessments must be independently reviewed. Where high risk activities are being undertaken, these reviews must be undertaken by a subject matter expert.

All sub-contractor documentation must be submitted to Bridges for review and approval at least 10 working days before any works are due to start. Delays will be at the sub-contractors cost.

Sub-contractors must also provide evidence that all of their workers on site have been properly briefed, and keep records of attendance for review and audit purposes.



6.2 Task briefings

All supervisors must provide regular briefings to their teams:

- At the beginning of every shift – Start of Shift briefings

- For new activities covered by risk assessment method statements (RAMS)

- If there's a change in the work process or environment

- Supervisors performing the briefings must:
  - record it
  - provide records on request

6.3 Emergency arrangements

6.3.1 Fire prevention

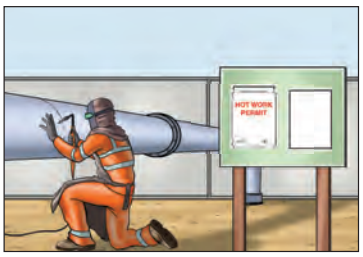
All projects must be set up so as to minimise the risk of fire in the first instance i.e. a fire risk assessment must be undertaken and suitable controls introduced. An emergency plan must also be in place, in the unlikely event of a fire arising, based on the understanding that the emergency services should not be relied upon.

All site personnel must cooperate/comply with:

- Emergency Coordinator
- Fire Warden/Marshal
- Hot Works Responsible Person

General requirements:

- The project management team must use the method statement review process to approve the storage of gas and flammable liquids inside, under and on buildings.



- A hot works permit must be in place and followed.

- All flexible temporary protective coverings used on internal finished surfaces or fittings must conform to the Loss Prevention Standard LPS 1207 and LPS 1215.

Don't:

1. Burn any materials on any project, office, depot or factory.
2. Store fuel in plastic containers.
3. Use jubilee clips for connecting gas supply hoses.
4. Use halogen lamps.
5. Smoke, unless in designated smoking areas.

6.3.2 First aid provision

Adequate first aid provision must be provided for the workforce with first aiders and supplies based on task's or project's risk assessment.

- Mental health first aiders should also be available.

6.3.3 Rescue plans

- Suitable rescue plans must be provided when workers will be working in locations where emergency rescue may be necessary, for example confined spaces or working at height.
- Equipment must be regularly inspected and maintained to implement the rescue plan.
- Rescue drills should be carried out.

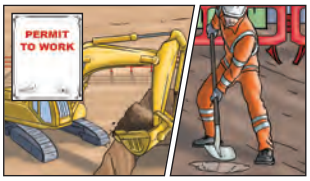
6.4 Permits to work

Permits to Work should only be operated and received by persons assessed as competent.

A Permit to Work guarantees that as long as the controls identified upon it remain in place, then the persons working under it will remain safe.

A Permit to Work should identify:

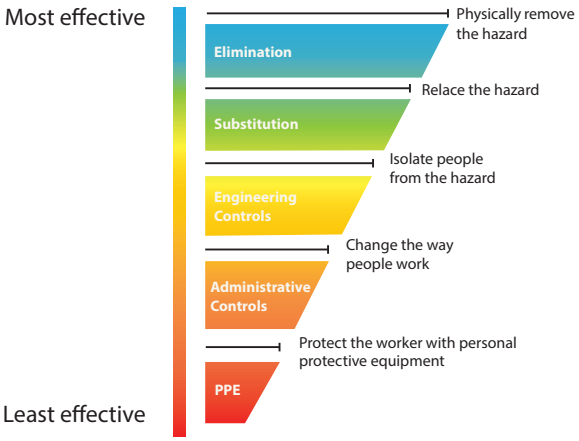
- The permitted work activity and location.
- Date and time.
- Control measures such as isolations, barriers and signage.
- Reference other safety documents such as RAMS, Client permits
- Have signatures for ISSUE, RECEIPT, CLEARANCE and CANCELLATION.



7. Working at Height

Follow the hierarchy of control and avoid working at height if possible. Ask yourself: can the task be done from ground level? If you have to work at height, carry out a Risk Assessment and Method Statement, make sure you know the control measures, and have an emergency rescue plan in place – don't rely on the emergency services.

Select the safest method of access to complete the work – scaffold/alloy tower/podium/ladder – and only use ladders/stepladders for short duration and low-risk work.



7.1 Scaffolding

- Scaffold contractors must employ a full-time supervisor who must possess a valid Construction Industry Scaffolders Record Scheme (CISRS) supervisor's card as a minimum.
- All scaffolds must have a design where load bearing other than for personnel access
- Don't alter handed-over scaffolds.
- Don't acess scaffolds if unauthorised.
- Check the date on the scaffold's tag.

7.1 (Cont)

Before first use or after alterations:

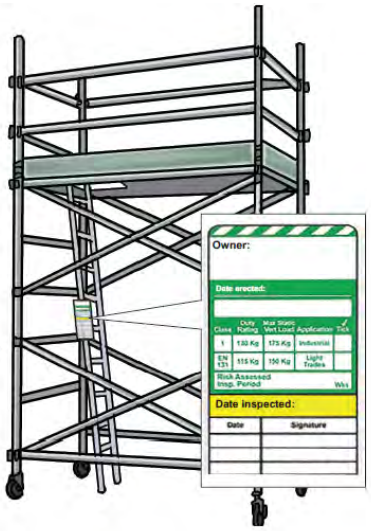
• An inspection must be done by someone who has completed the Basic or Advanced Scaffold Inspection training course run by CISRS.
• If you've only completed the Basic Inspection course, then you can only hand over a basic scaffold.
• If you've completed the Advanced Inspection course, then you can hand over basic and advanced scaffolds.
• Scaffolds must be appropriately tagged.
• Findings must be recorded and given to Bridges.
• A handover certificate must be issued to Bridges
For further information please see Essential Standard 10 - Scaffolding

7.2 Mobile scaffold towers

All mobile scaffold towers must be controlled using a tagging system that shows:

• Who the tower belongs to
• Who erected it
• The date of the last inspection

A PASMA-trained operative must erect and inspect mobile scaffold towers according to the manufacturer's instructions.



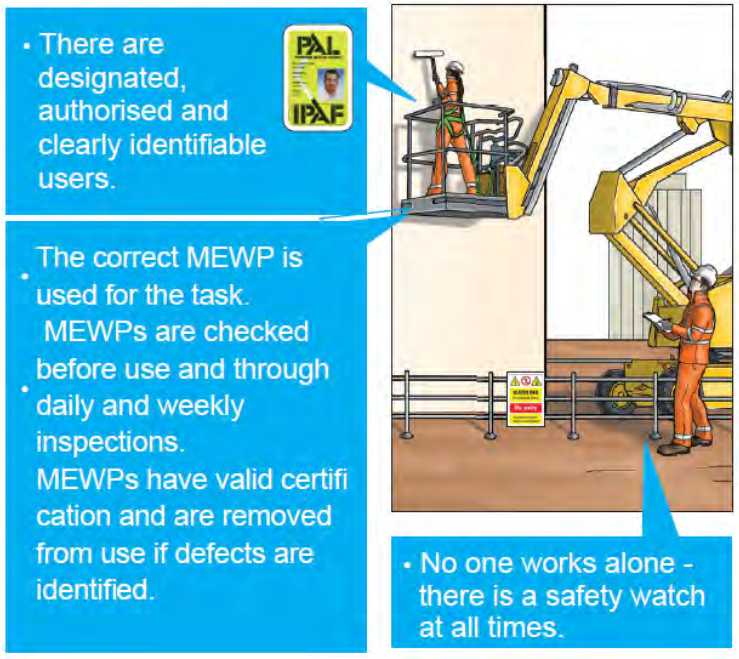
Note:

Aluminum scaffold towers must not be used in `Hazardous Areas` due to the risk of sparking if they come into contact with rusty steel.

7.3 Mobile Elevated Work Platforms

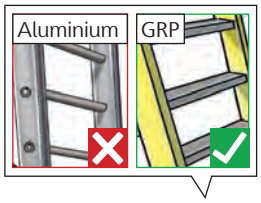
When working with a mobile elevated work platform (MEWP) ensure:

- A competent person has planned the work.
- A suitable rescue plan and drill schedule is in place.
- A specific risk assessment is in place.
- The users wear a fall restraint harness hooked up to an approved anchor point.



7.4 Ladders and stepladders

The following requirements must be met when using ladders:



- Only use ladders made of non-conductive materials (i.e. not aluminium ladders) when working in live electrical facilities, such as live switch rooms.

- A competent scaffolder must install and tie-off ladder they are needed to pr access to scaffolding o under any erection phase.
- All ladders must have a unique number (or other mark) and the contractor's name on them.
- A competent person must inspect ladders before use and once a week thereafter (keep records of this).

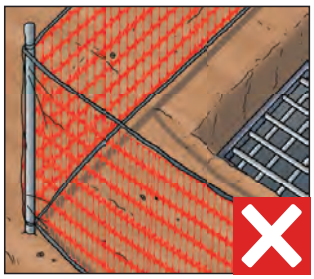
7.5 Open edges and openings

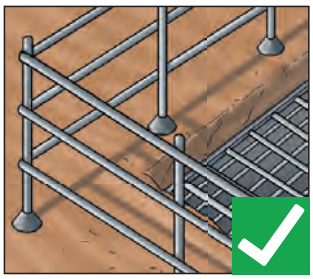
To help prevent slips, trips and falls:

- Permanent works should be installed as soon as possible.
- Temporary coverings must be designed and approved following Temporary Works procedures.
- If construction is steel framed, install edge protection on beams before they are lifted into place and secured.

- Clearly mark openings with permanent markings.

- Staircases must have a handrail system in place.

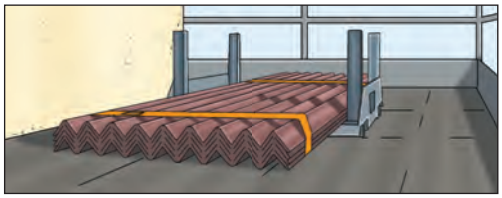




- Netlon-type fencing and barrier tape are not allowed to be used as edge protection or as barriers for restricted areas.

7.6 Falling materials and tool tethering

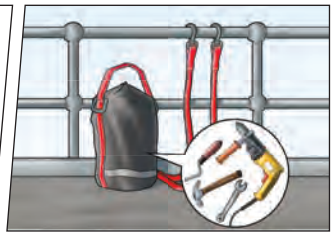
Store all items used at height in a suitable manner to prevent them from falling.



If items can't be secured during use, create storage exclusion zones that are:

- Demarcated.
- Labelled.
- Maintained until the risk is removed.
- Suitable to contain any falling item based on an assessment (e.g. height and potential deflection).

Attach tools to tethers and suitable anchorage points if there is a risk of them falling from height.

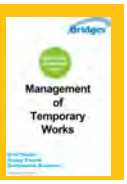


8. Temporary Works

All Temporary Works must be managed in line with Bridges `Temporary Works Procedures`

All projects should have a Temporary Works Coordinator (TWC) appointed to ensure that all design and construction work is carried out to the agreed temporary works procedures.

For further details please refer to Bridges Essential Standard 12 – Management of Temporary Works

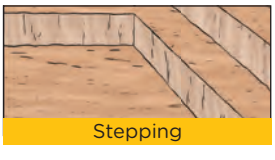


Excavations:

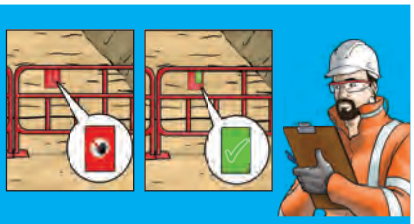
Bridges does not operate a 1.2m deep rule for excavations. All excavations must be risk assessed to determine whether temporary works controls are required to support them.


Shoring


Battering


Stepping

Excavations must be regularly inspected – we recommend using a 'Scaff tag'-like system to record and communicate the status of an excavation to the workforce.



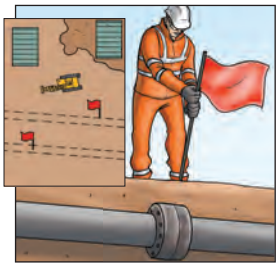
9. Lifting Operations

9.1 General requirements

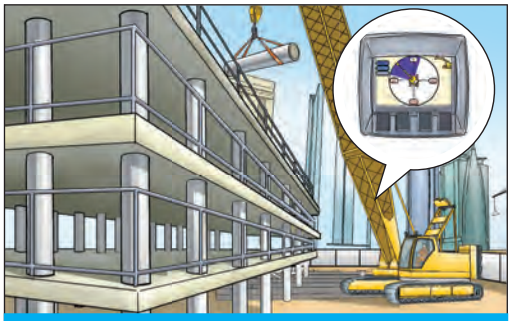
- All lifting operations must be planned and undertaken by approved, trained and experienced people.
  Bridges Lifting AP must authorise all lifts with a lift permit

A temporary works co-ordinator, in consultation with the appointed person, must:

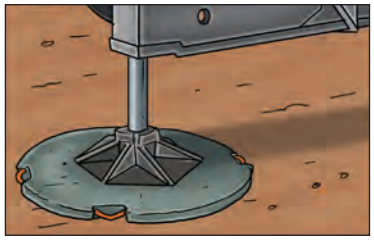
- Ensure an engineering assessment of the ground bearing capacity is done.

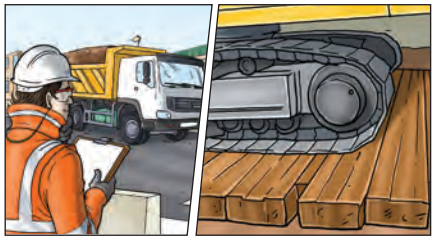


- Consider ground conditions, underground services and the position of any sub-structures.

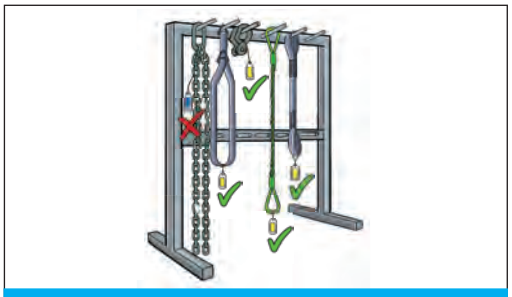


When a crane or part of the load being lifted can enter prohibited space, such as over a public or work area, a site boundary or near to overhead lines, the crane must be fitted with zone limiting devices to limit both slewing and derricking.



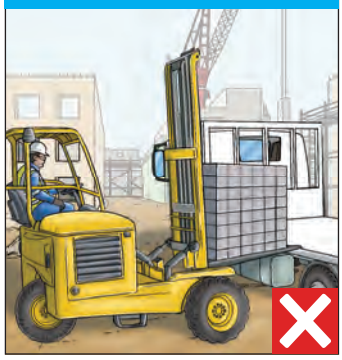


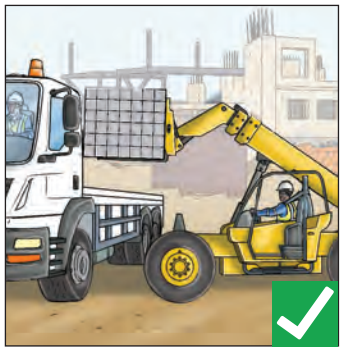
- Ensure there's a design for outrigger pads, haul roads and pavements/piling mats.



All lifting accessories must be clearly marked when they need to be inspected next.

Truck-mounted forklifts must not be used for deliveries on construction sites. Deliveries must be restricted to a suitable hard standing segregated compound.





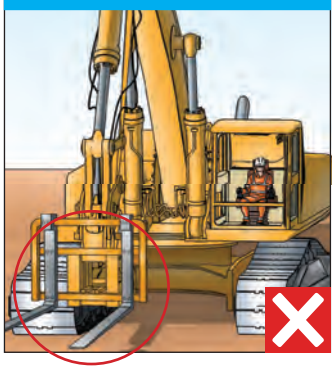
Prohibited:

- **Mobile cranes extracting sheet piles.**
- **Using excavators, Telehandlers, Lorry Loaders and Lift Trucks to lift personnel.**

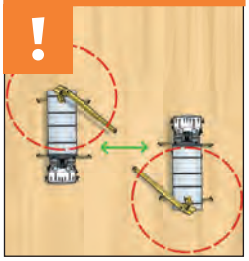
- Slingers/ signallers acting as crane operators.

- Under slinging loads under the forks of wheeled mobile plant for transportation.

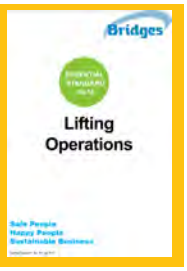
- Using forks fitted to or suspended from 360° excavators or the back of an 180° excavator.



Where there's a risk of a crane coming into contact with another crane, proximity warning and restrictors must be fitted.



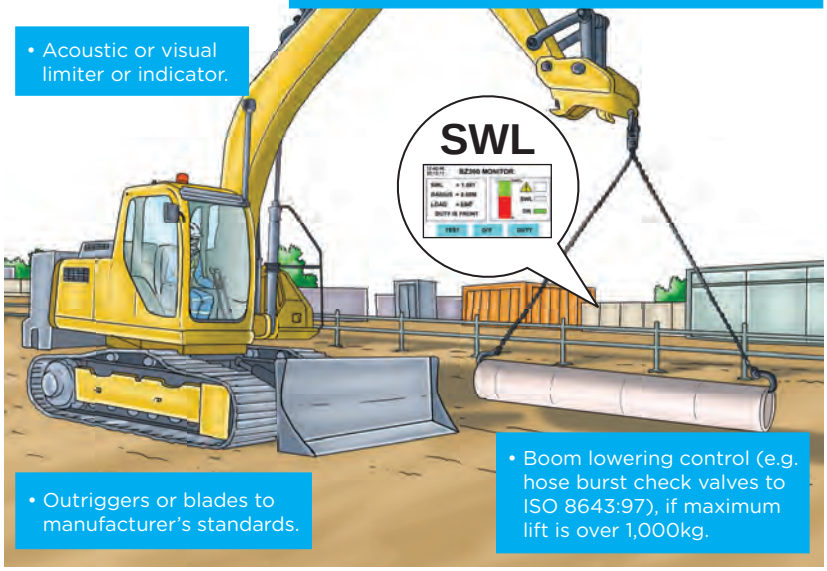
For further details please refer to Bridges Essential Standard 18 – Lifting Operations



9.2 Lifting with excavators

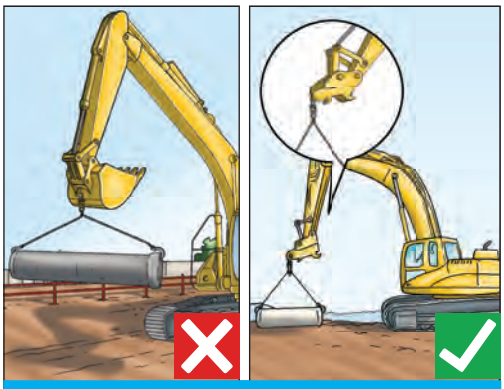
Consider if an excavator is appropriate for the lifting operation and have an approved lift plan in place.

Excavators used for lifting must comply with the Bridges Essential Standard 18 and be fitted with:



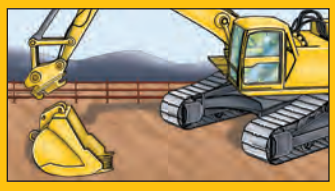
Each different type of crane and lifting equipment would require a specific Lifting Plan signed off and approved by Bridges Lifting AP.

Don't rely on rated capacity indicators (RCIs) for working out the weight of a load. Calibrate RCIs at least once a year.



Fit excavators used in lifting operations with a load hooking device. The bucket and other accessories must be removed for lifting operations.

Before lifting:

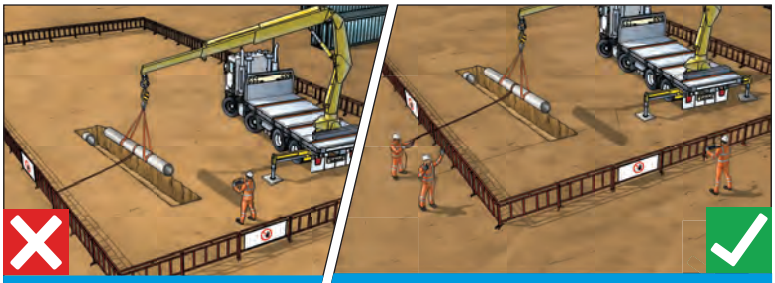


- Remove the excavator's bucket.
- Attach the master link to the designed lifting point –ensure it's free-hanging.

- Use a swivel shackle between the load and lifting point.

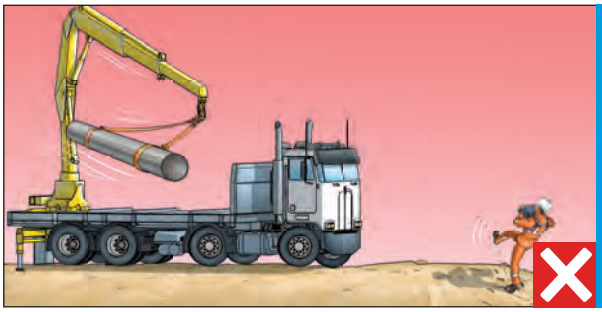
10. Safe Use of Remote Controlled Equipment, including HIABS, Vacuum Excavation and Concrete Pumps

Exclusion zones must be set up and monitored.



No lone working of this equipment should be undertaken.

Operators must ensure others working in the area are familiar with controls to assist in the event of an incident.



Operators must not carry a live remote control unit except when on firm level ground i.e. not climbing.

11. Bio-hazards/Sharps

Wear full PPE when working with bio-hazards or sharps. E.g. put on extra PPE such as disposable overalls, wellies, gloves and face shield when working with sewage.

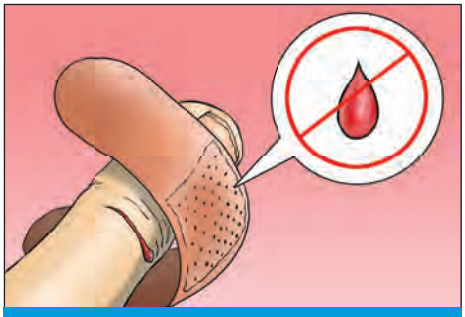
Remove PPE before entering the canteen. Wash your hands before eating and smoking.

Supervisors to brief on hazards and operatives must follow RAMS.

Wear a mask in the vicinity of aeration lanes.

Operators must tell a supervisor if they discover a needle and create a segregated area.

!



Cover cuts with waterproof plasters.

Never put your hands where you cant see, always use a tool or the right equipment.

12 Confined Spaces

Everyone involved in planning, supervising or undertaking confined space work must be appointed, trained and experienced.

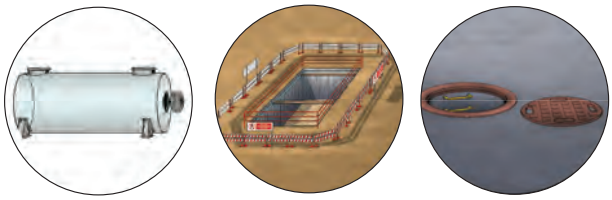
- A manager must check isolations are all in place.
- Supervisors to brief workers on the safe system of work and rescue arrangements before working in confined spaces.
- Activities are to take place under a permit
- Test emergency arrangements and debrief on their effectiveness.
- A valid safety critical medical is mandatory for each person in the team.

A confined space is a place which is substantially enclosed, though not always entirely, where serious injury can occur from hazardous substances or conditions within the space or nearby. For example, there might be a lack of oxygen.

Some confined spaces are fairly easy to identify, but others are less obvious, but can be just as dangerous.

The risks are great, some conditions may already be present in the confined space, but other risks can develop as a result of action you take whilst working.

Never enter a Confined Space to carry out a rescue unless you hold the appropriate rescue training, have the necessary equipment and the suppport of a competent rescue team.



Examples of equipment to be carried:

• First aid kit

• Gas monitor or detector

• Resuscitation kit

• Breathing apparatus

• Safety harness

• Escape breathing equipment

13. Excavations and Buried Services

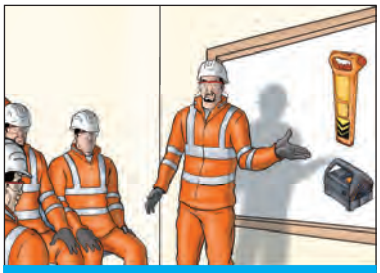
Breaking ground must be carried out in a controlled manner to prevent damage to services and to protect the workforce and third parties.

- All works must be carried out in accordance with HSG47.
- Design works to avoid breaking ground and plan to avoid any utility strike, and have a responsible, authorised person in charge of all undertakings where we break ground.
- Suitable and sufficient access and egress is to be installed for all excavations.
- All ladders used within excavations should be non-conductive.
- Ensure the necessary plans, service drawings, tools, equipment and materials are available on site to carry out the work safely.
- Always ensure the correct method is used at all times to minimise the risk of service strikes.
- In line with HSG47 there is a legal requirement to isolate known live services prior to breaking ground.

- The following mandatory steps must be taken for any known live electricity service encased in concrete prior to breaking ground or on the discovery of a cable encased in concrete:

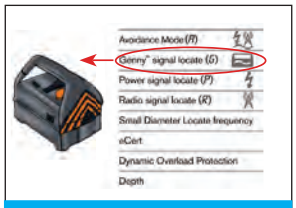
- stop work
- discuss with your line manager
- investigate and look at service and utility drawing records
- contact the Asset Owner (electricity provider) to request isolation
- retain a record of the request

- Anyone undertaking excavation work must be trained, competent and understand the risks and control measures.



- The responsible persons must be trained to locate underground services so they are competent.

- Anyone who performs drilling operations through structures, e.g. core drilling, must provide the responsible person with a hand-held cable detector and manufacturer training on how to use it.



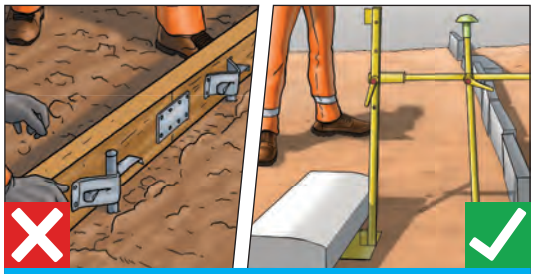
- Agree on the type of equipment to use, but ensure it provides a depth reading in genny mode and record of usage, and live data transfer (e.g. GCAT or similar).

- The use and upkeep of site safety information boards are essential to communicate safety information as conditions and personnel change.

When breaking ground:

- Use non-contact methods for excavating where possible, e.g. vacuum excavation or air lance for excavating.

- Use electrically-insulated digging tools when digging by hand and wear the mandatory PPE appropriate for the task at all times.



- Avoid using road pins where possible, and use alternatives like 'Pinsafe'. If this is not possible, use non-conductive road pins (fibreglass).

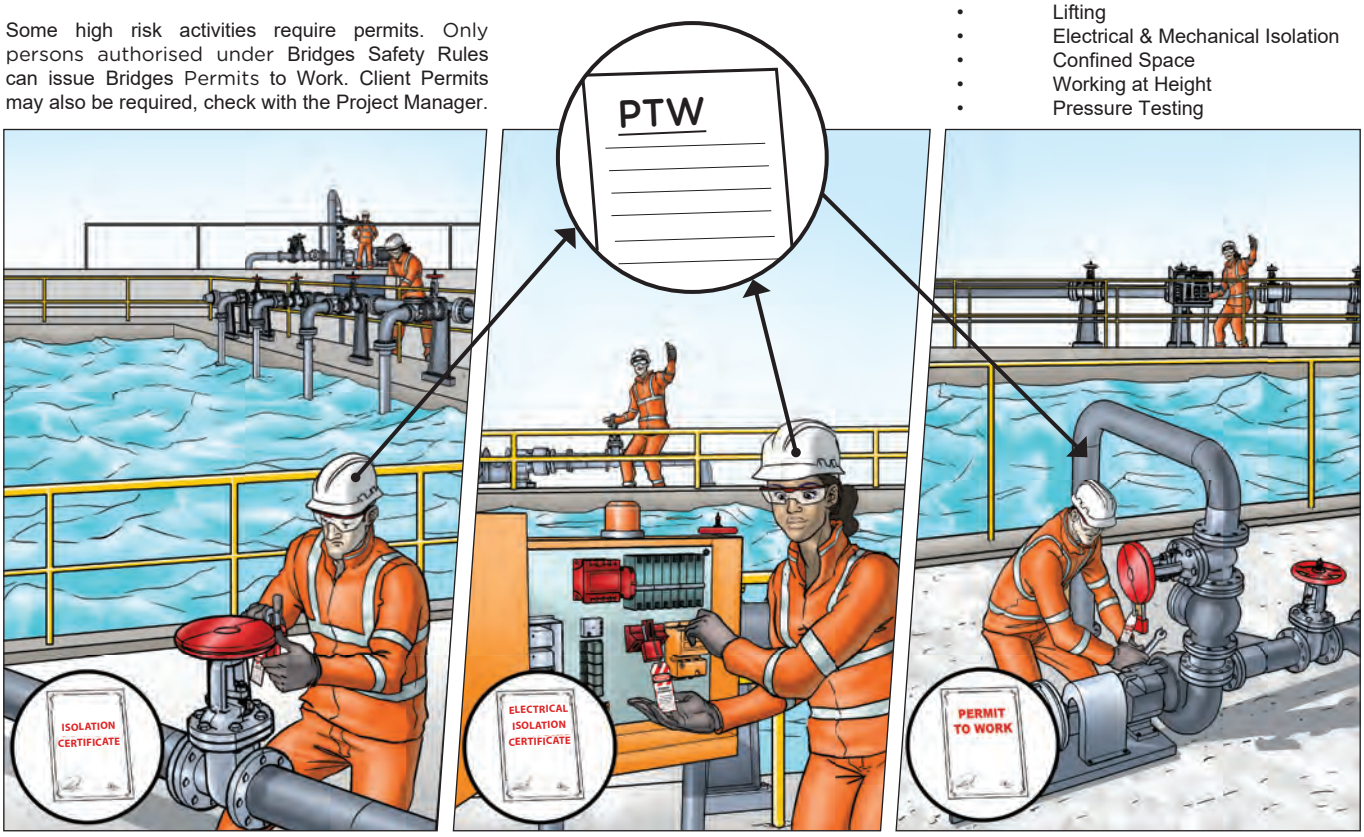
Always ensure excavations are adequately protected from collapse and that the edges are protected to prevent persons from falling in. See **Essential Standard 03 - Breaking Ground** for guidance on design and shoring of excavations.

14. Permits to Work

Some high risk activities require permits. Only persons authorised under Bridges Safety Rules can issue Bridges Permits to Work. Client Permits may also be required, check with the Project Manager.

Permits are necessary for:

- Hot Works
- Breaking the Ground
- Lifting
- Electrical & Mechanical Isolation
- Confined Space
- Working at Height
- Pressure Testing



15. Plant and Equipment

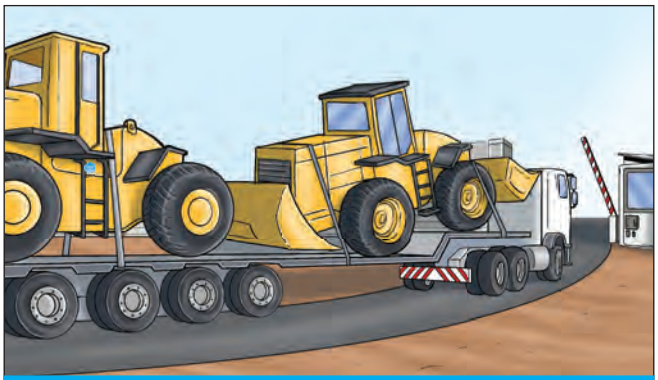
Supervisors should not operate plant and equipment.

Operators must:

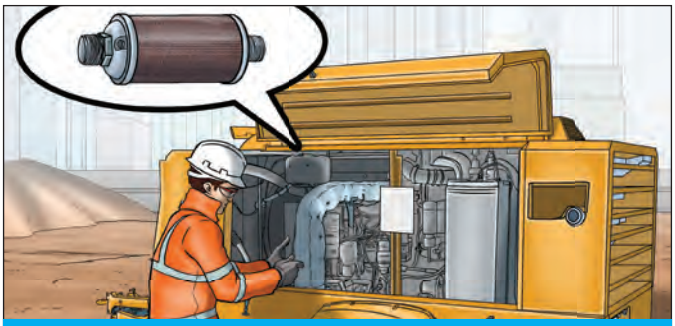
- Hold a current skill card for the plant or equipment they are operating, recognised by the latest Build UK accepted record scheme.
- Get additional training if operating ancillary equipment, such as quick hitches or grabs.
- Hold a valid safety critical medical

- All relevant copies of certifi cation and documentation must be available on site for inspection if requested.

Plant and equipment requirements:

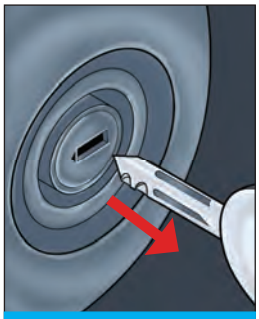


Ensure all plant receives an reception check before use.

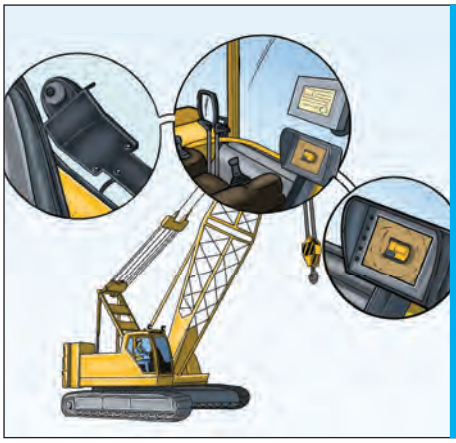


- Fit all compressors, percussion tools, plant and vehicles with effective silencers recommended by manufacturers.
- Maintain all plant and equipment in good working order. Pay special attention to silencers and acoustic panels.

- Provide plant sound power levels in decibels (dB). All plant must comply with permissible noise levels as per the European Directives and any local restrictions.

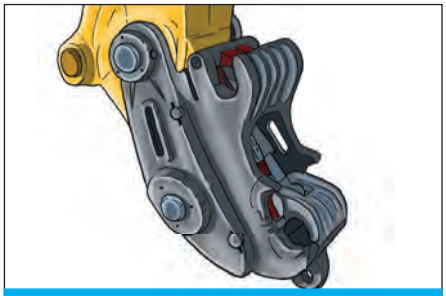


- When not in use, shut plant and remove keys.

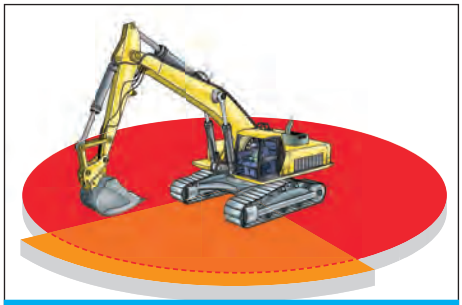


- All items of plant with blind spots must be fitted with a proximity warning system that meets the requirements for all-round 360 degree visibility.

- All equipment and plant must comply with air emission guidelines, for example, London Low Emission Zone.



- Use 'new generation' quick hitches that have a fully automatic double-locking device that locks both pins of the bucket.



- Implement and maintain exclusion zones when using excavators and other mobile plant.

- **One-tonne dumpers must not be used due to risk of overturning.**

Forward-tipping dumpers above six tonnes must have the following to ensure operators have clear visibility:

- Raised driver seat.

- An angled skip to maintain visibility.

- Low head board to prevent overloading the skip.

16. Protecting All Road Users

All parties who bring heavy vehicles on to Thames Water sites must comply with the following:

- Sign-up to the CLOCS 'Memorandum of Understanding'.
- As a minimum, have silver FORS status.
- Work towards gold FORS status.

Vehicles must have the correct licence, be roadworthy and operators must perform pre-use checks (e.g. lights, tyre tread, etc.).

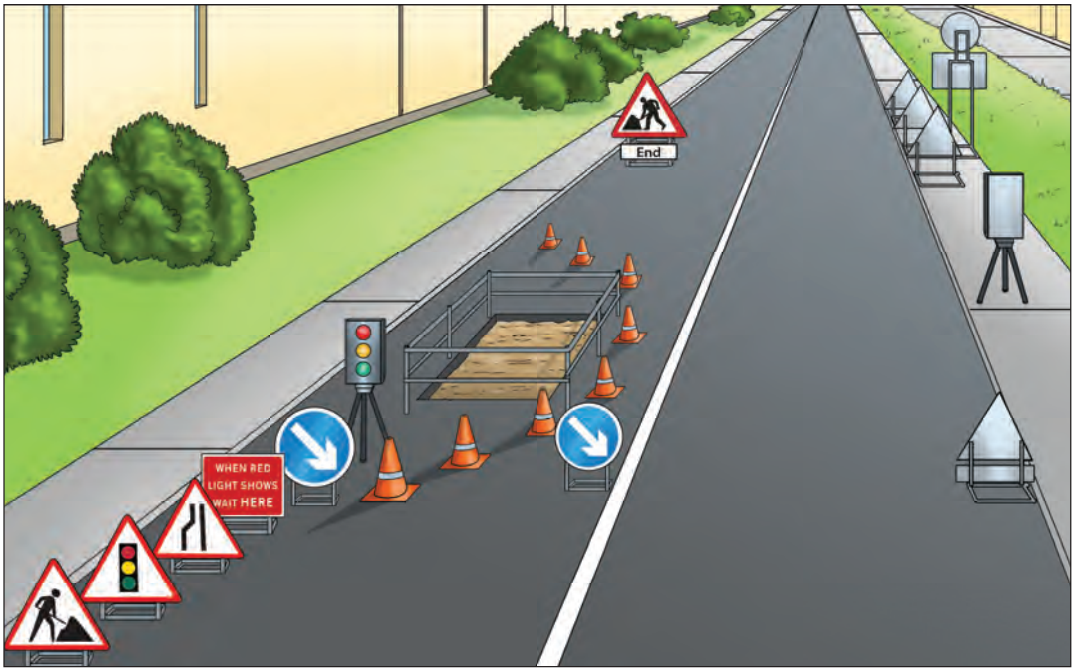
17. Traffic Management and Signage, Lighting and Guarding (SLG)

All SLG must be installed as per the site plan and inspected daily to ensure it remains compliant. Particular consideration should be paid to vulnerable members of the public, as they are at greater risk.

All traffic management must be installed to the approved traffic management plan by an approved contractor.
It must be inspected visually every day before and after work with a documented weekly inspection, undertaken by a competent person.

Street Works

- All persons carrying out Street Works **must** be trained
- There must always be a lead person (Supervisor) on site who:
  Ensures work is carried out in accordance with the Safe System of Work.
  Briefs the whole team.
  Ensures the work area is set up correctly before work commences.
- See Essential Standard 09 - Street Works for further information.



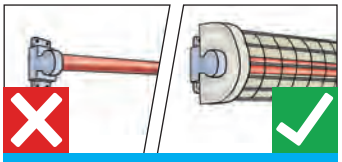
18. Electrical Safety

All electrical portable appliances must be:

- Portable Appliance Tested (PAT).
- Recorded on a register.
- Labeled with:

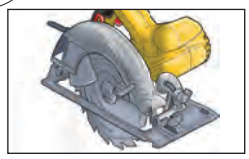
  Next test due date

Multiway plug and socket adaptors must be fused and surge protected.



Radiant space heaters, tubular heaters without wire cages and heaters without thermal overloads are not allowed on site.

Only use 240v chargers if they are approved by a project lead and in designated and agreed locations.



Type of equipment	110v	240v	Site Cabins
User checks	Pre-use	Use Not Permitted	Monthly
Formal visual inspection	Weekly recorded		Monthly
Combined inspection and test	Before first use, then every 3 months		Before first use, then every 3 months (portable RCD's, once a month)

Working on electrical systems

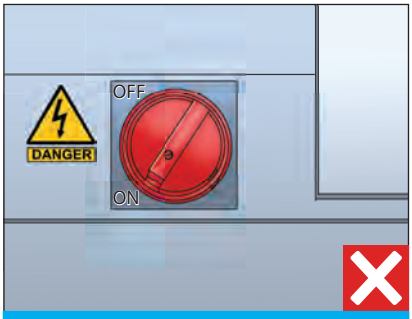
Only persons authorised under Bridges Electrical Safety Rules are permitted to carry out electrical safety isolations.

The most common electrical safety document is the Permit to Work when we need to work safely on isolated plant, and Sanctions to Test when we need to safely carry out testing of electrical equipment.

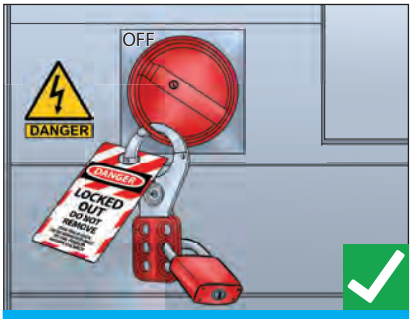
Electrical isolations may be required:

- To enable electrical works to be carried out on equipment that could become live.
- As part of a broader safe system of work in conjunction with process isolations.
- To make safe a piece of mechanical equipment for maintenance, such as a rotating scraper bridge or overhead crane.
- To disable a piece of process plant that has been taken out of service for process reasons.

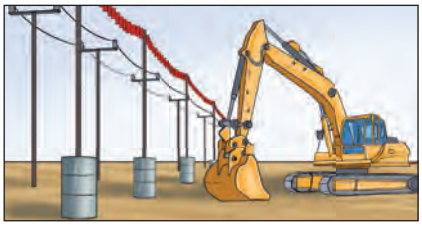
All electrical work MUST only be carried out by competent persons who are authorised under Bridges Electrial Safety Rules - BHS HSI 041



Risk of burns and electrocution.



Isolated system as part of a SSOW.



Before starting work near overhead power cables:

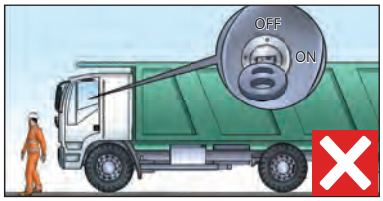
- Take all precautions and protection, as per HSE guidance and standards

19. Noise, Dust and Vibration – including nuisance

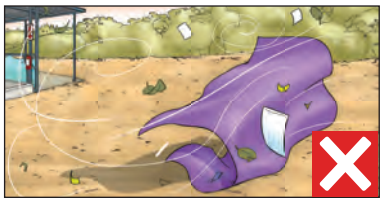
All work must be planned and manage work to minimise noise, vibration and dust caused by our activities.

- Ensure noisy activities take place during the agreed-to working hours.
- Site team to fully understand and implement agreements with residents and local authorities i.e. section 61.
- Install hoarding or screens as noise barriers if necessary.
- Choose super silent equipment wherever possible.
- Keep vibration exposure under 100 points (HSE exposure scale).
- Ensure vehicles and equipment are regularly serviced to reduce noise and vibrations.
- Plan and control site deliveries to minimise queuing.
- Install dust screens and use dust suppression systems where dust is unavoidable.
- Use plastic sheets to cover spoil heaps.
- Direct lighting away from shining into house windows, drivers' views, etc.
- Switch off lighting when not in use or at the end of a shift.

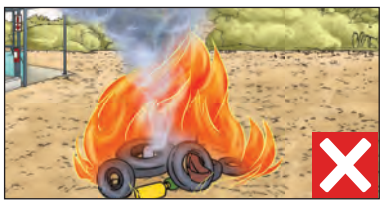
Don't:



- Leave plant or equipment running when not in use.



- Allow waste to blow around.

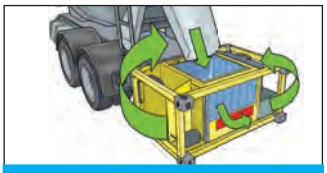


- Burn anything on site.

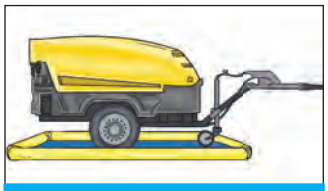
20. Water Management and Pollution Prevention

Before discharging or dispelling water (e.g. to drains, watercourses or even some land areas), ensure you have the relevant permit that's required. For example, an Environmental Permit, permission from landowners or Trade Effluent Consent

To help prevent and contain pollution:



- Follow regulatory guidelines to prevent pollution when washing out concrete wagons, e.g. use a proprietary concrete wash water treatment system.

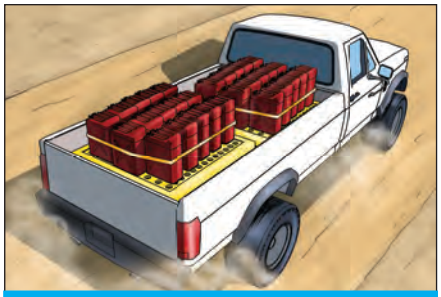


- Ensure mobile fuel bowsers and compressors have the correct size drip tray (e.g. Plant Nappies) underneath them at all times.

- Place static fuel tanks on an interceptor drip tray, even if they're double-skinned or bunded.

- The appropriate type and quantity of spill kits must be available.

- Bund fuel drums or CoSHH substances to 110% capacity of the largest container, or 25% of all containers – whichever is greatest.



- Jerry cans must be stored upright, bunded, and protected from impact.

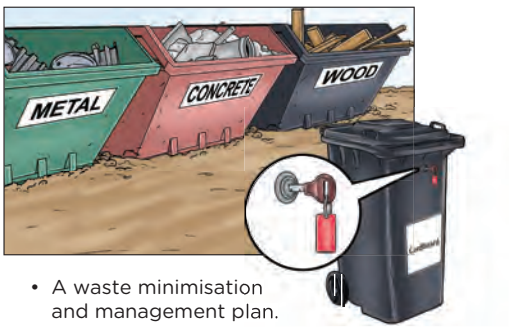
- Display CoSHH Assessments next to bunds.

- Store smaller CoSHH items (mastics or aerosols) in site safes with the relevant CoSHH Assessment.

21. Waste

Bridges has a long-term objective to generate zero waste from its projects.

To reduce or eliminate waste, ensure the following are in place:



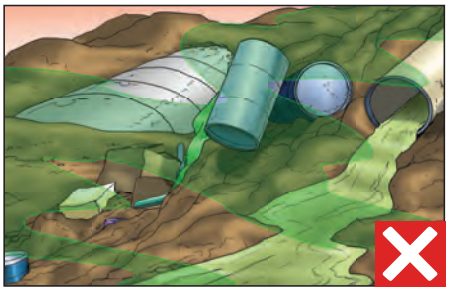
- A waste minimisation and management plan.
- A waste classification undertaken in accordance with the regulatory guidelines.
- Waste carriers registration, as issued by the Environment Agency.
- Environmental permits for all facilities where waste is transported to, e.g. waste transfer or consignment note.
- Authorised people to sign WTNs.

• Minimise . • Reuse. • Segregate.

22. Land Contamination

Land contamination can be identified by:

- Discoloured soil
- Fibrous soil structure e.g. asbestos
- Foreign objects e.g. oil containers, drums, chemicals, etc.
- Unusual odour
- Under ground storage tanks
- Waste pits
- Old drain runs



If contaminated land is found:

- Stop work immediately.
- Never move contaminated materials unless told to do so.
- Report it to your supervisor straight away.
- Contact your SHEW Advisor if you have any doubts.
- A method of managing works must be available and followed.
- Store contaminated material on non-biodegradable plastic liners or in secure containers e.g. skips.

- Contain the area as far as possible.

- Keep contaminated materials at least 10m away from surface drains, waterways, sewers, etc.
- Don't mix contaminated and clean materials together.

23. Ecology

If any sensitive habitats or species have been identified before starting works, specialist working methods could be required and, if so, must be followed.

Notify your SHE Advisor if the scope, design or conditions of your work changes.

If a sensitive habitat or species is found during works:

- STOP work immediately
- Inform a supervisor
- Get advice from Bridges SHE Advisor
- If these steps are not followed, it could result in prosecution

Avoid clearing vegetation between March and August, which is bird nesting season.

Put up exclusion zones around habitats.

Protected species:

Don't:

- capture, injure or kill wild animals
- take, damage, destroy or disturb protected species' habitats
- take or destroy wild bird eggs or nests

23.1 Invasive Species

Efforts must be made to prevent invasive plants from spreading. If you discover an invasive species:

- **STOP** work immediately
- Contain the area using a fence or by washing equipment and vehicles
- Report the discovery to a supervisor

Himalayan Balsam

Stem: dark purple/ maroon
Leaves: spear shaped with serrated edges. Dark green and appear in groups of three
Flower: purple/pink (bloom in June-October)

Japanese Knotweed

Stem: hollow and similar to bamboo or purple/red when juvenile
Leaves: spear shaped and pink/red. In summer, leaves are mid-green with dark veins and are large, oval/heart shaped

Giant Hogweed

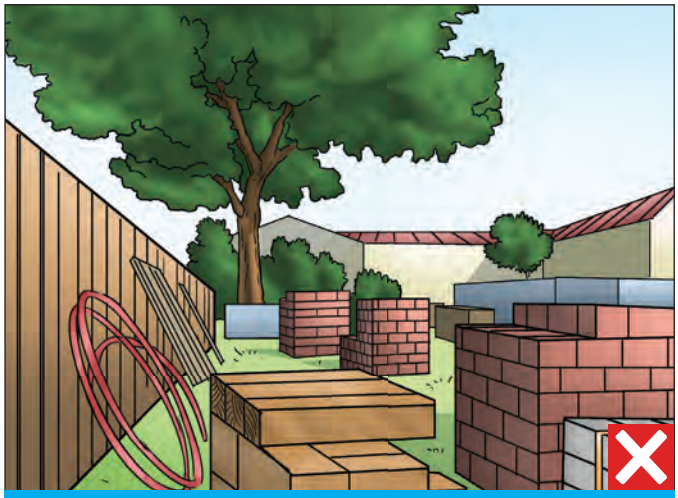
Stem: large and green
Leaves: dark green, large and jagged
Flower: umbrella shaped and cream/white coloured (bloom in June)

23.2 Working near trees and hedgerows

Damaging branches, trunks, roots or even changing the surrounding soil's characteristics can have a negative effect on trees or hedgerows.

Some trees are protected by Tree Protection Orders (TPO), which prevent them from being removed, topped or lopped. Authorisation must be given to work near these trees.

You are legally required to notify the council before removing part or all of a hedgerow, which could take up to 6 weeks before an outcome is reached.



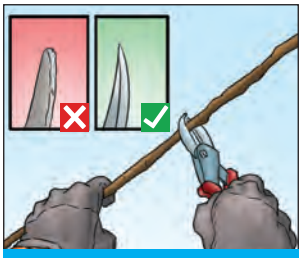
- Never park vehicles or plant or store materials within the precautionary area.

- Restrict plant movement near the precautionary area.
- Carefully compact backfill around retained roots.
- Use an inert granular material and topsoil mix to backfill the trench.

- Cover roots with damp sacking during hot weather.

Don't:

- use machinery to excavate in the precautionary area around hedgerows. Use trenchless techniques or hand dig where possible
- cut roots that have a diameter larger than 25mm without agreement with the Council Tree Officer



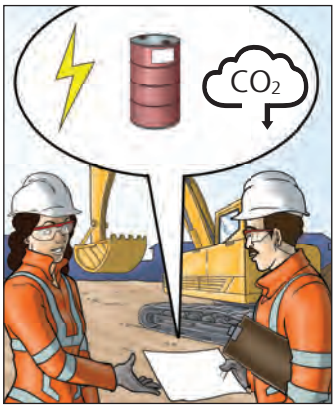
- Use a sharp tool to make a clean cut when pruning.

24. Energy, Water and Materials

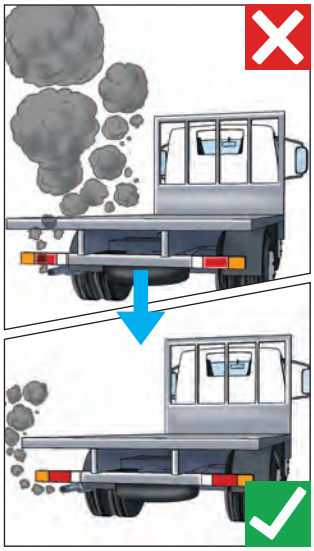
Energy

Bridges long-term objective is to minimise energy use and embodied energy contained in its projects.

- Plan work activities to minimise vehicle use and travel



- Minimise energy use from fossil fuels. E.g. use solar panels, hybrid engines etc.



- Minimise pollution from vehicles and plant

- Store materials to minimise loss, waste and damage

25. Personal Protective Equipment

The following minimum standards of PPE apply to all Bridges projects. Additional or higher standard PPE, may be required according to risks, in the operation or task's risk assessment.

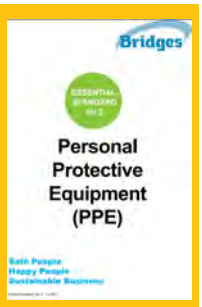
25.1 Workwear/PPE to EN471 (Class 3)

Wear full-body, orange-coloured, high-visibility workwear/PPE. This applies to all projects, visitors and those working at depots and stores.

25.2 Flame-retardant and arc-resistant PPE

Anybody breaking ground or working around live services must wear full flame and arc- resistant clothing as detailed in Bridges Electrical & Mechanical Safety Rules.

For further details please refer to Bridges Essential Standard 02 – Personal Protective Equipment



25.3 Eye protection to EN166

Eye protection is mandatory at all times, except for operators of vehicles or plant that are fully screened. Specify higher levels of protection, if required, in relevant risk assessments. Operators who wear prescription spectacles must get prescription safety spectacles from their employer. Over-glasses may only be used by short-duration visitors and are not acceptable for site workers.

25.4 Head protection to EN397

In general, all personnel must wear white helmets, with the exception of supervisors who wear blue or black (client dependent) helmets. Helmets should have a completed ICE (In Case of Emergency) tag attached.

Individual projects may visually differentiate between roles, if necessary, using the following helmet colour schemes:

	Black: supervisor		**White:** site manager, competent operative, vehicle marshall
	Orange: slinger/signaller		**Blue:** visitor/other
Helmet Sticker:			
	Green: first aider		**Red:** fire marshal

Note: Sikhs wearing turbans can legally refuse to wear head protection on construction sites on religious grounds.

25.5 Hand protection to EN 388-4131

Wear gloves that provide the appropriate level of protection for the task being done. Flame-retardant and arc-resistant gloves must be worn when undertaking electrical testing, streetworks or manually breaking ground (Arc Flash Hazard/Risk Category 2).

Cut resistant gloves to EN 388:2016 4.X.4.4.E must be worn for all manual cutting operations

25.6 Safety footwear to EN20345

25.7 Additional requirements

Additional PPE, as per a task-specific risk/CoSHH assessment, may be required.

The minimum standard for disposable face masks is FFP3. All users of filtering face pieces RPE must be face-fitted/tested for each specific RPE worn.

25.8 PPE branding

For all public facing works, safety helmets and high-visibility workwear must display the approved client branding.

26. Asbestos

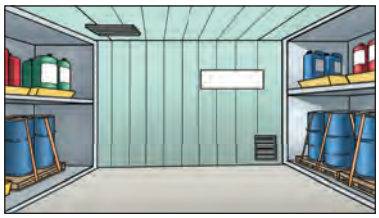
Clients should inform employees and sub-contractors if asbestos is present or suspected on the project. Before commencing a project, all necessary asbestos surveys must have been conducted and the results translated into the project's health and safety plan.

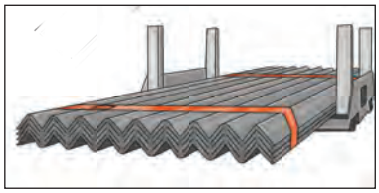
Disturbance of asbestos cement (AC) containing materials through cutting, drilling, and other activities may result in elevated levels of airborne asbestos fibres. The current safest method of cutting AC pipes is using a grit saw. The method of removal and disposal of AC debris must be agreed prior to commencing work.

Also be aware that asbestos is routinely found in electrical equipment, and so suitable precautions should be taken.

27. Work Areas

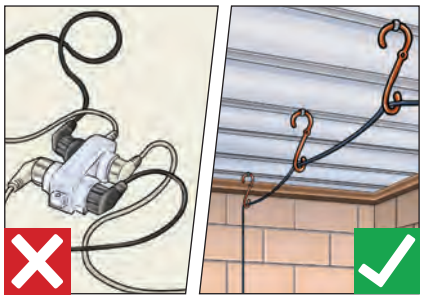
Store all materials on pallets, racks or specialised storage systems.

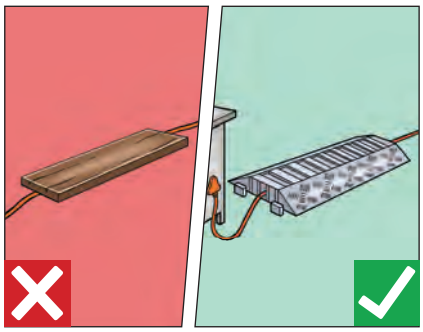




Practice good housekeeping and keep walkways and access routes clear.

Secure temporary electric cables (junction boxes, extension leads, etc.) with "sky hooks" or the equivalent and route them safely so they don't cause tripping hazards.





28. Archaeology and Heritage

If there's a risk of finding historical artifacts on-site, perform works according to the relevant method statement and watching brief.

If a discovery occurs:

- Stop work immediately
- Cordon off the area and restrict access
- Inform your supervisor immediately
- Don't remove or damage any findings
- Don't work or drive near findings

29. Incident Reporting

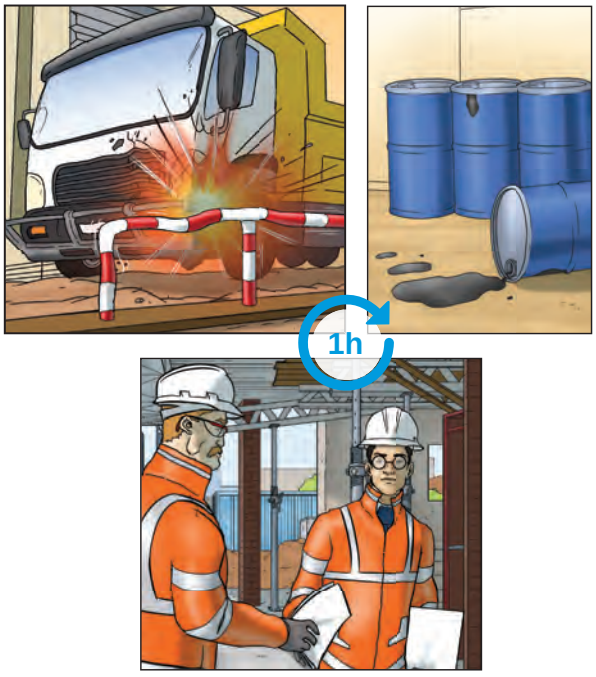
- Report any and all incidents, including environmental incidents such as spills or pollution, to help us improve conditions and everyone's safety on site.
- All incidents must be reported as per Bridges **112 Reporting Procedure.**

112 Incident Procedure (within)

1 Hour - Notify SHEW Team

1 Day - Incident Report by Manager/Supervisor

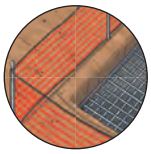
2 Weeks - Review by SHEW Team and sharing of learning



30. Summary of Items that are Prohibited

- Halogen lamps.

- Fuels stored in plastic containers.



- Netlon-type fencing as edge protection or as a barrier for restricted areas.

- Forks fitted to or suspended from 360°/180° excavators.

- Grinders without kickback protection

- Underslung loads from wheeled plant whilst in motion (Telehandlers Excavators etc

- Barrier tape as edge protection or as a barrier for restricted areas.

- Vehicles only certified to FORS Bronze or with no certification *(Thames Water Sites)*

- Supervisors must not operate plant and equipment

- Knives - Alternative safe means of cutting must be used i.e. cable strippers.

- Aluminium ladders or stepladders in live electrical areas and excavations.

- Lifting with excavators without removing the bucket.

- One-tonne dumpers.

- Road pins made of a conductive material.

Everyone at Bridges is empowered to STOP work if they feel the task being undertaken is unsafe or can be performed in a safer way.

Please note: some clients may have specific requirements which enhance our standards and therefore Bridges standards should be taken as a minimum requirement.

ESS01 - Risk Assessment
ESS02 - Personal Protective Equipment
ESS03 - Breaking Ground
ESS04 - Working Over/Near Water
ESS05 - Welfare Facilities
ESS06 - Mobile Plant
ESS07 - Portable Access Equipment
ESS08 - Vehicle Movements
ESS09 - Street Works
ESS10 - Scaffolding
ESS11 - Temporary Oils and Chemical Storage
ESS12 - Management of Temporary Works
ESS13 - Protecting The Public
ESS14 - Tiredness and Fatigue
ESS15 - Underground Services
ESS16 - Working on Live Water Mains
ESS17 - Telehandlers
ESS18 - Lifting Operations
ESS19 - Effective Health & Safety Management
ESS20 - Electrical Safety - Portable Equipment
ESS21 - Safe Isolation of Plant & Equipment
ESS22 - Water Hygiene
ESS23 - Working at Height
ESS24 - Confined Spaces
ESS25 - Water Hygiene
ESS26 - Working on Roofs
All are available at **www.bridgessafety.co.uk**

For further help and advise contact the Bridges SHEW Team.

Safe People
Happy People
Sustainable Business