

PROJECT TITLE:	A465 Clydach River Underbridge Repairs			
CONTRACT NUMBER: A465 ECI				
METHOD STATEMENT TITLE:	MS004 Ground Investigation			
Date of Commencement:	07/04/2025			
Approx Duration:	4 Days			
Supervision:	Carl Morris – Site Agent			
Authorised person for issuing & signing permits:	Works Manager / Agent / Engineer / Supervisor			
First Aider(s)	Carl Morris			
Document revision & Approval:				
Revision:	Date:	Prepared by:	Reviewed by/ date:	Revision Code
0	10/02/2025	Craig Thomas		
A- Accepted for construction; B- accepted subject to comments; C- not accepted				
Location	Monastery Road, Dyffryn Clydach, Neath Abbey, Neath. SA10 7DP			

Scope of Work	A Temporary Works (TW) design is required to support the bearing replacement at Clydach bridge. The purpose of the ground investigation works is to gather geotechnical information on the banks of the river to inform the design of the proposed Temporary Works. The ground investigation employs the Dando Terrier tracked drilling rig for dynamic sampling purposes (also known as window or windowless sampling). This method of forming a borehole utilises a drop weight to percussively drive sampling tubes of decreasing diameters (typically between 116mm and 66mm) into superficial and weathered deposits.
Responsibilities	The Site Manager shall ensure that individuals conducting the work are: • Inducted and briefed before commencing works. • Are trained and competent to undertake their specific roles (including checking of applicable CSCS & CPCS cards) • Have the required PPE, tools, and equipment (specified below)

	The Site Supervisor shall undertake works: • In accordance with their training and applicable standards and regulations • In accordance with this method statement and the Site Managers instructions
Equipment and PPE	Equipment • Terrier drilling rig (including coring head attachment). • Sampling barrels and coring barrels. • Drilling rods (and probing rods, as necessary). • Hand tools.120 roller • 150mm twin wall pipe • Hand Tools PPE • Hard hats (EN 397). • Abrasion resistant waterproof gloves (EN 388). • 200 Joule toe-cap boots with mid-sole protection (BS EN ISO 20345 S3). • High visibility vests (RIS-3279-TOM), EN 471 class 2). • Coveralls (RIS-3279-TOM, EN471 class 3 ISO20471). • Flame retardant coveralls (RIS-3279-TOM, EN ISO 149, EN ISO11612/11611) • Gas, electrical, bulk fuel storage sites only (or where client specified) • Hearing protection (EN3522-3), in accordance with rig specific noise risk assessment. • Protective eyewear (EN 166 1F, class 1), as instructed during the site induction. • ½ face mask (EN140) fitted with FFP3 dust filters (EN143), as required for the task.
Inspection and test requirements	• In accordance with PUWER regulations 1998, regular checks of correct rig function shall be undertaken by the lead driller. This shall be recorded on a daily/weekly inspection check sheet (CCGI form 003-11). A record of inspections will be kept on site with the rig in the rig pack, with duplicate copies returned to the office for filing. • Any serious defects shall be reported to the plant coordinator immediately. • In accordance with LOLER regulations 1998, all lifting tackle and lifting equipment on the rig shall be inspected at the correct intervals by a competent person. A record of these checks shall be kept on site with the rig in the rig pack and at the office. • The lead driller shall complete a site-specific check sheet (CCGI form B09) and all operatives sign onto the drill brief (construction phase plan) prior to starting work. • When the rig is in operation (other than at idle) the drilling team will wear hearing protection in accordance with the noise risk assessment. See rig pack for further information. • When using vibrating tools (i.e. breaking out hardstanding), individual HAVS risk shall be assessed by the operative in accordance with the vibration risk assessment (B24) and individual exposures monitored and recorded on the HAVI record sheet (CCGI form 016), as necessary. • Any new or unforeseen hazards associated with site activities of anything other than very short duration shall be assessed on site by the lead driller or CCGI supervising engineer using a point of work risk assessment (CCGI form B10).

COSHH	• COSHH information for substances used are contained within the rig pack. Large volumes of substances are not used and include; vegetable oil based lubricants, diesel, bentonite & cement. MSDS sheets are available on request. Substances are transported/stored in the support vehicles in designated containers and in a manner, that minimises the potential for spillage or accidental damage. The support vehicles will be kept a minimum of 10m from water sources.
Health, Safety & Environmental Considerations	• The lead driller is responsible for their own health and safety and that of their assistant(s) and others in immediate working area. They have the authority to stop works because of an unsafe condition. • The lead driller will ensure the guard surrounding the drop weight is in place and functioning and that the rig is operated in accordance with the manufacturer's specification, BS EN 16228 and the BDA's Code of safe drilling practice. • All personnel shall wear the correct PPE and ensure loose clothing or hands/feet are kept clear of potential entrapment, entanglement or crushing. • All site personnel will be familiarised with the site and made aware of any hazards, by way of a site-specific induction. • A life buoy will be kept near the river in case of emergency. • All operatives working on the tasks described in this method statement, risk assessment and any associated minor works statement must be briefed on its contents. • Operatives must sign the briefing attendance sheet to confirm that they have been briefed and understood the contents. • All required Permits will be issued by the designated person prior to the works commencing. ○ A permit to break ground must be issued before drilling begins. • Daily briefings shall be given to the operatives prior to work commencing. • All operatives must be briefed on the requirements of the permit before work commences. • The site will be kept in a clean and tidy state, monitored by frequent inspection. • Storage of fuel and refuelling of plant to be subject to the procedures in The Control of Pollution (Oil Storage) Regulations 2001. Fuel will be kept a minimum of 10m from the river edge. Drip mats will be used during refuelling. • Refuelling will take place in the car park area away from the river's edge. Access and Egress • Access to the work area will be via Monastery Road and the vehicles and plant parked in the parking area in front of the palisade fenced Dwr Cymru Welsh Water compound. • Heavy vehicle deliveries will come via the DCWW gated entrance accessed via the Trade Centre Wales access road. • Work on the southern bank will be accessed via the track from the roundabout near the on slip road from Neath. ○ This access is on a flood plain so access and work will be conducted during low tide and when flooding is unlikely to occur. ○ If rain causes floodwaters to rise, the equipment will be removed until suitable conditions return.

	Safety of Services - Services are not expected in the area. - Foul sewer is visible in the fields to the south of the boreholes. - Asset maps will be used to identify services. - CAT & Genny will be used to survey the site. Site office, welfare and first aid facilities - Welfare van located near the DCWW fenced compound at Monastery Road. Interface Issues - Mr and Mrs Kriescher, owners of the neighbouring property through which access will be required, will be kept informed about the works and any temporary access arrangements required through their property.
Method	Services A safe system of work must be in place before the drilling crew breaks ground. All works to follow the general principles set out within HSE's guidance note HS(G)47: Avoiding Danger from Buried Services. The lead driller and their crew shall be briefed by the supervising engineer on the specific arrangements for the avoidance of buried services on site (i.e. consultation of service plans, use of electromagnetic and radar clearance techniques, use of permits-to-work, etc.). Once an exploratory hole position is cleared of services and there remains a risk of encountering unknown services, a hand dug inspection pit will be excavated. Note that if in-situ data is required in the upper metre of soils then inspection pits cannot be excavated. In such cases, work should be preceded by a sufficiently robust risk assessment to avoid service strikes (i.e. electromagnetic and radar survey or as built service location plants, etc.). Where CCGI are in control of PTWs this shall be recorded on form B10. Loading/unloading & set-up The rig is transported to site by trailer supported by a panel van or Land Rover. Before travelling on public highway, the vehicle driver will carry out checks for roadworthiness and record the findings in the vehicle defects book. All vehicles/trailers with a combined weight of >3.5t shall be fitted with a tachograph. The driver shall be in possession of a card and valid licence appropriate for the class of vehicle operated. The lead driller and driver shall ensure that the rig and ancillary equipment has been correctly loaded and secured. During loading/unloading activities, any ramps used must be appropriate for the task and secured. Vehicles should be positioned so that personnel can load/unload safely avoiding members of the public and other vehicles. Attention must be paid to the ground conditions on planned loading/unloading areas and access routes to prevent toppling. When moving onto position, or between positions, the rig will be tracked with the mast in the reclined position. The driller will be required to stand on the back of the rig when tracking. Where there is a risk of other site users meeting the moving rig, the assistant driller will act as a banksman, as necessary. Drilling ancillaries are carried/stored on the rig to avoid excessive stooping when the rig is in operation. Other materials may be placed neatly onto the ground adjacent to the work area to avoid trip hazards. Wherever possible the engine is positioned downwind from the borehole so that the crew are not subject to exhaust fumes. Once in position, the lead driller will check for overhead obstructions (location of bridge) before putting the mast into a vertical position. The rig mast is stabilised using two adjustable legs (packed with timbers on soft ground) and the rig's hydraulic ram. Dynamic sampling Once the rig is tracked into the position and the pre-start checks complete the percussive drive carriage is hydraulically lifted, allowing sample barrels to be attached and drilling to commence. 1m long casing tubes/sample barrels and drill rod threaded joints should be

fully screwed home before use to minimise damage to the threads. Where casing is required, the casing and sample barrel will be attached, and the carriage is lowered until it rests on the ground. The rear ram is then fully retracted to enable the full weight of the carriage to rest upon the sample barrel. The lead driller must ensure that the assistant driller's hands and feet are clear when lowering tools or casing to the ground. All personnel should keep hands clear of potential entrapment, entanglement or crushing hazards when drilling. The percussive drive carriage comprises a chain driven drop hammer weight. The drop hammer is powered up and the sample is barrel driven into ground by repetitive blows.

Upon completion of a 1m drive the barrel is extracted from the ground using the pull-back ram on rig. Once extracted, the sample barrel is laid out onto the rig and the liner removed and placed onto the ground for the supervising engineer to inspect. The sample barrel can then be cleaned out ready for another liner to be inserted. The process is then repeated, and boreholes progressed using smaller diameter sample barrels until either completion or refusal. Casing will be installed if unstable ground conditions are encountered. Standard penetration tests as per BS EN ISO 22476-3 2005 (SPT) can be carried out and undisturbed sampling in the form of 100mm (UT100) (U100) and 70mm (U70) diameter open drive samples can be taken.

Dynamic probing (BS EN ISO 22476-2: 2005)

The weight and drop height are adjusted where necessary depending on the job instructions. The rig is positioned over the probe hole location and cone and rod assembled in accordance with manufacturer's manual. The drive unit is hydraulically lifted, allowing the rod and cone to be connected. The drop weight is then activated, and the operator records the number of blows to drive the rods 100mm into the ground. The rods are graduated for this purpose.

On reaching 1m depth, the drive unit is lifted, and a further rod is added. A torque reading/friction is taken on the rods at 1m intervals. Rods are added until such time that a specified depth is reached, or no further penetration is possible (50 blows not achieving 100mm penetration). Rods are removed from the ground, utilising the pullback ram on the rig. On completion area is made tidy and surface reinstated as instructed.

Environmental protection

Vehicles and machinery will not enter the river or cross the river bed.

HVO fuels and biodegradable oils are used in the drill rig.

Re-fuelling will only take place at the site compound, more than 10m from the river.

Drip trays and mats will be used during refuelling.

Our main aim is to achieve zero pollution incidents, protect biodiversity, minimise waste sent to landfill and minimise stakeholder disruption.

Vehicles and machinery will not enter the river or cross the river bed.

Dust, emissions & vapours

Not anticipated to be of significance for this activity. Any dust generated can be controlled by the use of water flush. Emissions can be controlled by judicious use of the throttle and switching off engines when not in use.

Ecosystem

Operatives will be briefed on the importance of not entering the river with items of plant and observe environmental exclusion zones, as advised by scheme ecologists (AtkinsRealis) and observe exclusion zones (i.e. >30m from badger sett when using heavy machinery, etc.), ensuring that the relevant licences are obtained ahead of works. Where protected species are identified, works shall stop, and the supervising engineer informed. Where invasive species are identified the relevant exclusion, zones shall be observed, or advice sought from the scheme ecologists.

Noise & vibration

Every effort will be made to keep noise and vibration on site to a minimum. All plant shall be silenced at source, wherever practicable and maintained in accordance with the manufacturers' instructions. Engines shall be switched off when not in use.

	Waste CCGI operates a policy of no waste on site. The use of skips, located at site compound, will allow waste segregation. All liners and excess materials will be returned to the yard for recycling/restocking.
Permits Required	Permit to Break Ground
Emergency Procedures	Fire (Site) - Call the emergency services, giving your location (e.g. road and MP marker) - Retreat to a safe distance, do not attempt to recover materials or tools. - Check that all of your colleagues and residents are accounted for. - At remote locations, consider positioning yourself or others in a position to assist emergency services to locate the fire (e.g. side of road) - Follow the instructions of the emergency services. - Call your manager to report the incident. Accidents Minor - If you have even a minor accident (cut, graze, or bruise) seek first aid treatment (e.g. clean and cover cuts) - Report the incident to your manager, or H&S Manager Major - Call the emergency services. - Consider your own safety (i.e. if someone is electrocuted, they may still be in contact with the electrical source) - Do not move injured persons unless they are in imminent danger of further injury. - Contact your nearest first aider. - Keep the injured person warm and dry. - Position people to assist the emergency services to locate the site. - Follow the instruction of the emergency services. - Report the incident to your manager, or H&S Manager Emergency condition and preventative measures All CCGI drilling rigs are fitted with a fire extinguisher. Support vehicles contain a further extinguisher and a first aid kit. Spill kits are also available with the drilling rig and will be kept near the rig to prevent spills entering the water course. In the case of an accident or emergency all works will be suspended (if safe to do so) and the supervising engineer notified. The drilling crew will follow the procedure set out during the site induction, otherwise will contact the emergency services (999), if the situation requires. Unanticipated conditions: If any unanticipated conditions arise, the crew will stop work and use the point of work risk assessment form (B10) to assess the hazard(s). If any doubts remain the lead driller must discuss with their supervising site engineer or line manager, as appropriate. Encountering asbestos (unplanned): Stop works and immediately inform your supervisor. If the material appears fibrous, damp down and cover it to prevent fibres from becoming airborne. Works should not proceed where fibrous asbestos is suspected. Cordon off the area and wait for further instructions. Casing getting stuck in borehole:

	If unstable ground conditions are encountered ensure casing is used to sufficient depth. Avoid running casing into hard ground. If the casing becomes stuck firstly ensure the rig is on stable ground or set up in a stable manner. Boards can be used to stabilise the rig. Keep the rig mast upright at all times and readjust whilst attempting to pull back casing. Use bottle jacks in addition to the main ram, this may be done using wooden blocks to chock the jack. Dynamic probing: Before probing tighten all grub screws and ensure rods are straight. The rig must be levelled and upright. Run the rig at a gentle idle speed to ensure an accurate blow count. Too fast and a double bounce of the weight in hard ground could occur. Drill rod and casing threads: A visual inspection of the rods and casing threads should be made at the beginning of each day. Any dirt, wear, galling or burrs identified should be removed using a wire brush or file, if the defect is significant the rod or casing must be identified and removed from the drill string and replaced at the earliest opportunity. Rods breaking in hole: During drilling keep hands and body clear of the mast, if a rod were to break it may be plausible for the mast to drop suddenly. Installation lifting with casing: The backfill or surround material should be kept below the bottom of the casing, when the base of the hole is being backfilled. Encountering live services: Stop works and consult the supervising engineer. If safe to do so, make safe and backfill the borehole/inspection pit and relocate the borehole. Fluid leak from on-site plant: Ensure any leaks are contained and not allowed to reach surface water drains or water courses. Use drip tray below power pack ensure there are suitable spill kits and drip trays for use should the event occur. Where the leak is minimal and can be easily controlled ask permission from the site owner or supervising engineer before commencing with work. Personnel shall follow the Identify the source – Stem the flow – Prevent spread – Report workflow when dealing with fluid leaks. Inoperable plant: All safety cut-off switches, cage guard switches and emergency stop buttons should be checked. Fuel filter should be checked to ensure no water or dirt has got into the system. Driving vehicles on site: If vehicles have to be driven in areas of awkward access, a banksman must be used especially when reversing. Please ensure that the turning circle of the vehicle is taken into account in tight areas. All site incidents, accidents and spillages shall be immediately reported to Centregreat Health & Safety												
Risk Assessment References	NOTE: For full identification of the Hazards and associated Risk Levels relating to the above Method Statement, you must refer to CG Risk Assessments with the following reference numbers and titles: <table border="1" data-bbox="472 1818 1489 2060"> <thead> <tr> <th>Reference No.</th><th>Title</th></tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	Reference No.	Title										
Reference No.	Title												

Method Statement Continued

Date Information Issued:	
Issued by:	
Signature:	
Operatives Present: Those present to confirm they have received and understand all information relating to the works they are to conduct and that they have been made aware of the risk(s) involved including any control measures in place to control them.	
NAMES	SIGNED

SUB-CONTRACTORS		
NAMES	COMPANY	SIGNED

Continue separate sheet if required.

Hazard & Near Miss Reporting Form

Name of reporting person:	
Date of incident	
Location:	
Company (if sub-contractor):	
Task/job being conducted:	

Description of Hazard

Description of Near Miss

Reported to:	
Time:	
Date:	

Health & Safety Managers Report	
Action Taken:	
Risk Assessment Reference:	
Date:	
Signed:	

Method Statement

Hazard (what could cause harm)	Consequences and persons affected	Uncontrolled risk			Summary of control measures to be included	Residual risk		
		S	L	R		S	L	RR
Task specific hazards in alphabetical order and are to be read in conjunction with general site hazards risk assessment RAMS B08.								
Breaking drill rods	Crushing, cuts and abrasions Operatives	2	4	8	- Operatives trained in manual handling operations - Wear abrasion resistant gloves - Ensure the area around the borehole is clear from any slips or trips hazards. - Ensure your posture is correct and allows you to move freely whilst applying force to the pipe wrench - Monitor and inspect the rod threads every day, ensuring that they are adequately lubricated	2	3	6
Changing chain-driven weights	Pinch or crush injuries Operatives	4	3	12	- Use two operatives to undertake this activity - Wear appropriate PPE (gloves, boots) when performing this task - Be aware of pinch injuries when adding or removing drop weights - Avoid dropping the weights onto the floor - Ensure weights are correctly fastened to the guide rods, all bolts tightened, and that the safety cage is correctly installed - Operatives to be trained in manual handling best practice	4	1	4
Entanglement, pinching and crushing	Loss of limbs, major injury, dislocation, cuts and abrasions, Operatives and others	5	4	20	- Ensure that all guards are in place on machinery, in line with manufactures' guidelines - Keep others away from working area - No loose clothing, all jewellery removed, long hair tied back, ties to be removed on all operators working with drilling machinery - Use correct PPE for the task and wear overalls, as necessary - Operatives should be trained and competent in the use of associated with all plant and equipment - Be alert and maintain good levels communication between operatives	5	1	5
Exhaust fumes and hot surfaces	Noxious fumes and hot surfaces resulting in inhalation of respirable particles & gasses and burns, respectively Operatives	3	3	9	- Operate in well ventilated areas - Position exhaust down wind of operatives - Maintain regular service intervals - Hot surfaces to be guarded where possible to avoid accidental contact - Do not touch hot surfaces	3	1	3
Flying objects/particles	Eye injury permanent or temporary, puncture injury, cuts and abrasions Operatives	4	3	12	- Ensure all tools are in good working order and they are being used for the task designed for - Ensure that all guards are in place and in line with manufacture guidelines - Ensure the work area is cordoned off for unauthorised access - Wear appropriate eye protection when there's a risk of ejected materials (e.g. breaking out concrete, hydraulic oil from failed hoses/unions) unless a point of work risk assessment (form B10) identifies that this creates a greater hazard (e.g. impairment of vision from poor lighting conditions or wet weather)	4	1	4

Method Statement

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		S	L	R		S	L	RR
Task specific hazards in alphabetical order and are to be read in conjunction with general site hazards risk assessment RAMS B08.								
Lifting equipment (rig's chain weight assembly & rams)	Falling objects leading to cuts, crush injuries or fractures Operatives	4	4	16	• Daily/weekly checks of all lifting equipment to be recorded • All lifting equipment and tackle to be inspected by a competent person in line with LOLER '98	4	1	4
Loading and unloading rigs	Objects falling from the vehicle, crushing injuries, cuts, broken limbs, fracture, damage to plant and vehicle Operatives and bystanders	4	4	16	• Position vehicles and plant in order to prevent/minimise disruption to 3rd parties • Vehicles to carry only within their capabilities & weight limits • Ensure the ground is suitable to hold the weight and the surface is even, especially during wet conditions • Cordon off area to prevent unauthorised access, as necessary • Access/egress points to be agreed in advance whenever possible • Loading and unloading of rigs from vehicles and trailers to be supervised • Ensure jockey wheels and pins are in place on all ramps before unloading • All deliveries to arrive on site as per schedule	4	1	4
Lubricants	Environmental impact Controlled waters	3	3	9	• Use greases containing heavy metals sparingly • Use vegetable based lubricants on drill string, or proprietary enviro-lubricants that do not persist in the environment • Inspect relevant COSHH risk assessment sheets held in rig files	3	2	6
Moving rig around site	Rig toppling, trapping and crushing, striking objects Operatives, others and 3 rd party property	4	4	16	• Lead driller to track rig slowly using rig mounted levers • Take care in areas of soft ground and consider walking the track ahead of the rig in extreme cases • Avoid tracking across inclines, approach them head on • Use a banksman in public areas • Access/egress in difficult areas (narrow spaces or inclines, etc.) shall be assessed by a competent person Network rail Lifesaving rules: • Never use a hand-held or hands-free phone, or programme any other mobile device, while driving • Always obey the speed limit and wear a seat belt, even when reversing in an adjacent carpark under the control of Network rail	4	1	4
Noise	Tinnitus, hearing loss temporary or permanent, environmental Impact Operatives and others near by	4	5	20	• Diffuse noise on machinery and tools where possible within manufacture guidelines • Wear ear protection in accordance with noise risk assessment • Third parties to be kept clear of the working area (use barriers, Heras fencing, as necessary) • Use health surveillance to monitor long term effects	4	1	4

Method Statement

Hazard (what could cause harm)	Consequences and persons affected	Uncontrolled risk			Summary of control measures to be included	Residual risk		
		S	L	R		S	L	RR

Task specific hazards in alphabetical order and are to be read in conjunction with general site hazards risk assessment RAMS B08.

Rig set-up	Serious injury, crushing injury, possibility to affect the railway infrastructure, death, environmental impact Operatives and others	5	4	20	- Ground conditions will be checked prior to access, pay particular attention to slopes - Extra care to be taken when moving from hard standing to soft ground - All out riggers must be locked/screwed into place - Ensure fire extinguisher is fitted to rig and in service date - Check for overhead cables before setting up and follow guidance set out in 'Working safely near buried or overhead services - Suitable spill kits must be available on site - Use a plant nappy where significant environmental risk has been identified - Ensure that there are no obstructions when raising and lowering the rig mast (including operatives that may become entrapped or crushed) Network Rail Managed Infrastructure - Ensure that all equipment is at a sufficient distance from the nearest open line that in the event of equipment being lost (rolling away), or rig toppling, it will not foul the line	5	1	5
Track trolleys	Serious injury from unstable loads and fouling adjacent line Operatives and others	4	4	20	- Ensure all track trolley operations are supervised by a Competent person - Competent person to carry out pre-use checks (e.g. brake function, load capacity & lights) - Ensure loads are evenly distributed and secured, as necessary - Only allow load overhang on the sides of the trolley when operating under a full line block to ensure the load does not foul adjacent lines - Ensure trolleys are adequately secured to the rails using ratchet straps. This is to prevent the trolleys from rocking in the rails when loading or unloading the rig - Two trolleys, correctly secured together, must be used when transporting a drilling rig	4	1	4
Working at Height (tracking rig whilst stood on rear step and counterbalance equipment)	Sprains, fractures and abrasions Operator	3	3	9	- Inspect the step and handle to ensure they are secure and free from any damage - Operator should adapt the three-point of contact system at all times - Do not lean backwards when tracking the rig as the operator forms part of the counter balance to stabilise the rig when moving - Wear applicable PPE - Only one person on terrier at any given time	3	1	3
Unauthorised use	Serious injury or damage to property Others	4	3	12	- Do not leave the rig unattended when in operation - Remove key and make safe prior to leaving the rig - Fence off, or store in secure area when leaving rig overnight to prevent unauthorised access or vandalism	4	1	4

Risk rating matrix

Risk rating = severity x likelihood

Likelihood	1	2	3	4	5
	2	4	6	8	10
	3	6	9	12	15
	4	8	12	16	20
	5	10	15	20	25
	1	2	3	4	5
	Severity				

	1	2	3	4	5
Severity	Negligible Impact or personal injury	Slight Minor injury, damage or environmental impact	Moderate Injury, damage or environmental impact	High Major injury or health effect, damage or environmental impact	Very high Potential fatality or very serious injury, damage or environmental impact
Likelihood	Remote An unusual combination of factors would be required for an accident or incident to occur	Unlikely A rare combination of factors would be required for an accident or incident to occur	Possible Could happen if a combination of accidental factors is present	Likely Not certain to happen but additional factors may result in an accident or incident	Certain Almost inevitable that an accident or incident would result

Residual risk level	Action and timescale
Low (1-6)	No further action is required, and the risk is considered acceptable and as low as reasonably practicable. Monitoring is required to ensure that the controls remain effective.
Medium (8-10)	Efforts must be made to reduce the risk. Risk reduction measures should be implemented within a defined time period. Where the medium risk is associated with extremely harmful consequences, further assessment may be necessary. Consideration should be given to additional safe systems such as a permit to work or additional supervision. Tasks can only go ahead in this category if it is considered the risk has been lowered as far as reasonably practicable and with express permission of a director or the QHSE manager.
High (12-25)	Work cannot begin until the risk level has been reduced. If work is in progress it must be stopped until the risk is reduced to an acceptable level.