John Henry Group	JHG Operations Risk Assessments
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Document Owner: Head of Health & Safety	**Approved By:** HSEQ Director

Risk Assessments

This "Task Specific Risk Assessments" document has been compiled by JHG the HSEQ Department and approved by the Group HSEQ Director. This document forms part JHG operational safe systems of work and must be followed in support of appropriate UK health and safety legislation and JHG policy.
It is the responsibility of operational management to brief the contents to their respective workstreams and each individual to familiarise themselves with the risk assessments relevant to their work activity.
This document must be kept in good working order and presented upon request to the auditory and/or management / supervisors that request it.
It is also available via access on tablets and JHG OPs management must ensure the latest version is uploaded to the gangs devices.

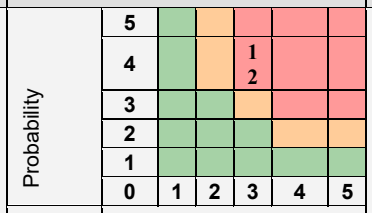
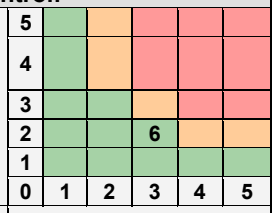
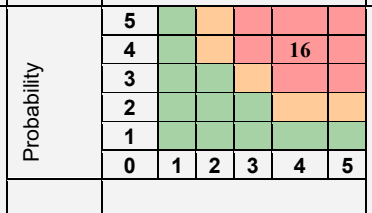
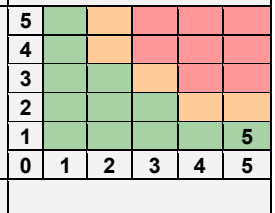
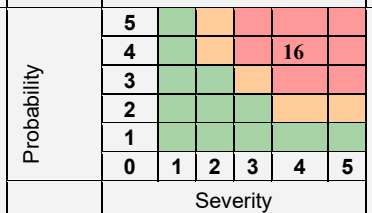
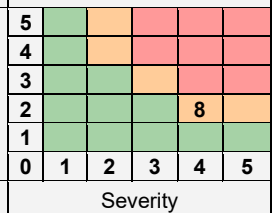
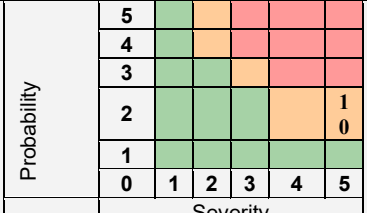
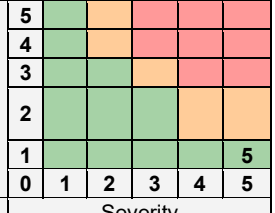
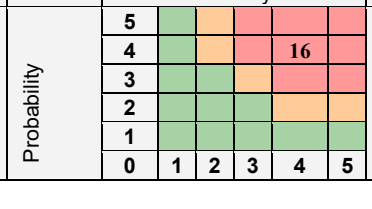
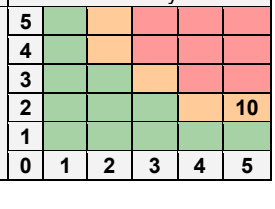
Contents

F-JHG-RA 01 Abrasive Wheels

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Hand/ Arm Vibration	Injury or illness to Persons		Only authorised and trained staff to use the equipment. Concrete saws and Stihl saws will be considered abrasive wheels. Equipment to have isolated anti-vibration handles. Use a loose handgrip, Keep hands warm. Take breaks and massage hands after use. Rotate personnel using tools Monitor/record use to ensure product trigger times/exposure limits are not exceeded	
Wheel Bursting/ Flying Particles	Death\Injury to persons		Only trained personnel to mount and use the abrasive wheel\disc cutter. Check Wheel for damage before use. Ensure daily/weekly maintenance regime is adhered to. Do not use in explosive atmosphere. Guard must always be in place. Stand on firm level base. Wear Protective gloves, eye protection and safety footwear. Exclude non-essential personnel from area. When mounting wheels ensure that the safe maximum operating speed marked on the wheel is not exceeded	
Limb Injury/Cuts/ Abrasions	Death\Injury or illness to persons		Loose clothing and long hair to be kept clear. Only trained personnel to use the equipment. Ensure the floor guard is secured and properly adjusted. Work Rests should be as close as possible to the wheel. As the Wheel Wears the work rest should be frequently inspected and adjusted.	
Noise	Injury to persons		Exclude non-essential personnel from area. When mounting wheels ensure that the safe maximum operating speed marked on the wheel is not exceeded Wear hearing protection	
Dust	Illness to persons		Exclude non-essential personnel from area. Dampen with Water and wear respiratory protection if dust is produced. Ensure use of dust mask (minimum FFP3 and face fit tested)	

Hazard:	Risk:	Risk Factor Before Control:		Control Measure:	Risk Factor After Control:	
			Severity			Severity

F-JHG-RA 02 Access & Egress on Site

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
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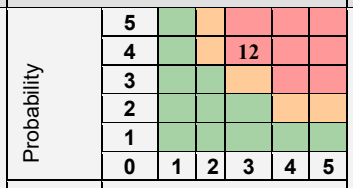
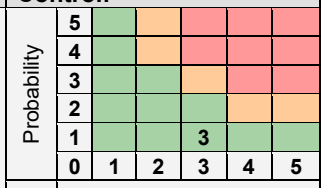
Seek further guidance from the Health, Safety

Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Access and Egress Routes - Site	Slips, Trips and Falls Impact with Vehicles Blocked Escape Routes		Identify external working environment: Near Rail/ Near Water/ Ports/ Harbours/Petro Chemical refineries/ Gas Pumping stations/ Construction sites. Have a permit to work issued by site provider Carry out specific H&S induction training as required Ensure adequate access for delivery, installation and maintenance of plant, equipment, and systems. Have appropriate PPE. Ensure to risk assess the working environment and document the finding on a POWRA (Point of Work Risk Assessment). All visitors to sign up to POWRA. Ensure all access/egress routes are kept clear. Ensure that all required traffic management will be setup as per chapter 8, NRSWA, including required pedestrian. All staff are informed of location of access\egress route Position loading and unloading areas to avoid reversing. All vehicle/plant movements to be overseen by nominated plant/vehicle look out. Prevent access to unsafe areas by physical barriers and warning notices. Adequate space for access/egress Plan work areas properly.	

F-JHG-RA 03 Asbestos

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

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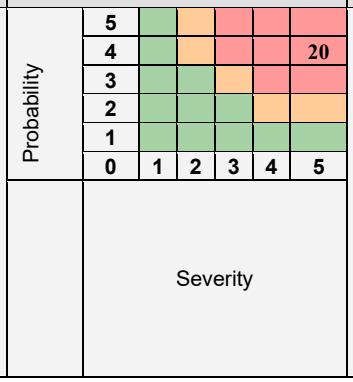
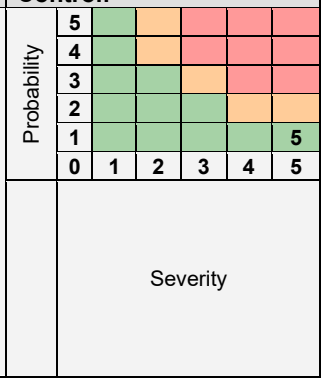
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Asbestos Dust	Asbestosis Lung Disease Cancer Serious Illness Death		Where is discovered, stop work and contact specialist licensed contractors to identify and deal with asbestos. Based on a written risk assessment, where the planned asbestos related work activity will expose or could expose workers to a concentration of asbestos fibres in air in excess of the exposure limit value (i.e. 0.1 fibres/cm^3), an employer must submit a written notification to the hHSE, 14 days before commencing any work. The site specific plan of work (also known as a method statement) for the proposed work must be submitted along with the notification.	

F-JHG-RA 04 Auger Boring

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
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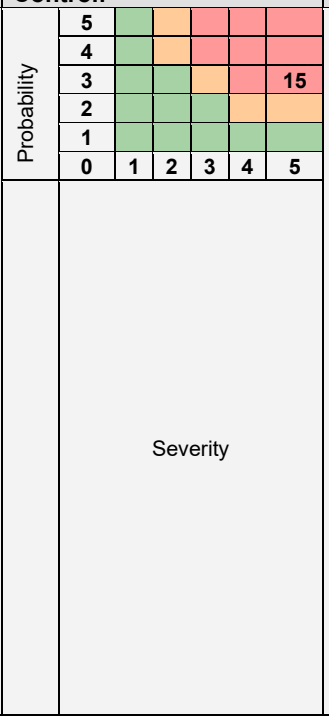
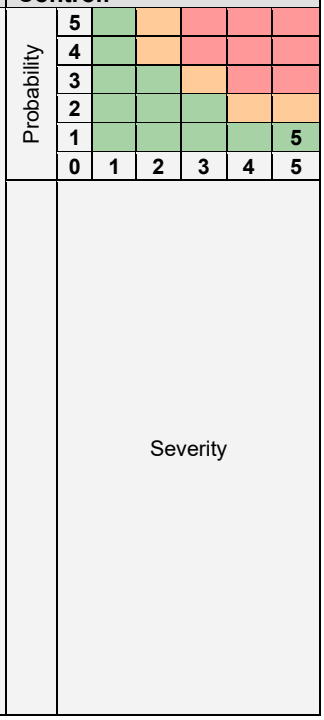
Seek further guidance from the Health, Safety and Environmental Department if unsure.

Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Augur Boring (Short Pipe sections) Contact with underground services Entanglement	Electric Shock Burns Major injuries Death		When digging/Drilling a hole to accommodate a newly installed pole, the work area must first be identified, in most cases the work area will be along the road, therefor a safety zone must be strictly setup, using cones, barriers, and warning signs to manage the traffic of the activities. The operator of the Auger must be trained and certified to in its use. The machine must be certified with a 6 month inspection, ensure that it is fit to perform the required task. All plant must be subject to daily/weekly plant checks by operator The area must be adequately surveyed for the presence of underground services, by consulting stats, scanning the area using a cable avoidance tool (CAT). Any located services will be marked 1m each side using marker paint. Inside this area will be a no dig zone. A trial hole will be dug at the proposed location to eliminate the risk of any services being in the area. THIS WORKS IS TO COMPLETED BY A SPECIALIST CONTRACTOR WHO ARE TO TASK SPECIFIC RAMS PRIOR TO COMMENCING	

F-JHG-RA 05 Avoidance of Underground Services

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
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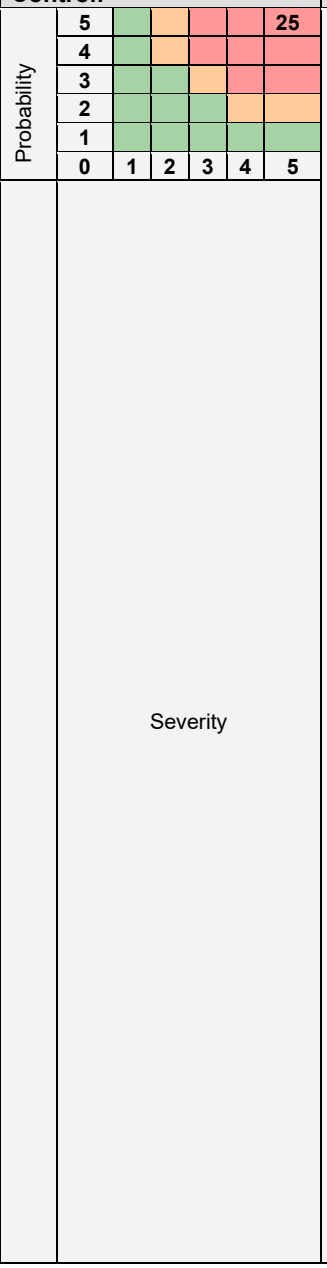
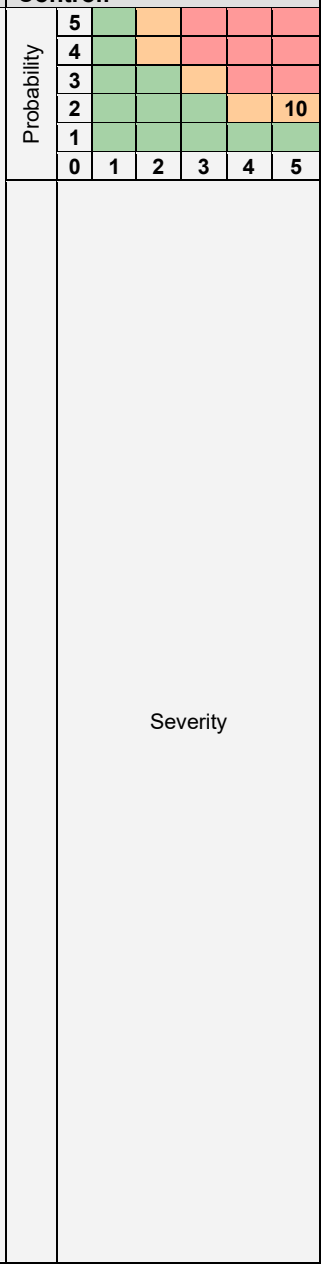
Risk Factors after control measures 12+
Unacceptable – Do not proceed

Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Digging in the vicinity of underground apparatus. Striking Underground services, i.e Gas, Electricy, water,,telecoms cables etc. Entanglement	Electric Shock Burns Major injuries Death		Review the site for presence of all live services adjacent to and on the site. This includes - sewers, water supplies, HV/LV underground cables, Telecoms, Gas, High Pressure pipe lines throughout the site. Obtain Cable plans/stats from the various providers. Record drawings/existing safety file to be obtained from site owner if possible. If any high voltage power lines or high pressure gas lines are present contact the relevant service provider to highlight planned work activity. Submit site specific method statement to the service provider for approval. Once method statement approved ensure their presence on site prior to work commencement. Risk assess the area and document the findings on the POWRA. Use cable avoidance tools (CAT & Genny) and ensure cables/services are marked up prior to work. The cable/service location should be carried out by a trained competent person and there must be a location of underground services trained operative on site at all time when digging near services. Trial holes must be dug to confirm the location of the services before any excavator is used. Only safe digging procedure must be used, i.e. trained user of the excavator, no mechanical excavation within 0.5m of the exposed service, adherence to HSG47 Where possible services are to be isolated prior to commencing excavations. In the event of crossing or proximity of underground telecoms and power cables the following shall be fulfilled as per ETCI 4th edition National Rules for Electrical installations: a) a fire retardant partition shall be provided between the cables, e.g. Bricks,clay or concrete, protective conduit or troughs made of fire proof materials. b) for crossings, mechanical protection between cables shall be provided, e.g. Metal or synthetic cable conduit. c) a minimum of 100 mm shall be maintained.	

F-JHG-RA 06 Bitumen - Reinstatement

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
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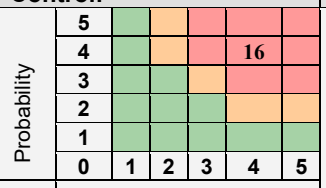
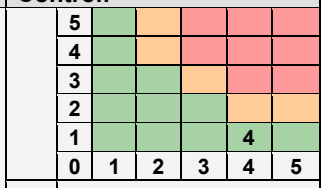
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Fire and Explosion from using hot Bitumen	Burns Major injuries Death		All crews using the bitumen must have a fire extinguisher and fire blanket that is fit for purpose and should be setup alongside worksite. The laying of bitumen is a dangerous activity and must only be carried out by trained competent person LPG Cylinders and hoses maintained in good condition. Correct equipment to heat and pour bitumen must be used and serviced regularly Care must be taken to avoid breathing in the fumes released during the working of hot bitumen. Prolonged exposure may damage health. Material safety datasheets for bitumen should be available to each member of the crew. Handling and Storage precautions outlines in these datasheets must be adhered to Signing, lighting and Guarding of works is required. Workers should be provided with coveralls, protective gauntlets and goggles to protect clothing skin and eyes from splash damage. Boots worn should be resistant to bitumen penetration. The burners/boilers are normally vehicle mounted boilers and LPG cylinders must at all times be secured. All associated controls, Pipework's, valves and gas burner heating units should be regularly inspected and maintained in good working order. The gas system on Bitumen sprayers should have a built in flame failure device to ensure that gas is automatically cut off if the flames extinguished. Bitumen boilers should be kept at least 3 meters from the cylinders. The sprayer driver and spray bar operator should be aware of how to cut off the gas supply in the event of emergency. Smoking must be prohibited in the working area.	

F-JHG-RA 07 Box Demolition/Brick & Block work

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
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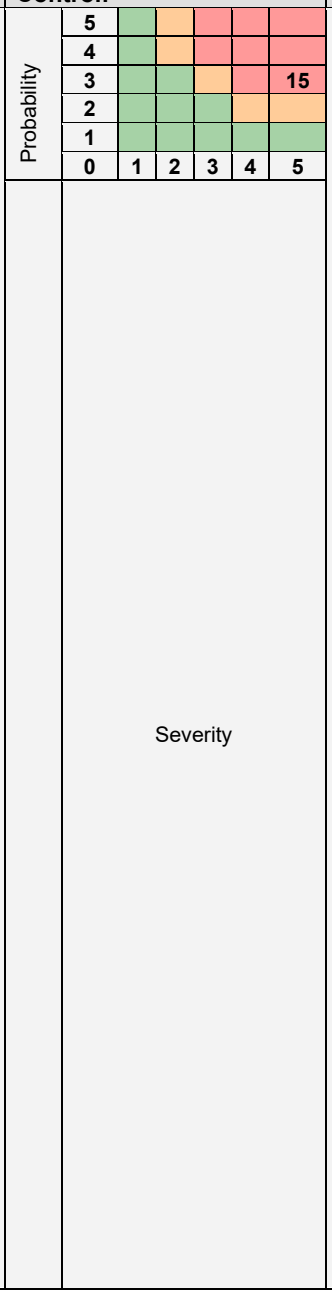
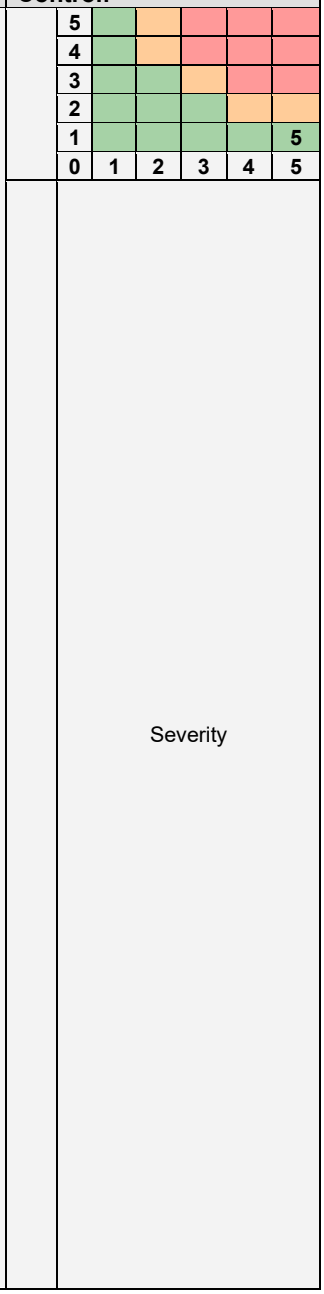
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Manual Handling Repeated contact with Mortar Collapse of brickwork/blockwork Concrete mixers Falls Foreign objects (eye injury) Dust (respiratory disorders) Noise (impact/damage to hearing) – refer to F-JHG RA 28 Manual handling (refer to F-JHG-RA 27) Accidental contact with live services.	Back Strain Skin Diseases. Dermatitis Major\Minor injuries		All block/brickwork will be carried out by competent trained operative, in accordance to the specification of the client in question. Depending on the building project all materials will be located in a suitable location to reduce manual handling requirements. If this isn't possible extra staff will be required as the physical workload increases. Bags of cement should weigh 25kg max. If there is a requirement to carry out works at height then the area will have to be assessed to ensure that suitable access arrangements have been setup. I.e. scaffolding including access stairs and loading bays (with clear max load capabilities stated) Direct contact with cement must be limited, either by work practices or by the use of gloves (Refer to MSDS/COSH data for relevant cement related products). There must be eye washing facilities on site in case the cement powder makes contact with the eyes. In windy conditions eye protection glassed should be worn. All required machinery must be maintained in a good condition. i.e. Mixers and cable hoses. All machinery must be washed directly after use The fresh build blocks must be cordoned off correctly, as it would not give the slab the stability it may appear to give. Additional PPE – safety eyewear, hearing protection, dust mask - to be worn as required THIS WORKS IS TO BE COMPLETED BY A SPECIALIST CONTRACTOR WHO ARE TO SUBMIT TASK SPECIFIC RAMS PRIOR TO COMMENCING All relevant STATs and utility pre-survey must be progressed to ensure no services are laid with the construct of the Box Walls. Inspect from inside ensuring appropriate accreditations are in place to lift lifts on asset owner's property i.e. OR. Refer to GDU usage preventative measures for chamber works. Isolation of diversion may have to occur ahead of demolition in consultation with asset owner. This will be picked up at design and planning stage, but if gang discovers	

Hazard:	Risk:	Risk Factor Before Control:		Control Measure:	Risk Factor After Control:	
				service not on STATS then they STOP, make area safe and escalate to supervisor.		

F-JHG-RA 08 Cabling and Jointing

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
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Risk Factor = Probability x Severity
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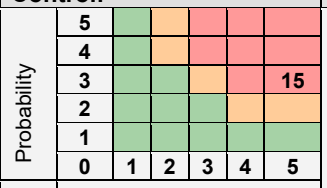
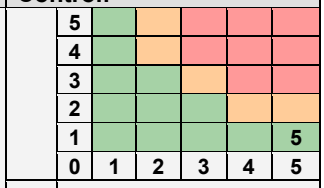
Risk Factors after control measures 12+
Unacceptable – Do not proceed

Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Manual Handling Impact Entering a confined space Contact with Rat urine Slips, Trips, Falls, needles/sharps Mobile and Fixed Plant Cable Trailers (Towing) Climatic Conditions	Back Injury Weils disease		All operatives carrying out cabling and jointing works must have correct training and knowledge. Accredited by Client to required specification. All work must be carried out in full compliance with the relevant standard. The specification document will detail the machinery that must be used, the method of activity – for example rodding and roping of ducts. When the activity can be adequately defined the hazards and risks can be determined. Document all risks on the POWRA. Only access chambers by removing lids with correct keys/lid lifter. Always test chamber atmosphere with calibrated GDU prior to accessing. Always visually inspect area prior to placing limbs/digits into hard to view areas to ascertain if sharps are present – if so stop works, contact supervisor, needles/sharps to be removed by competent contractor. Pull cable smoothly and at a steady rate, keeping a safe distance from the winch to avoid entanglement. Don't over exert when pulling cable. If there are snags stop pulling and trace back to see what is causing the snag. Stay out of the chamber during winching operations. When cabling and jointing in a manhole, ensure that any cuts are covered and that you do not smoke, eat without washing, as there is a very high rate of weils disease, wear gloves. Atmospheric tests before entering confined space with calibrated gas detection unit. Do no stand astride cable or rope Ensure that area around the joint box is adequately managed, using cones, barriers and signs to ensure that the live traffic is as far away from the work location as possible. Ensure that the correct method for using the winch is used at all times.	

F-JHG-RA 09 Confined Spaces

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

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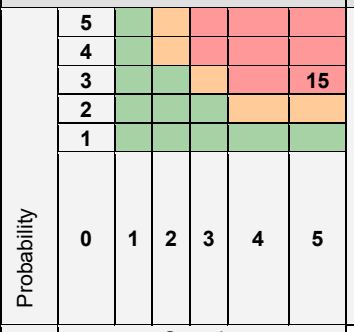
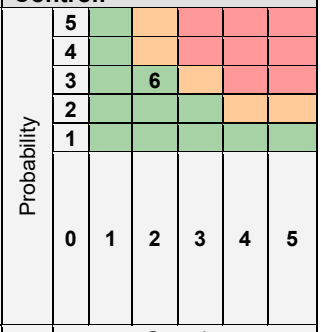
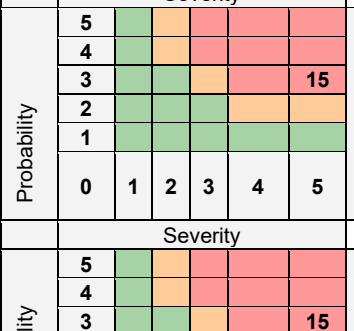
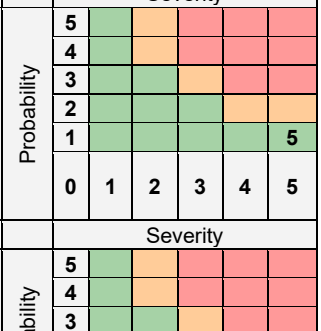
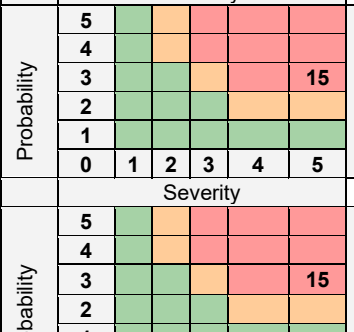
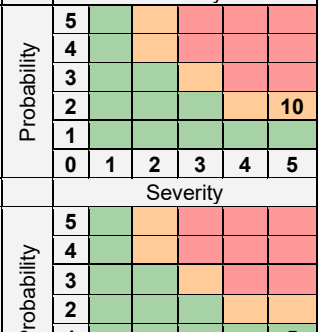
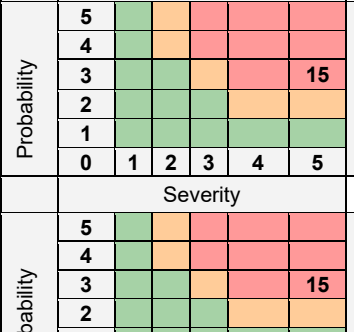
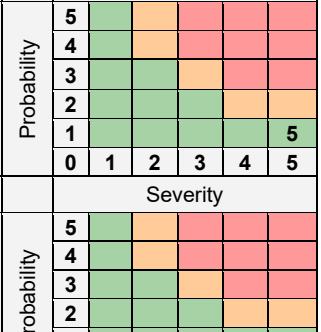
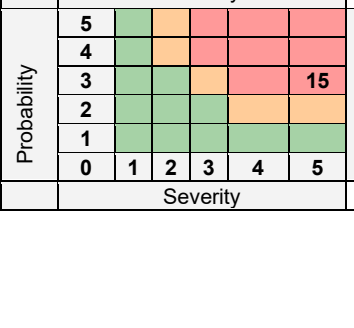
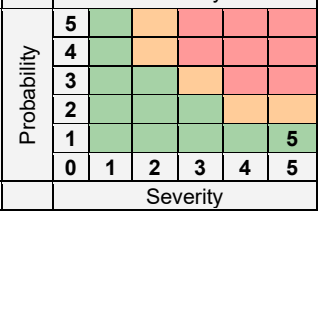
Unacceptable – Do not proceed

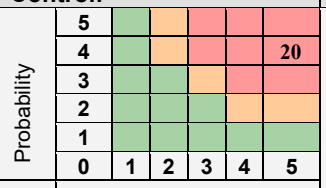
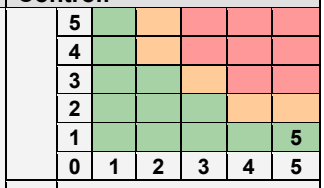
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Toxic Gases	Risk of Asphyxiation /poisoning / lung disease		Trained personnel only. Rescue team to be onsite at all times. Continuous atmospheric monitoring. Adequate ventilation. Breathing apparatus. Adequate communication measures. Before entering test for flammable or asphyxiating gases. Statutory inspections carried out and recorded. Ensure area is adequately guarded. All entries to be opened to provide alternative escape route. No smoking is permitted. Before access the joint box a gas detector assessment must be carried out using a GDU.	
Flammable Gases	Risk of explosions / fire		Trained personnel only. Rescue team to be onsite at all times. Continuous atmospheric monitoring. Adequate ventilation. Breathing apparatus. Adequate communication measures. Before entering test for flammable or asphyxiating gases. Statutory inspections carried out and recorded. Only intrinsically safe electrical items are to be used.	
Collapse of Structure	Risk of injury or death		Adequately designed structures and supports. Adequate communications. Rescue team on site at all times. Statutory inspections carried out and recorded. A site specific method statement is required and a permit to work.	
Dust	Risk of lung disease		Trained personnel only. Rescue team to be onsite at all times. Continuous atmospheric monitoring. Adequate ventilation. Breathing apparatus. Adequate communication measures. Statutory inspections carried out and recorded.	
Weils Disease	Risk of illness		Reference Risk assessment WRA117	

F-JHG-RA 10 Contaminated Land

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

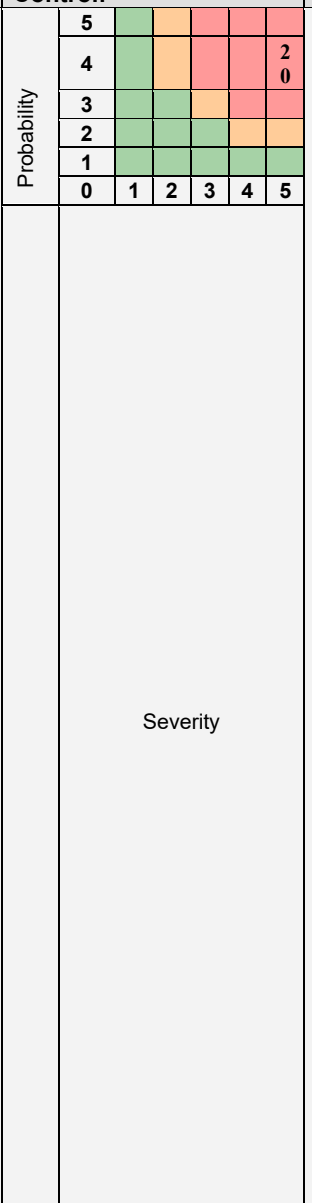
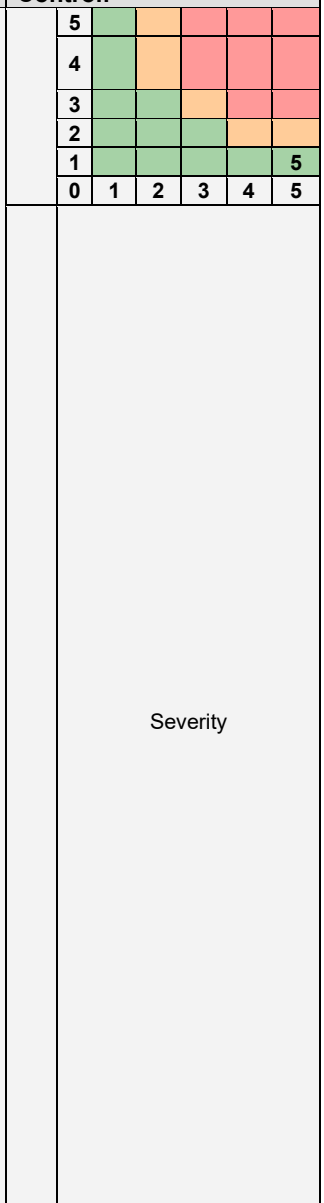
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Chemicals and other substances identified from soil analysis	Slips trips and Falls Impact with Vehicles Blocked Escape Routes		Upon discovery of contaminated soil, a soil analysis must be carried out to determine what contaminants are present, then an assessment of the risks involved can be carried out. Soli contamination can be determined by the colour, odour and level of moisture. On site Risk Assessment. A soil test must be carried out by a trained person, who will in turn give specific instructions on how the soil must be managed based on the information from the soil analysis. The client and the site provider must be informed of the finding and may give further instructions to investigate the source of the contamination. Use appropriate PPE, gloves, rubber boots Provision of washing facilities (showers where necessary) and removal of contaminated clothing. Waste to be disposed of correctly Medical Surveillance may be required with the relevant works after the works have been completed.	

F-JHG-RA 11 Deep Trench Excavations

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

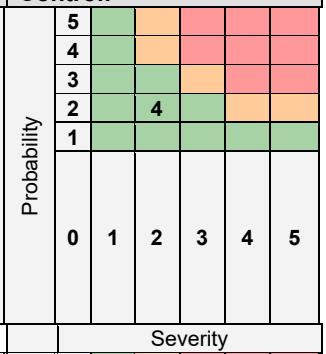
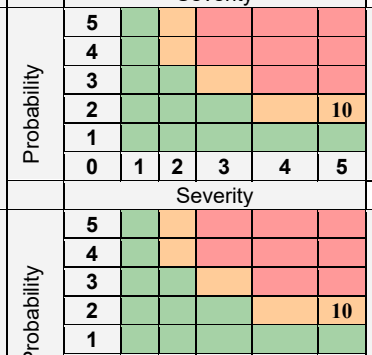
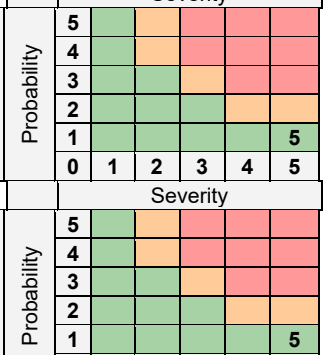
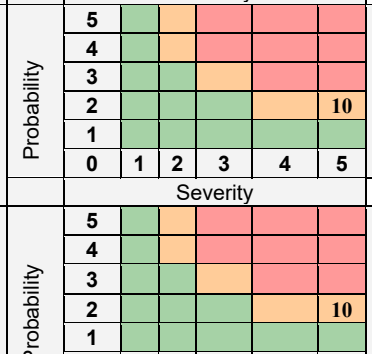
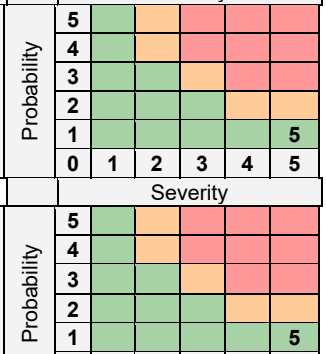
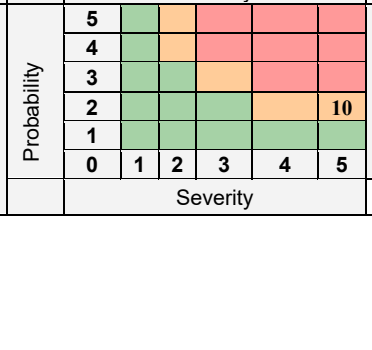
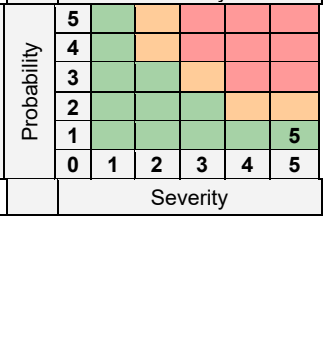
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Toxic/ Flammable atmospheres Slips\Trips and Falls Underground Services Disc Cutters Mobile Plant and hand tools Noise and Vibration Dust Road Traffic Collapse of sides	Poisoning from toxic gases Major injuries Electric Shock Burns Crush Injuries Asphyxiation HAVS Death		Review the site for presence of all live services adjacent to and on the site. This includes sewers, water supplies and underground cables throughout the site. Obtain Cable plans/stats from the various providers. Record drawings/existing safety file to be obtained from site owner if possible. If any high voltage power lines or high pressure gas lines are present contact the relevant service provider to highlight planned work activity. Submit site specific method statement to the service provider for approval. Once method statement approved ensure their presence on site prior to work commencement. Risk assess the area and document the findings on the POWRA. Use cable avoidance tools(CAT) and ensure cables are marked up prior to work. The cable location should be carried out by a trained competent person and there must be a location of underground services trained operative on site at all time when digging near services. Trial holes must be dug to confirm the location of the services before any excavator is used. Only safe digging procedure must be used, i.e. trained user of the excavator, no mechanical excavation within 1m of the exposed service. Where possible services are to be isolated prior to commencing excavations. In the event of crossing or proximity of underground telecoms and power cables the following shall be fulfilled as per ETCI 4th edition National Rules for Electrical installations: a) a fire retardant partition shall be provided between the cables, e.g. Bricks,clay or concrete, protective conduit or troughs made of fire proof materials. b) for crossings, mechanical protection between cables shall be provided, e.g. Metal or synthetic cable conduit. c) a minimum of 100 mm shall be maintained. Sufficient supports and support systems used e.g. trench box,shoring. Excavation guarded and warning signs displayed. Equipment and plant maintained in good working order.COSHH assessments. Appropriate PPE, Noise assessments, Dust suppression. Use of GDU	

F-JHG-RA 12 Driving

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

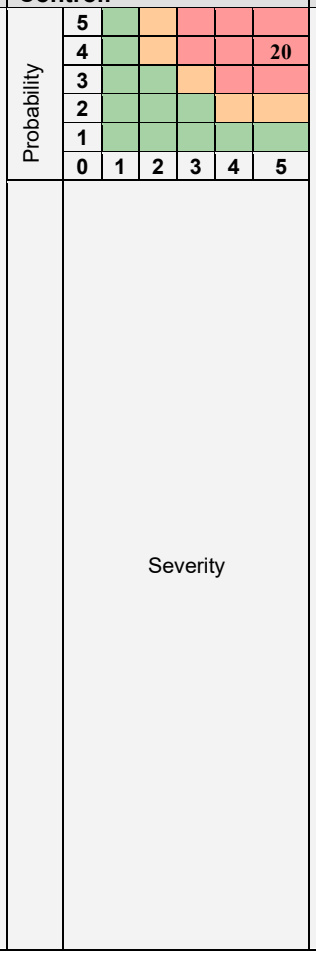
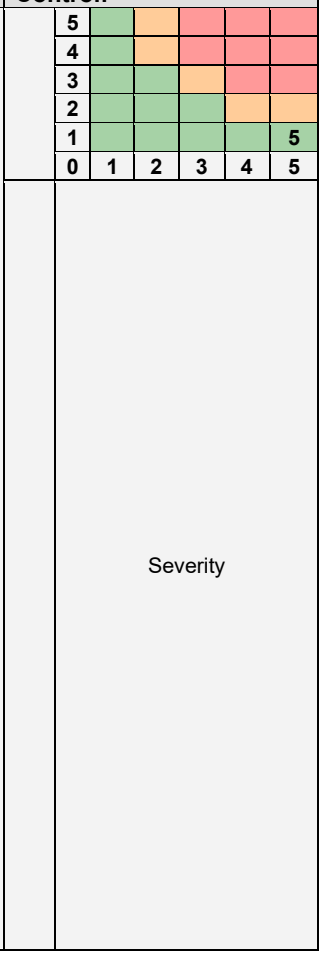
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Accident	Death or injury to persons, Damage to property		Ensure all drivers are competent and hold a current drivers licence. Allow adequate time for completion of journey. Ensure proper breaks are taken. Ensure the vehicle is appropriate for the purpose. Ensure regular maintenance is conducted on all vehicles by qualified person. Ensure regular checks are conducted by the driver. Ensure any goods or tools conveyed in the vehicle are secure. Ensure that vehicles to not exceeed maximum weight load. Report all accidents/incidents. Be aware of additional risks driving off road.	
Muscoskeletal Disorders	Injury to persons		Allow adequate time for completion of Journey. Ensure proper breaks are taken. Ensure the vehicle is appropriate for the purpose.	
Fatigue/ Stress	Injury to persons		Ensure all drivers are competent and hold a current drivers licence. Allow adequate time for completion of journey. Ensure proper breaks are taken. Ensure the vehicle is appropriate for the purpose. Be aware of additional risks driving off road.	
Noise	Injury to persons		Ensure the vehicle is appropriate for the purpose. Ensure regular maintenance is conducted on all vehicles by qualified person. Ensure regular checks are conducted by the driver. Ensure any goods or tools conveyed in the vehicle are secure.	

F-JHG-RA 13 Duct Laying

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

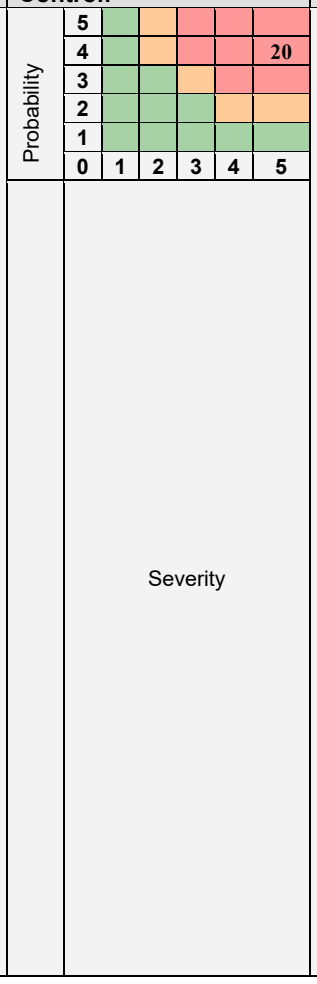
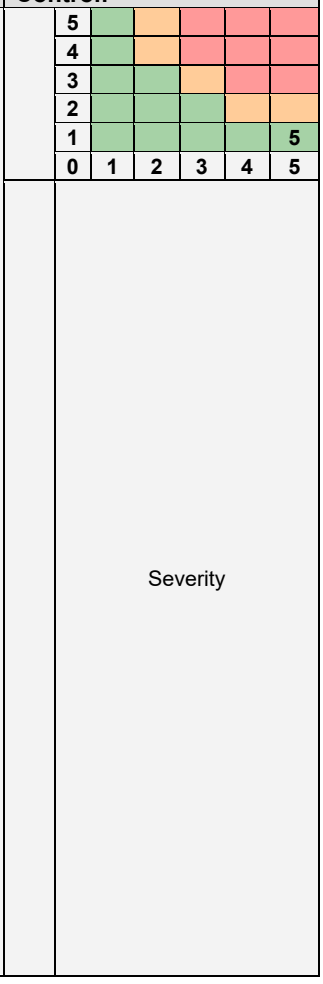
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Underground services Physical Agents Noise/ Vibration Discutters/ mobile plant Hand tools Impact Road Traffic Manual Handling	Eletric Shock Burns HAVS Major injuries Death		Review the site for presence of all live services adjacent to and on the site. This includes sewers, water supplies and underground cables throughout the site. Obtain Cable plans/stats from the various providers. Record drawings/existing safety file to be obtained from site owner if possible. If any high voltage power lines or high pressure gas lines are present contact the relevant service provider to highlight planned work activity. Submit site specific method statement to the service provider for approval. Once method statement approved ensure their presence on site prior to work commencement. Risk assess the area and document the findings on the POWRA. Use cable avoidance tools(CAT) and ensure cables are marked up prior to work. The cable location should be carried out by a trained competent person and there must be a location of underground services trained operative on site at all time when digging near services. Trial holes must be dug to confirm the location of the services before any excavator is used. Where possible services are to be isolated prior to commencing excavations Trained personell (NRSWA) location of underground services, signing lighting and guarding of roadworks) Hand dig where necessary Protection of worksite with barriers and TM setup as required. Adequate PPE Shoring of Excavations/trenchbox to be used where necessary Traffic control equipment available Machinery Guarded correctly	

F-JHG-RA 14 Excavating Near Sub Stations

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

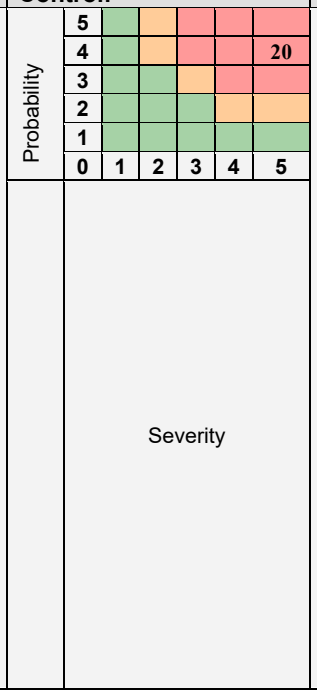
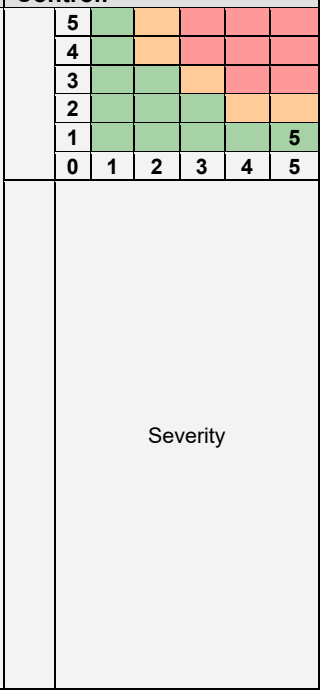
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Live Services Electrocution Fire Explosion	Electric Shock Burns Major injuries Muliple Deaths		The planning drawings issued by the client should include details of any electrical substations in the area. The area inside an electrical substation earth grid is called a hotspot. The station supervisor must be informed of any work happening inside this area and approve relevant method statement. Only trained personnel can work within these areas, training will be carried out by the relevant service provider. Review the site for presence of all live services adjacent to and on the site. This includes sewers, water supplies and underground cables throughout the site. Obtain Cable plans/stats from the various providers. Record drawings/existing safety file to be obtained from site owner if possible. Risk assess the area and document the findings on the POWRA. Use cable avoidance tools(CAT) and ensure cables are marked up prior to work. The cable location should be carried out by a trained competent person and there must be a location of underground services trained operative on site at all time when digging near services. Trial holes must be dug to confirm the location of the services before any excavator is used. Where possible services are to be isolated prior to commencing excavations All works to be carried out in accordance to Safety guidelines of the relevant electrical service provider.	

F-JHG-RA 15 Excavating Near Fuel Stations

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

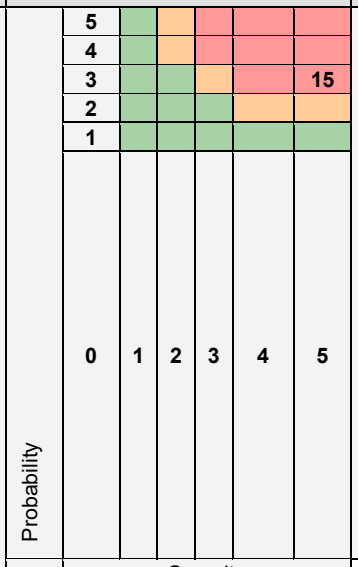
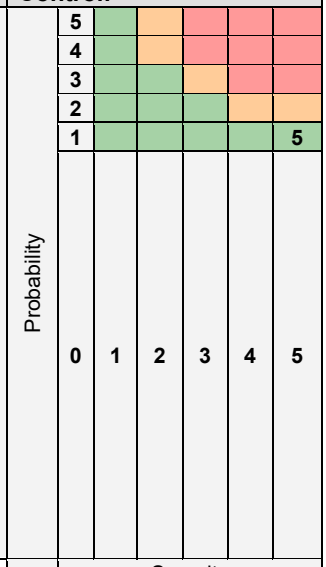
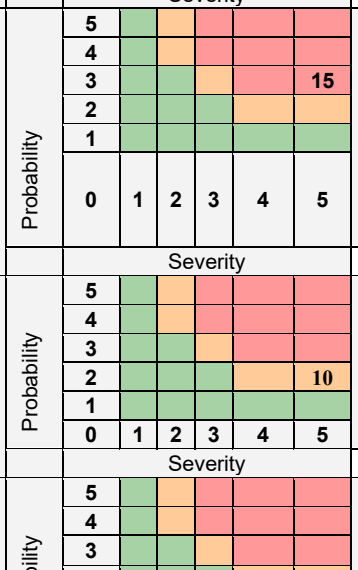
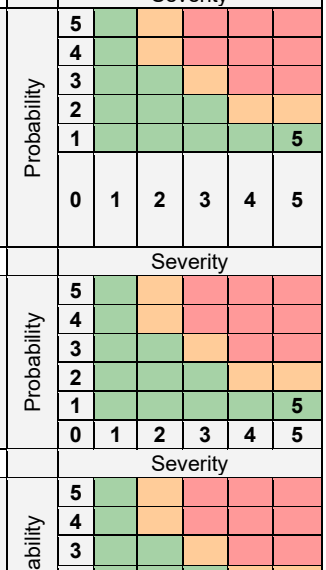
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Contaminated Ground Underground Plant Fire Explosion Access/Egress	Burns Major injuries Multiple Deaths		Risk assess the area and document the findings on the POWRA. Review the site for presence of all live services adjacent to and on the site. This includes sewers, water supplies and underground cables throughout the site. Obtain Cable plans/stats from the various providers. Record drawings/existing safety file to be obtained from site owner if possible. Excavate as far as practicable from the station Liaise with station owners If any High voltage power lines or high pressure gas pipes are present, contact the relevant service provider to highlight planned work activity. Locating equipment used. Keep access/egress clear Sign, lighting and Guarding Use only trained personnel .	

F-JHG-RA 16 Excavations

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

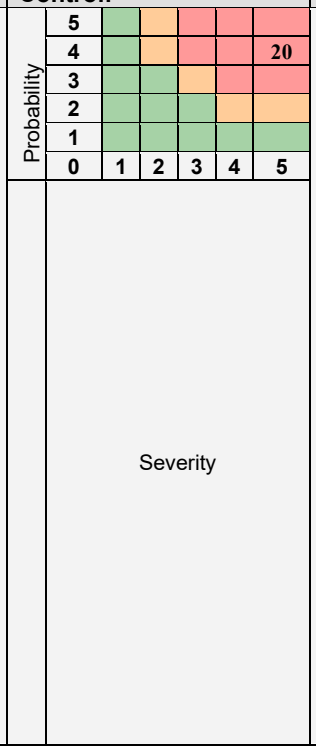
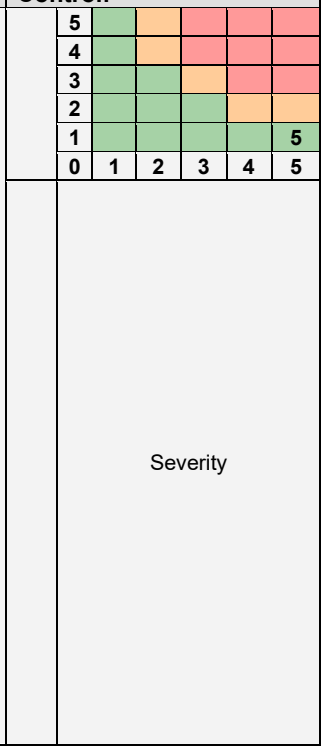
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Collapse of Structure	Injury/ burial of workers		No person is permitted to enter any unsupported excavation more than 1.25m deep unless the sides are properly supported or battered back to a safe angle for the prevailing ground conditions – THIS WILL BE SUBJECT TO FORMAL TEMP WORKS DESIGN & COORDINATION. Shallow trenches may require support in very poor conditions. Where possible the excavation support should be installed from ground level, otherwise precautions must be provided for the safety of staff installing the support. Stability of plant should be considered when working on soft ground conditions. Supervisor to carry out examinations required to be supported which has been open for 7 days, after blasting in the area or if any part of the support has been substantially damaged. These need to be recorded. Material must not be stacked or stored near the edges of excavations.	
Persons falling into excavations	Risk of injury to persons		The safety of public, particularly children or partially sited or disabled persons must be considered when excavations are left open outside working hours. Access and plant must be routed away from edge of excavations Ladders, securely fixed must be provided for access into excavations and to provide a means of egress in event of flooding. Secure barriers must be provided around excavation.	
Striking underground services (refer to F-JHG RA05)	Risk of injury or death		Full consultation must be carried out at all stages with representatives of various service authorities to agree precautions required, and to get information on the location of services. Full adherence to HSG47 and JHG safe digging practices	
Flooding	Risk of injury or possible drowning		Locate and markup any underground services e.g. water mains. Ensure ladder is in place to facilitate exit from trench in event of flooding.	

F-JHG-RA 17 Fibre Cable Blowing

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

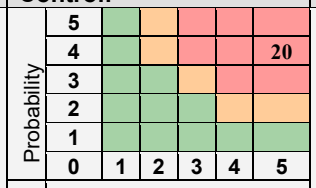
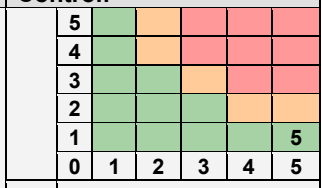
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Manual Handling Entering a confined space Contact with Rat urine Slips, Trips, Falls Mobile and Fixed Plant Cable Trailers (Towing) Slips Trips and Falls Climatic Conditions	Strains Illness Weils disease Asphyxiation Major Injury Death		Instruction and Training for all operatives Good communication Appropriate PPE Confined spaces Risk assessment Use of whip-checks Do not stand astride of cable or rope All plant adequately guarded, safety chains from vehicle to trailers in place. Tools and equipment fit for purpose Stay out of chambers during operations Good Housekeeping Signing, lighting and Guarding Correct lifting techniques	

F-JHG-RA 18 Fibre Optics

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

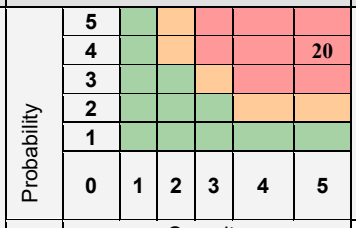
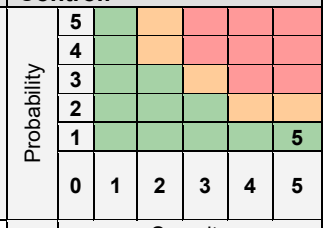
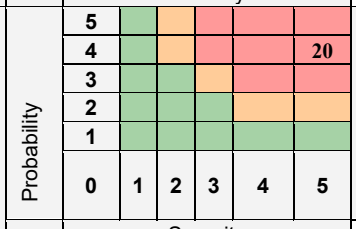
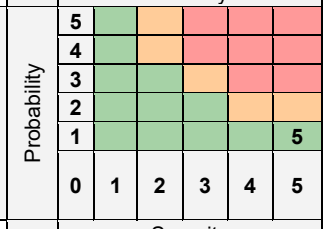
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Radiation Cuts and Bruises	Burns Illness Blindness Skin Disorders		Use trained personnel PPE Gloves and Goggles Isolate light source when handling cables Never view light source unless optical light source is isolated Dispose of fibres correctly Cap all terminated optical fibres Fix correct label for class of light in use Fix hazard warning labels No eating, drinking or smoking Maintain adequate hygiene	

F-JHG-RA 19 Fire

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

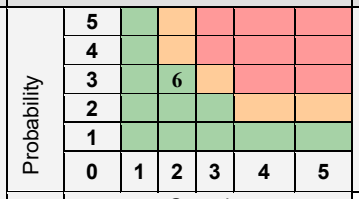
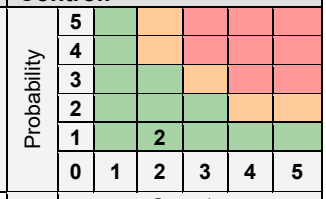
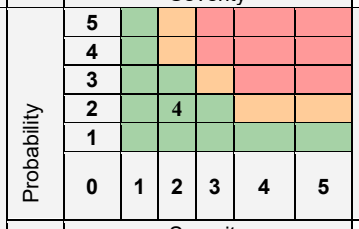
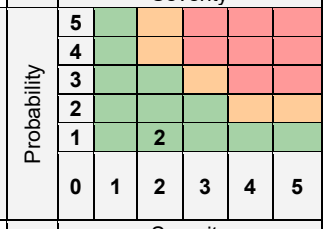
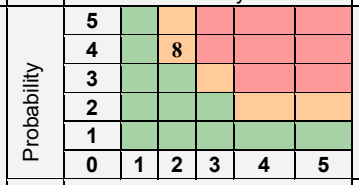
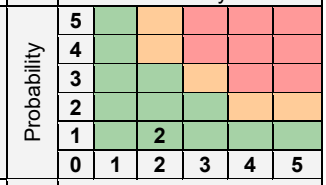
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Fire	Burns Injury or death		Fire extinguishers supplied with all vehicles. Adequate means of escape to be maintained at all times. Keep emergency access clear at all times. All rubbish to be removed on a regular basis. All hot work permit instructions to be followed. No smoking allowed in any place of work. Make staff aware of customer evacuation procedure.	
Fire	Damage to property		Follow good housekeeping procedures. Remove all rubbish at end of each day and when leaving site. Keep emergency exits clear. Ensure any flammable liquids are stored correctly and kept to a minimum on site. Smoking is only allowed in designated areas. Ensure butts are disposed of appropriately.	

F-JHG-RA 20 Hand Tools

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

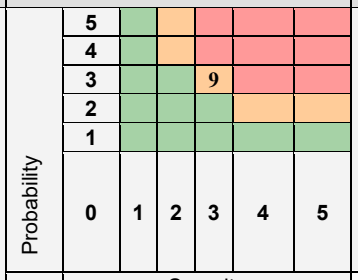
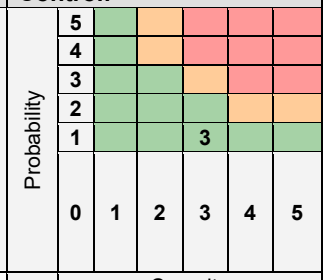
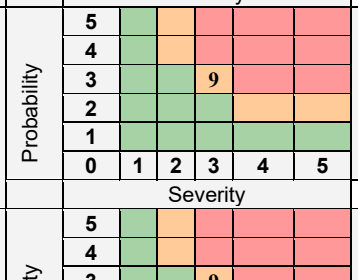
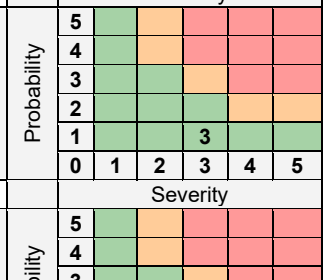
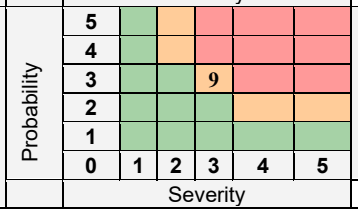
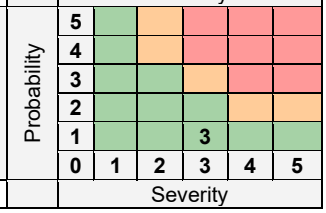
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Splinters and Flying Particles	Injury or death		Training given to staff on the use of suitable tools for the job. Tools are to be well maintained (PAT Testing) PPE in the form of eye protection/gloves etc. to be worn where appropriate. If the tool has sharp blades, always cut away from the body.	
Dust	Injury to persons/ Damage to equipment		Where possible any work generating dust should be removed from a confined/closed space e.g outside the Cab. Eye protection to be worn, dust mask to be worn. Staff with underlying conditions such as Asthma to take particular care. If it is not possible to move away from equipment then sensitive equipment should be temporarily covered	
Noise	Injury to persons		Where appropriate hearing protection should be worn when using tools such as grinders, cutters, drills. Always use tools according to the manufacturers instructions.	

F-JHG-RA 21 Hazardous Substances – Refer to product specific MSDS & COSHH assessment

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

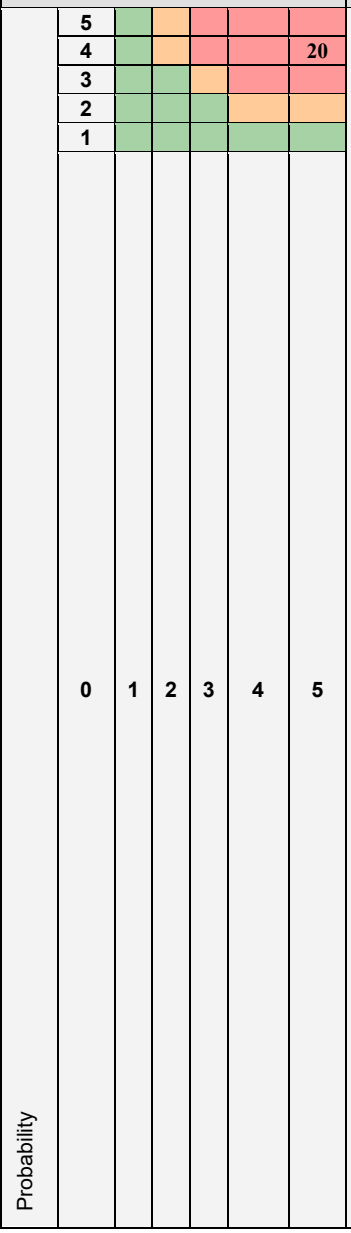
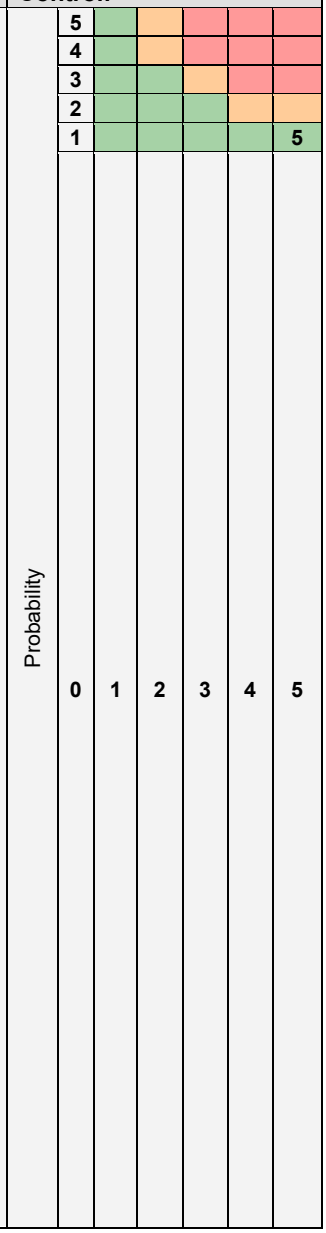
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
External Contact	Corrosive, skin absorption, dermatitis		Details of Hazards associated with chemicals are supplied on Material Safety data Sheets, COSHH assessments or with the product. Chemical products should never be allowed to come into contact with the eyes and in general contact with the skin should be kept to a minimum. Wear protective equipment and clothing as required. Clean all spillages immediately and dispose of waste and used containers properly.	
Inhalation	Gases, Fumes, Dusts, Vapours		Avoid inhalation of chemical vapours or dust, Wear protective equipment as required. Ensure that ventilation where provided is in operation. Clean all spillages immediately and dispose of waste and used containers properly.	
Ingestion	Poisoning		Clean all spillages immediately and dispose of waste and used containers properly. Wear protective equipment and clothing as required. Employ good hygiene techniques.	

F-JHG-RA 22 Highly Flammable Liquids - Refer to product specific MSDS & COSHH assessment

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Fire and explosion	Burns Injury or death Multiple Deaths		All operatives must be adequately trained in the use of highly flammable liquids, i.e. must be aware of the hazardous properties. PPE must be worn as a protective measure, all PPE must be fire resistant A MSDS for the substance in question must be on site and consulted before use All crews that use highly flammable liquids must have suitable and sufficient fire fighting ans suppression equipment available at all times including fire extinguisher and fire blanket If it is required to use highly flammable liquids then the are must ne assessed for the presence of fire components i.e. het or ligh sources. No Smoking or naked flames or extensive wind source. Knowledge of the fire triangle is necessary to assess the area. All fire hazards must be removed before the highly flammable liquids can be used. All this information must be documented in SSWP before any works can commence.  All warning notices must be in place to ensure that no third party in the area may compromise the work area. All highly flammable liquids must be stored in a suitable container, must be suitably labelled and these containers must be stored in a suitable storage location. (when transported the container must be stood upright in a stable location. Containers must never be overfull	

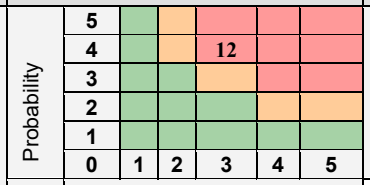
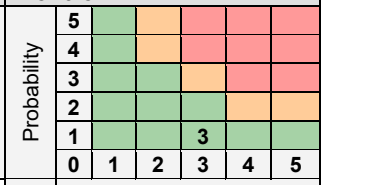
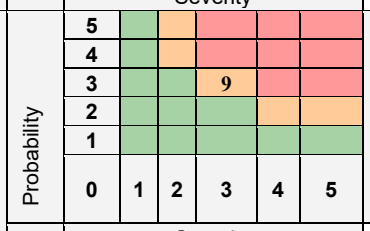
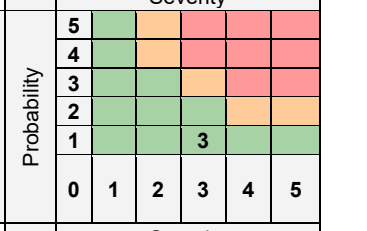
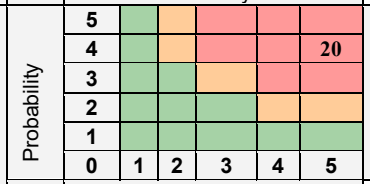
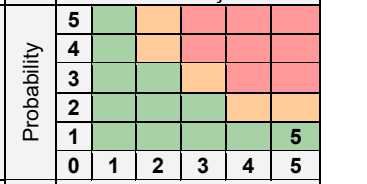
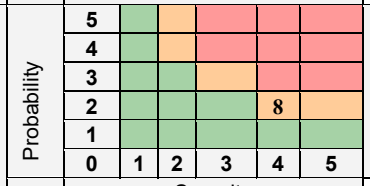
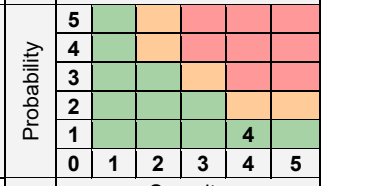
Hazard:	Risk:	Risk Factor Before Control:		Control Measure:	Risk Factor After Control:	
			Severity			Severity

F-JHG-RA 23 House Keeping

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

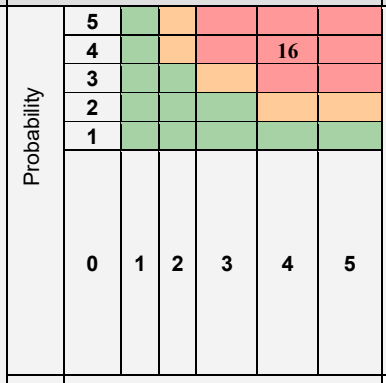
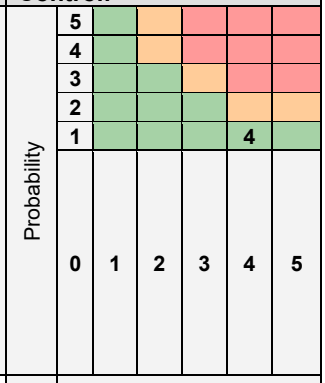
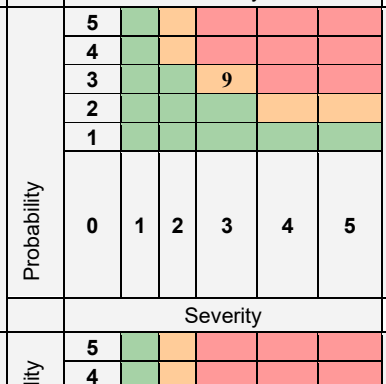
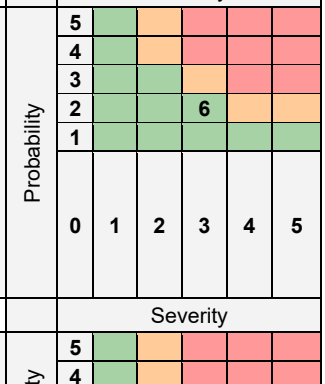
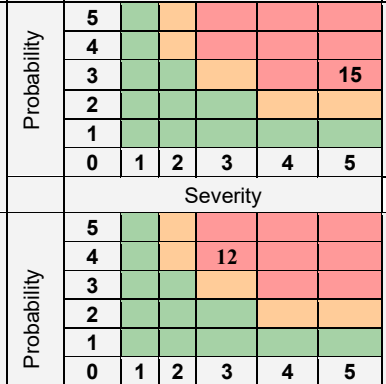
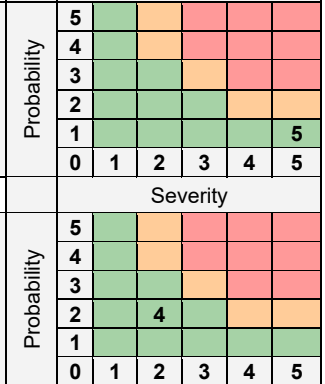
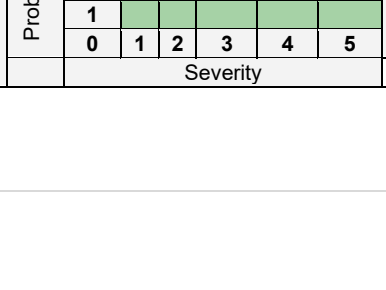
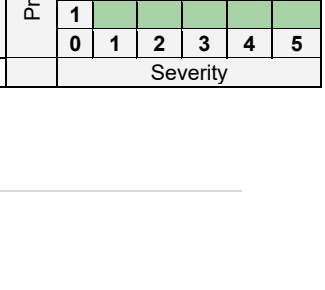
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Slips Trips Falls	Injury to persons		Plan all operations prior to commencement of work. Maintain good housekeeping principles. Remove all waste on a regular basis.	
Stacking Materials	Injury to persons from falling objetcs		Storage areas to be designated, All materials to be stacked in a safe manner. Where possible excess materials to be stored off site. Do not stack items too high. Do not leave items protruding into corridors and walkways. Check objects which may roll, Employee proper manual handling techniques to reduce risk of injury.	
Fire	Injury to persons and damage to property		All waste to removed on a regular basis. Flammable materials to be kept to a minimum on site and stored appropriately. See RA-39 Fire	
Substances	Injury to persons and damage to property		All Materials are to be guarded, covered and or locked up when staff are not on site, or at all times if site is accessible to the public.	

F-JHG-RA 24 Ladders & Stepladders

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

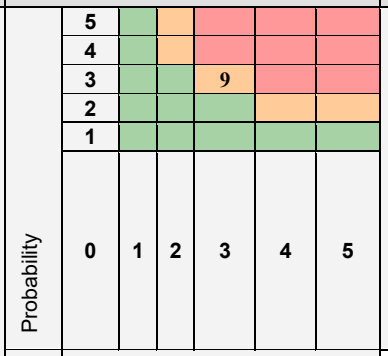
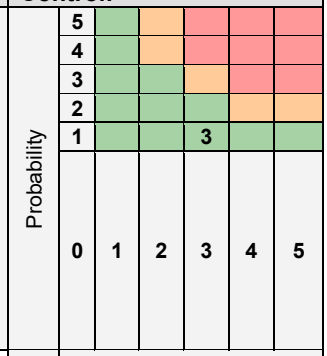
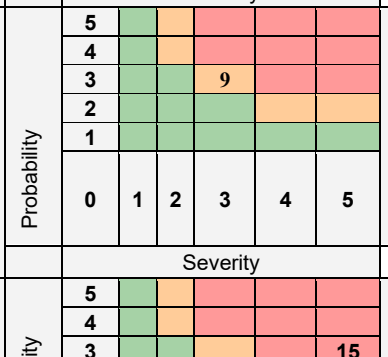
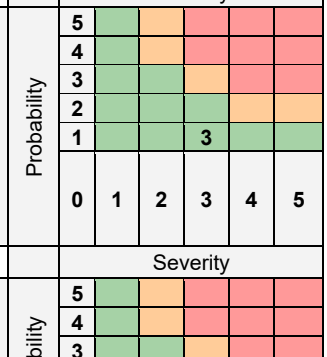
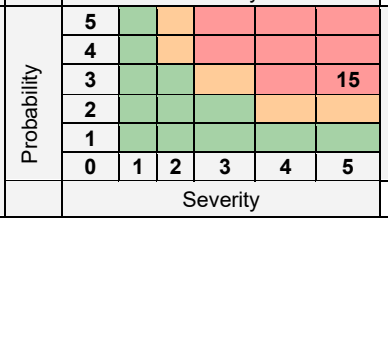
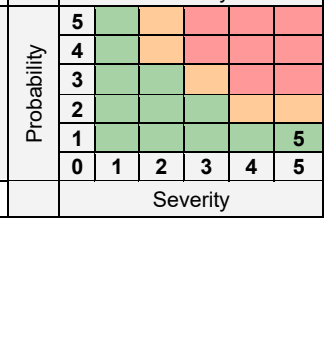
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Failure of ladders/Step ladders	Injury to persons		No Persons to work under the area of a ladder/step ladder. Use the correct ladder length/step ladder height. **Ladders** Put at a correct angle (75 degrees) and secure the ladder. Foot up the ladder if it is not possible to tie securely. Only one person on the ladder at a time. Do not paint or apply other coatings. Only use company owned ladders. Inspect prior to use. Ensure straps are tightened on Apex ladders **Stepladders** Ensure fully open, set on clean, solid ground, inspect prior to use for any defects	
Fall of persons	Injury to persons		Only certified and checked ladders/steps to be used. Ladders/steps to be positioned correctly and secured. Ladders should be tied off. No overreaching – reposition ladder/steps. Do not stand on the top 2 rungs of the ladder. Ladders must extend 1 meter above the place of landing. Always maintain 3 points of contact when using ladders/steps. Short duration only	
Overhead cables	Injury to persons		Check for overhead cables before attempting to position ladder. Do not position ladder adjacent to overhead cables.	
Fall of objects	Injury to persons and damage to property		Use a Carrying bag for tools. All staff working in the vicinity should wear a hard hat. If necessary cordon off the area.	

F-JHG-RA 25 Lifting Operations

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

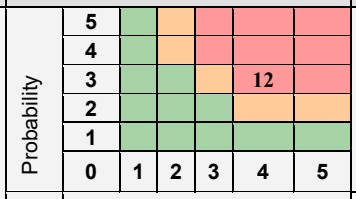
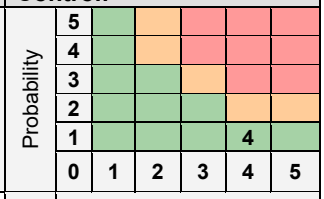
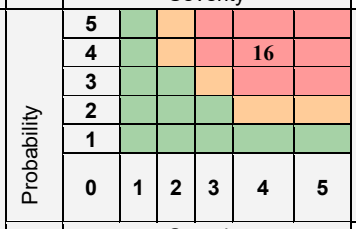
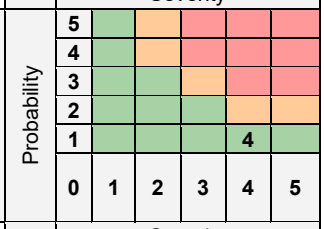
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Toppling of Crane or other lifting device	Injury or Death, Damage to property		Copies of equipment certification to be checked. Only authorised staff to operate equipment – current certification to be available. Where mobile cranes must be used in areas where there are underground ducts, drains, basements or doubt about the bearing capacity of the ground further clarification should be sougfht from the qualified person or additional precautions must be taken. Keep a close eye on local weather. Any defects in equipment must be reported immediately and equipment removed from service.	
Dropping of load	Injury or Death, Damage to property		Keep a close eye on local weather conditions. Only authorised and competent staff may sling loads or give signals. Authorised person must be over 18 yeards of age. All staff working in the vicinity must wear hard hats. Areas where lifting operations are to be carried out should be cleared. Loads must not be carried over by personel. Loose items must be secured or fully covered prior to lifting	
Electrocution	Death or Injury		Ensure the area in which the lifting operations are to be conducted are free from overhead lines. Assess the area within full reach of the proposed lifting equipment.	

F-JHG-RA 26 Lone Working

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

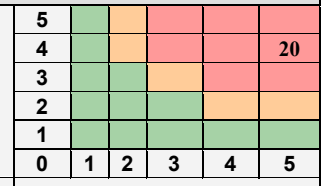
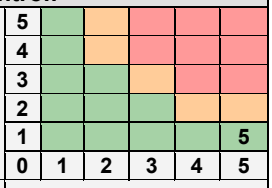
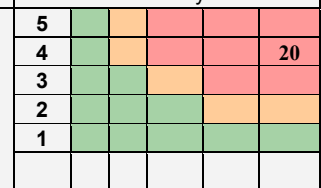
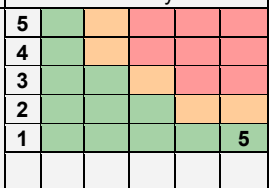
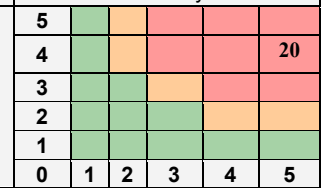
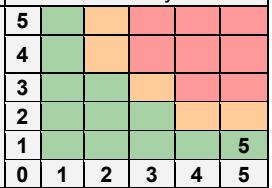
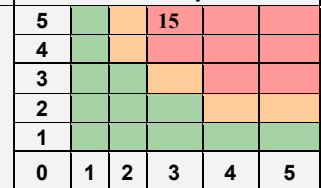
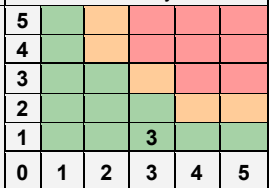
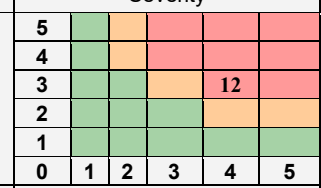
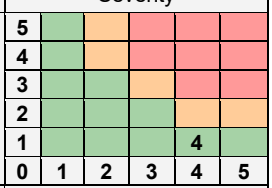
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Injury preventing lone worker summoning help (office)	Injury to persons		Most work to be carried out between 07:00 and 19:00. Means of access/egress to offices are kept clear. Security on premises at night. Lone workers on sites are always to inform supervisor/ colleague if working late and when they are finished.	
Injury preventing lone worker summoning help (office)	Injury to persons		Lone workers on sites are always to inform supervisor/ colleague if working late and when they are finished. No Lone climbing allowed. Work generally to be undertaken between 07:00 and 19:00. Operatives are given adequate instruction and traing on recognising and avoiding potential hazards. No lone working on electricity.	

F-JHG-RA 27 Manual Handling

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

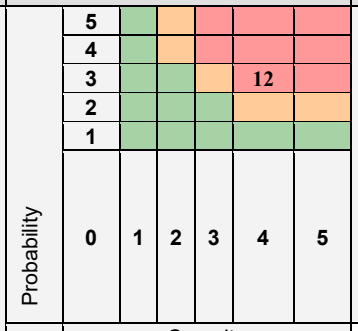
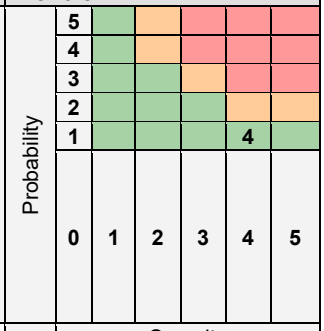
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Incorrect lifting technique	Injury to persons		Manual Handling training given to staff, this includes training personnel to carry out a personal manual handling assessment prior to carrying out any task.	
Lifting excessive weight	Injury to persons		Employee can be supplied with and trained to use an array of lifting equipment and mechanical aids to eliminate manual handling of these loads can include • Sack Barrows • Trolleys • Fork Lift Trucks • Telescopic handlers • Lorry mounted cranes	
Dropping of load or abrasive/uneven surface of load	Injury to persons		Gloves are to be worn if the nature of the load has the possibility to cause injury. Such as rope burns, cuts from sharp edges. All site and stores personnel are issue with protective gloves and footwear.	
Unintentional release of oil or fuel from part of equipment	Risk of lung disease		Plant and equipment must be properly maintained. Once in position all plant and equipment must have drip trays in place to catch any potential spills. Spill kits must be available to staff who must be trained in their use and in the correct procedure for the disposal of such waste	
Unintentional release of oil or fuel from part of equipment	Creation of slip hazard – potential Injury to persons		See above	

F-JHG-RA 28 Noise

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

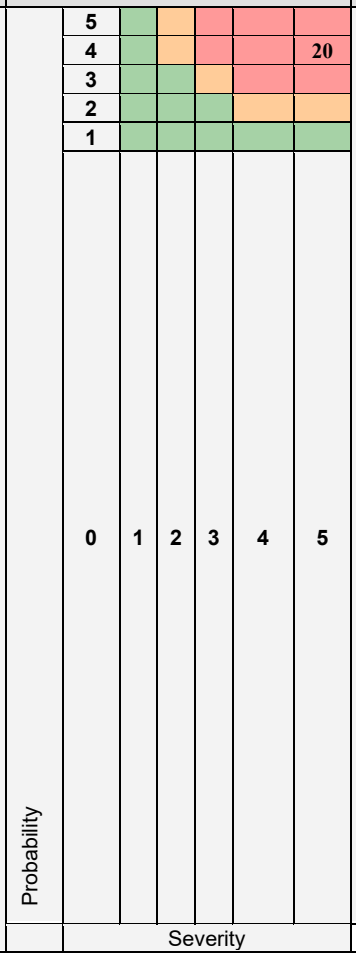
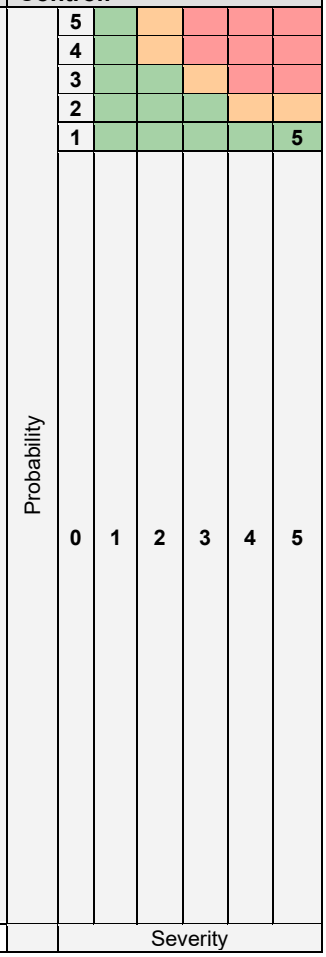
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Excessively loud noises	Injury to persons, including Tinitus, Stress and NIHL		Ear protection to be worn if noise levels excedd 80dB(A). Signage to be posted if we are generating the noise. Be aware of and obey any signs indicating noisy environment. Ensure plant and machinery is well maintained to minimise noise levels. If possible keep noisy equipment away from the work area. Ensure adequate means of communication in noisy environments especially if there are relevant alarm sounds that may need to be heard. Alternative signals to be used	

F-JHG-RA 29 Operating Cable Winch

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

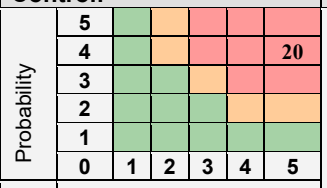
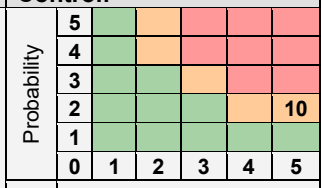
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Winch Drum Wheel Winch Rope handling / breaking Cable snagging	Trapped fingers Cuts and bruises Friction burns Minor injuries		All winches should be operated by a trained competent person. (this training is generally delivered as part of specific contract requirements.) i.e accreditation carried out by client on specific workstream Operators of the winch must wear suitable clothing (no loose clothing that can be caught in the winch) All operators of the winch must wear ear defenders. All components of the winch and associated equipment must be inspected every 6 months, every week and every day before use. Daily inspection must be carried out on all ropes and on guarding of rotating components prior to use. The emergency stop switch/button must be tested to confirm that it will stop the motion of the winch in the case of an emergency once the alarm is raised. It is very important that a high level of communication is practiced during cabling activities. Two way radios must be used if necessary and the noise of the machine may require the use of hand signals to the winch operator. The preferred method must be made clear before any work commences.	

F-JHG-RA 30 Overhead Power Cables

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

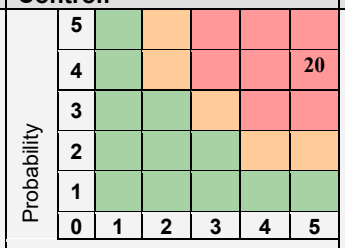
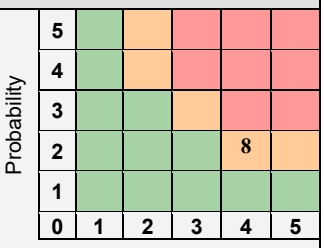
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Electricity	Electric Shock Death		All operators of plant and equipment must be familiar with the code of practice for any activity in close proximity to overhead lines. The code of practice is written in accordance with the service provider (owner of the apparatus ESB\NIE) and the legislative body(HSE/HSA). The code states that the minimum distance of 1m from LV overhead lines and a minimum of 3m from HV overhead lines must be maintained. It is important that all operatives have the knowledge to distinguish between LV and HV. At commencement of work (i.e. use of excavator, MEWP, ladder, etc near overhead lines), A risk assessment must be completed and the details documented on the SSWP. This assessment must include the identification of any overhead cables in the area, including voltage and the distance from the boundary of the work area to the adjacent cables. The exclusion zone must be marked using a cone and warning sign (exclusion zone, danger overhead lines) The works should be planned to ensure the exclusion zones will not be breached. All Machinery working in close proximity to overhead lines must be banked by a trained and competent banksman. If the exclusion zone must be breached then contact your supervisor, the supervisor will then reassess the works area under the general principles of prevention and try to eliminate the hazard by • Changing the works design • Liaising with the owners of lines to organise an outage • Issuing a permit to work near overhead lines under adequate supervision. NB. No work should take place near overhead lines during wet and windy weather conditions – Arcing may occur.	

F-JHG-RA 31 Pole Erection

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

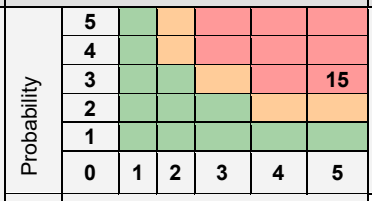
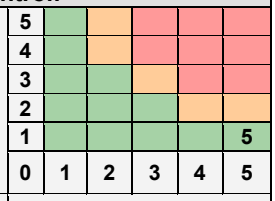
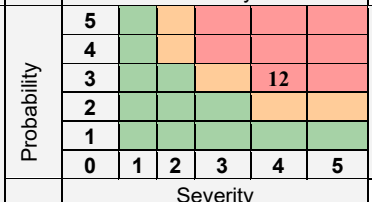
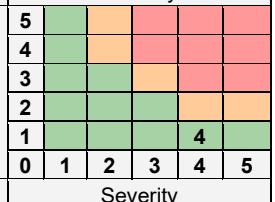
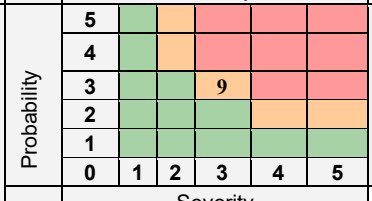
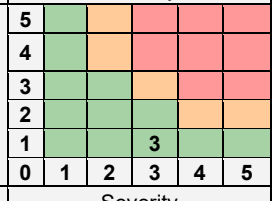
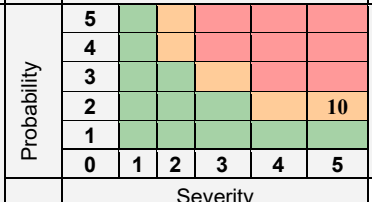
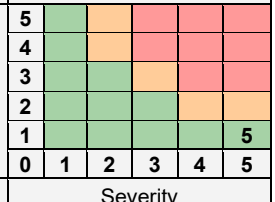
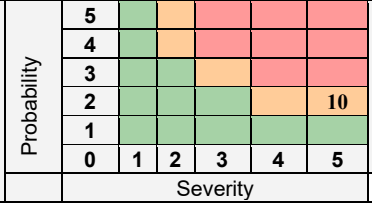
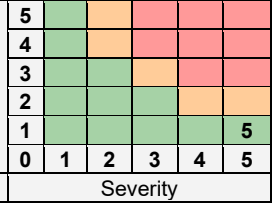
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Falls of persons or equipment. U/g apparatus O/g apparatus	Electric shock Major injury Crushing Death		Trained operatives. Equipment maintained & in good condition. Correct signing & guarding. Use of cable plans & cable locating equipment. Use safety belts or harnesses when working at height. Keep clear of o/h electric cables Work off level ground. Do not lift over pedestrians Stay with lifting platform. Do not exceed SWL	

F-JHG-RA 32 Portable Power Cables

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

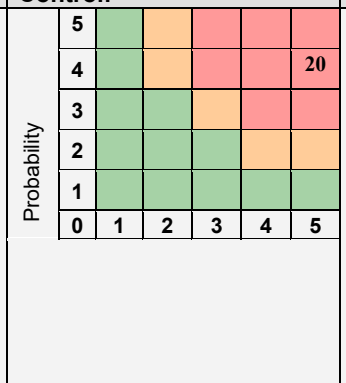
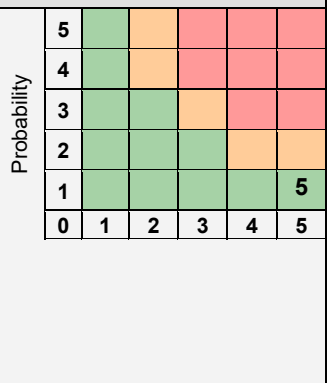
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Electric Shock/ Fire	Death or Injury to persons		PAT Testing required. Equipment inspected prior to use. Only use 110v equipment CTE. Maintain tools in good condition. Ensure tools are unplugged when making adjustments. Ensure the work does not drill through electrical cables or supplies. Do not use in confined spaces.	
Slips Trips and Falls	Injury to persons		Correct routing of cables to avoid water and traffic. Do not leave tools in walkways, route cables to avoid walkways or use cable covers if not possible	
Repetitive strain injury/	Injury to persons		Use the correct tool for the job, Hold tools with loose grip and rotate personnel on long duration jobs.	
Eyes and Hearing injuries	Injury to persons		Ensure chuck keys are removed before use. Protection to be worn for eyes. Assess needs for ear protection.	
Entrapment	Injury to persons		Loose clothing and long hair to be kept clear of all tools	

F-JHG-RA 33 Provision of Temporary Service

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

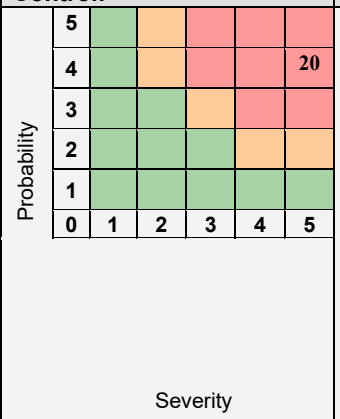
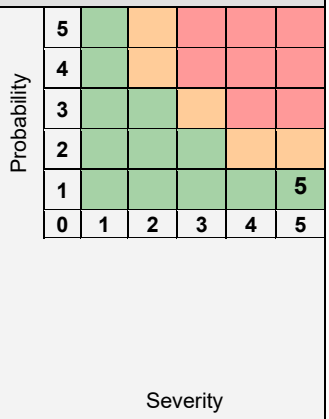
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Electricity Fire	Electric shock Burns Major injury Death		Trained operatives. Plan correctly Use Safe Digging Procedures Ensure equipment is protected against damage and contamination Switchgear and Metering equipment provided with secure accommodation Accessible for emergency Wiring to appropriate standards. Record location of any Underground supply	

F-JHG-RA 34 Sewage

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

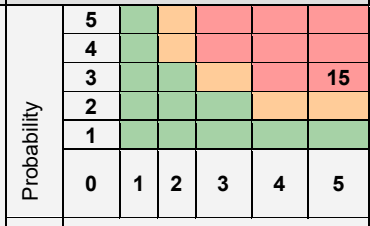
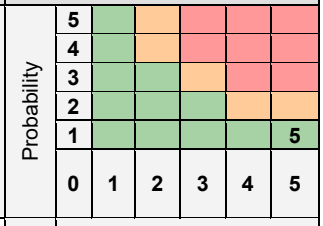
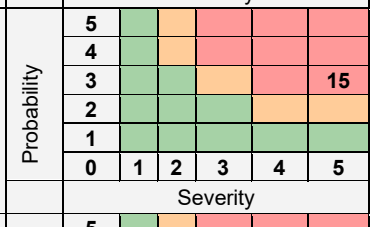
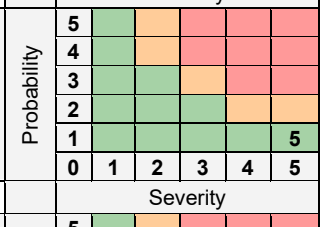
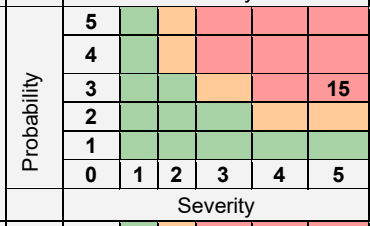
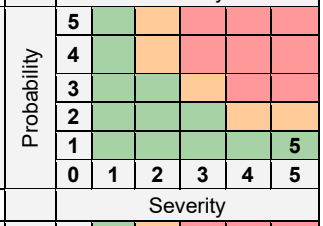
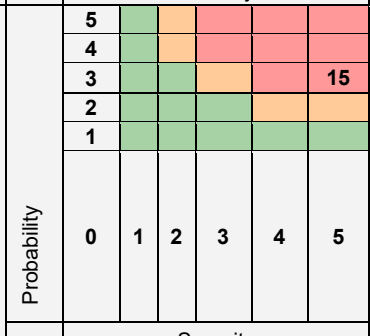
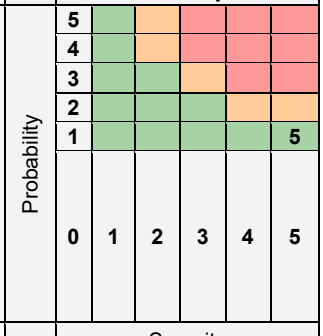
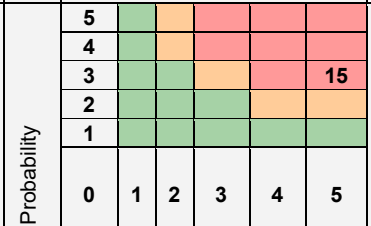
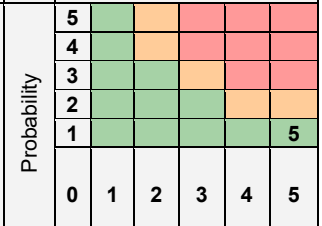
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Electricity Fire	Electric shock Burns Major injury Death		Use of Trained personnel and specific instructions based on operations to be undertaken. Appropriate PPE Provision of washing facilities (showers where necessary) and removal of contaminated clothing Increased supervision ISsue of occupational health warning cards Innoculations against known diseases Avoid rubbing of nose, mouth or eyes Cover up cuts and abrasions	

F-JHG-RA 35 Vibrating Equipment

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

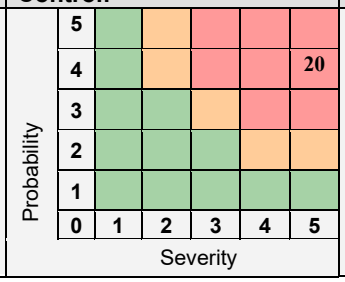
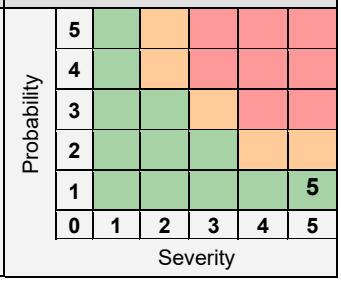
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Hand/Arm/Up per Limb Vibration	Injury to persons		Use trained operatives only. Use equipment in line with manufacturers recommendations. Tools to have isolated anti-vibration handles Use a loose grip Keep hands warm Take regular breaks Rotate users Monitor for HAV systems	
Contact with local services	Death or Injury to persons		Reference F-JHG RA 05	
Noise	Injury to persons		Reference F-JHG RA 28	
Accessing pole mounts above roof level	Death or Injury to persons		Where staff are able to access these without using equipment, they must be secured to the structure on a safety lanyard and fall rope and side chuck. This applies even if the client has identified these poles as climbable structures. Where access is only available using scaffolds or ladders they must be anchored or guyed back to the structure. If safe access methods are not possible then the poles must be accessed and the PM informed.	
Falling Objects	Death or Injury to persons Damage to property		All objects that may fall from edge of structure must be secured. Where this is not possible area below should be coned off and a standby man provided to bar public access. Where this is not possible the work should be programmed for a time when public access is closed off Where glass or fragile roofs are at risk the public should be barred from access and safety nets installed to prevent damage.	

F-JHG-RA 36 Waste Disposal

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

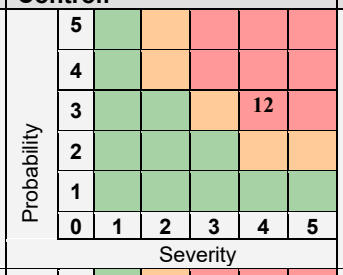
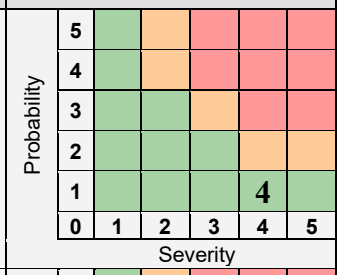
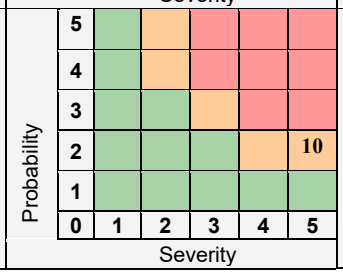
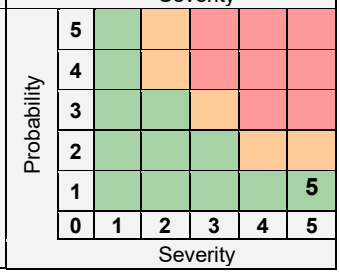
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Biological Waste	Illness and disease		Use of company registered waste carrier. Remove waste from site at end of each day. Special waste to be dealt with by specialist contractor. Use appropriate PPE. Floors and walkways to be kept clear of obstruction, objects and spills. Floors and walkways to be swept and cleaned regularly. Eating allowed only in designated areas.	

F-JHG-RA 37 Weil's Disease (Leptospirosis)

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

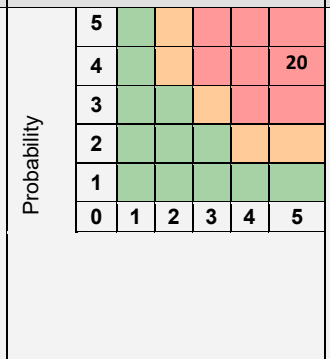
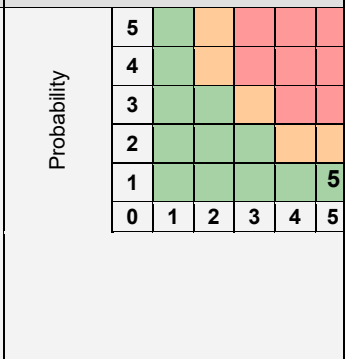
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Contaminated Water	Illness and death		Avoid contact with water, wear protective clothing to reduce exposed skin. Wear waterproof boots and gloves. All cuts to be covered with waterproof dressings. Avoid contact with mouth and face with dirty hands. Do not eat, drink or smoke before clearing hands. Consider engaging specialist contractors	
Weil's Disease (leptospirosis)	Illness and death		Avoid contact with water, wear protective clothing to reduce exposed skin. Wear waterproof boots and gloves. All cuts to be covered with waterproof dressings. Avoid contact with mouth and face with dirty hands. Do not eat, drink or smoke before clearing hands. Dispose of waste properly and regularly. Make yourself aware of the symptoms of the disease.	

F-JHG-RA 38 Working in the hours of Darkness

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

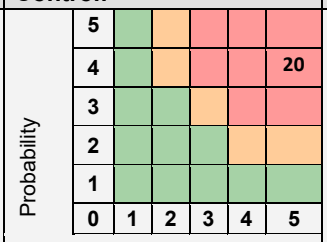
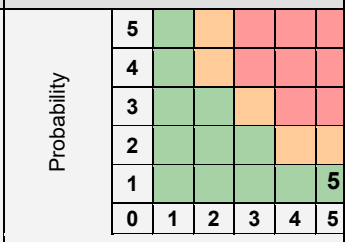
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Insufficient lighting. Moving machinery Road users Vehicles .	Operatives. Serious Injury Death		Consider re-planning works for daylight hours if possible. Use Trained operatives. Work kept to a minimum. Provide adequate lighting on roads and in work area. Ensure good communications. No lone working. Use of suitable PPE i.e. high visibility clothing Effective signing and guarding Don't work outside of limits of task lighting	

F-JHG-RA 39 Working Near Railways

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

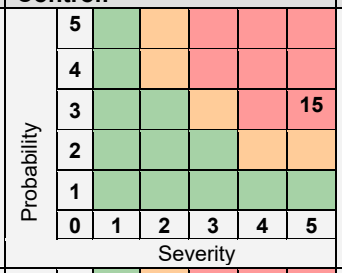
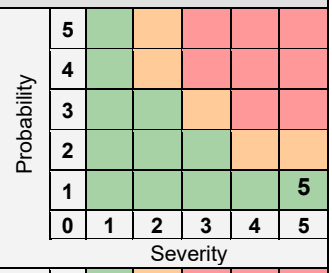
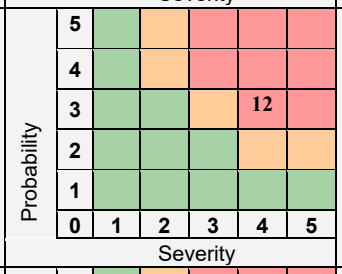
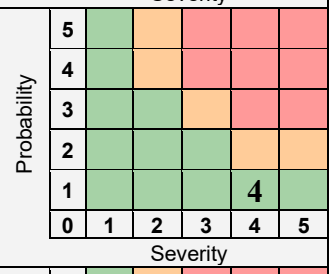
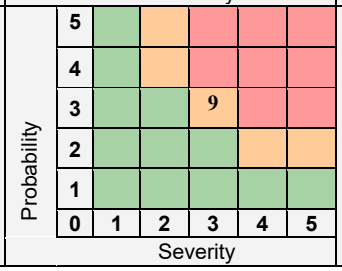
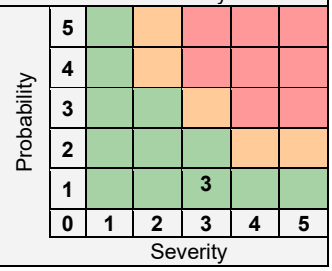
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Impact from rail vehicles Electricity .	Electric Shock Burns Major injury Death		All operatives must be trained in personal track safety (PTS course), which is delivered by the site provider (railway service). All operatives issued with track safety handbook (controlled) or rulebook (training card must be on person while on site) Ensure that no work proceeds on site until the site provider has approved the submitted method statement. All access agreements must be adhered to, regarding access notice etc. Ensure that the approved method statement and SAF (Safe Access Form) is on site before any work commences. Work can only take place under the direct supervision of site provider Track Supervisor Coordinator (TSC) This will be stated on the method statement. Including the name and number of the person to contact. Do not proceed with any activity until the TSC arrives on site to supervise the works. Obey all policies and procedures set out by the TSC Check site for potential hazards and note on a POWRA and inform crew regarding potential hazard. Rail approved high visibility clothing worn (orange visibility overalls) Management of working hours must be in accordance to site provider supervision.	

F-JHG-RA 40 Delivery of Materials to Site

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

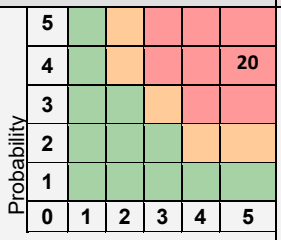
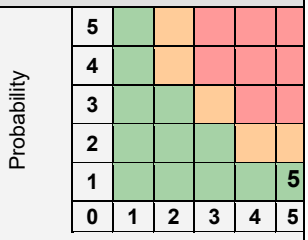
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Overhead Cables	Injury or death		Identify any overhead cables at time of site survey. Ensure delivery method statement is available. Use goalposts near overhead powerlines. Minimise the use of cranes/ MEWPs etc if possible.	
Impact/ Crushing	Injury or death		Impose speed limits on site. Reverse plant only when guided by a Plant Vehicle look out (local sites). Minimise reversing. Plan a one way system if possible. Set up pedestrian walkways. Place barriers around delivery area if possible. High visibility clothing to be worn.	
Manual Handling	Injury or death		*Reference F-JHG RA 27 Manual Handling*	

F-JHG-RA 41 Drilling Through Walls (Core drilling)

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

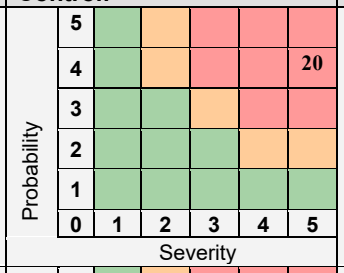
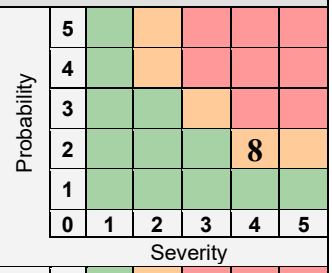
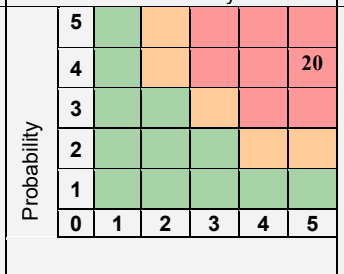
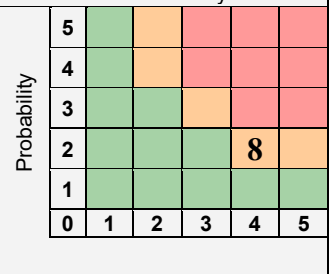
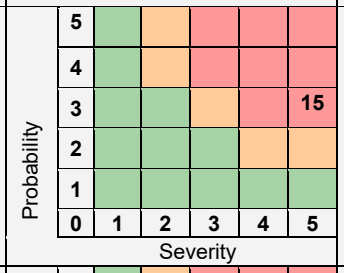
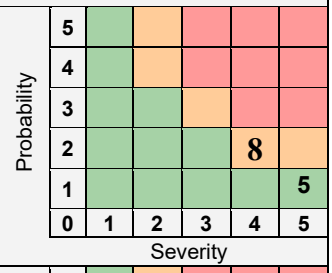
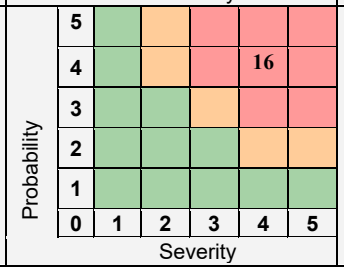
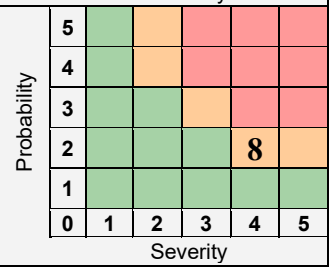
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Electricity Dust/ Debris/ Slurry . Moving Mechanical Parts	Electric Shock HAVS Lung Disease Major injury Death		Drilling through walls to be completed using a core drill. The core drill will only be operated by a trained and competent person. A risk assessment of the site will be carried out before any work commences; all information will be documented on a POWRA. Both sides of the wall will be exposed to investigate if there are any services present. The first step is to determine what possible services may be supplying the building/joint box. If these services can be proving somewhere else (chased in another wall) then it will lessen the chance of the services been present on the wall to be drilled. Both sides of the wall will be marked with the proposed drilling location. The areas will then be scanned using the CAT to see if there are any services present. Then the building drawings of the present services will be consulted to prove the absence of any cables. An investigation for the presence of asbestos must be carried out. If it is thought that asbestos may be present, then works must stop immediately. A suitable method of dust extraction must be used, water to dampen down the dust is suitable for outdoor works, and extractor fans can be used for indoor works. All machinery must only be used with the guards on, all electrical operated equipment must be PAT tested. Operators of Core Drills must use adequate PPE, including dust masks. If it is necessary for other operatives to be present then they too must wear dust masks.	

F-JHG-RA 42 MEWP'S

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

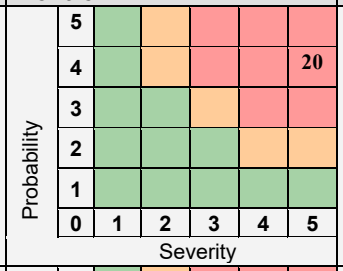
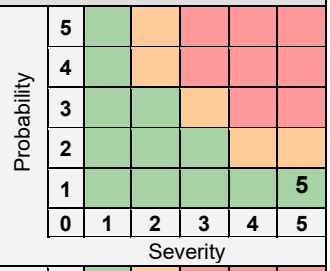
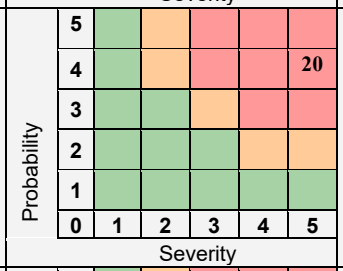
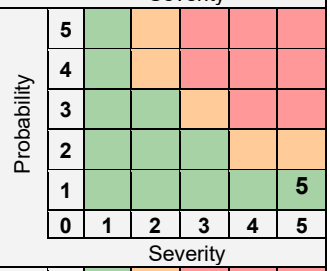
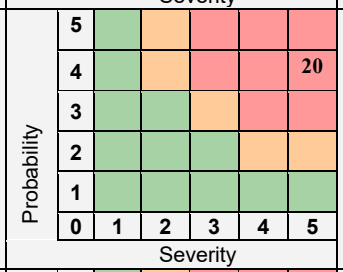
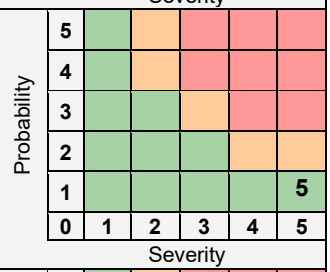
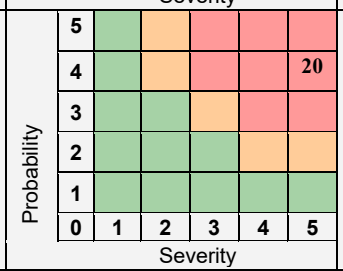
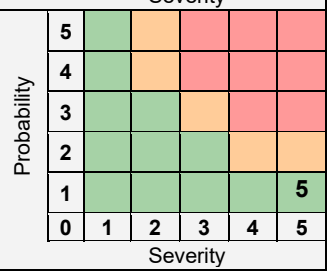
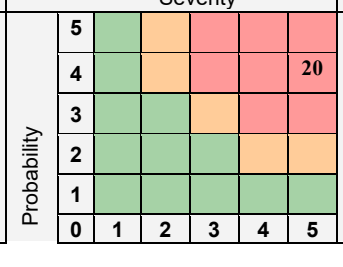
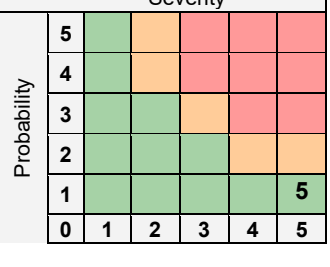
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Incompetent operator	Injury or death		The person in charge of works (Supervisor/PDM) must check the operator's documentation to ensure that he holds a valid competency based qualification, before the MEWP is used.	
Adverse weather conditions	Injury or death		The Supervisor/PDM will ensure that the MEWP operator carries out a windspeed check using an anemometer. The MEWP contractor will usually have their own limits above which the MEWP cannot be used, however even if below these levels the team leader has the final decision on whether it is safe to carry out the task or not. Where lightning is a risk, all work must cease immediately and all climbers are to descend to ground level. No work is to be carried out until the Supervisor/PDM is satisfied risk has passed.	
Contact with moving vehjcles/ pedestrians	Injury or Deatgh		*The work area is to be cordoned off with suitable and sufficient barriers to eliminate unauthorised entry of other persons to the work area. Where work is carried out near to or on the roadside, appropriate warning signs must be displayed and barriers put in place.*	
Working with hand tools/ installing equipment at height	Falling Objects		*All objects that could fall from the platform should where possible be secured. Where this is not possible the area below should be cordoned off. All persons on site must also be made aware of persons working aloft and when working on the ground staff should not work directly below persons working above. Safety helmets must be worn by all persons on site.*	

F-JHG-RA 43 Risk to Members of the Public

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Positioning of plant and equipment	Injury or death		Plant is immobilised and made safe at completion of work, to prevent unauthorised operation. Ensure cable drums are placed in such a position that they cannot be rolled down slopes on site. Where possible drums should not be left on site. Spindles and battens removed from site at end of day.	
Falling Objects from structure	Injury or death		All objects that may fall from edge of structure must be secured. Where this is not possible area below should be coned off and a standby man provided to bar public access. Where this is not possible the work should be programmed for a time when public access is closed off.	
Access in built up areas	Injury or Death		Sites must be adequately signed to ensure the public third parties and traffic are aware of the work. Where sites are not completed in one working day they must be securely fenced to prevent unauthorised access. Staff must keep constant vigil to ensure that work area is not encroached.	
Access along public highways	Injury or Death		Signage and Barriers required. The senior person in a gang must be trained in these requirements. Plant must not encroach onto the public highway without road sections being closed.	
Areas of Public access	Injury or Death		*Work areas must be cordoned off to prevent access by unauthorised persons. If necessary to ensure no access a gang member must be instructed to guide the public or third parties away from the work area. If the safety of the public or third parties cannot be assured then work shall cease until a system is in place which can assure their safety.*	

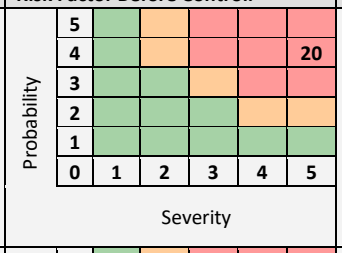
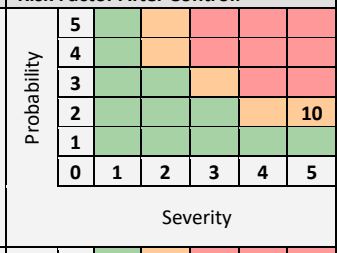
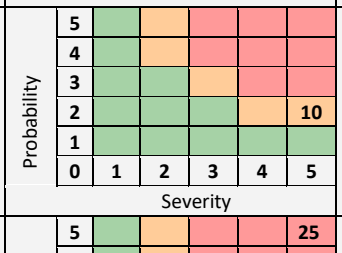
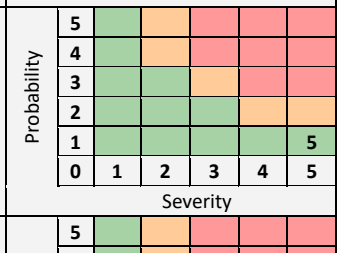
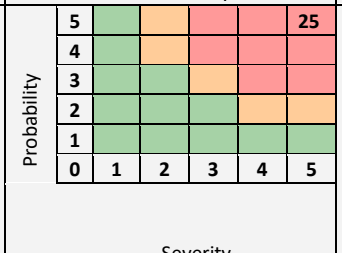
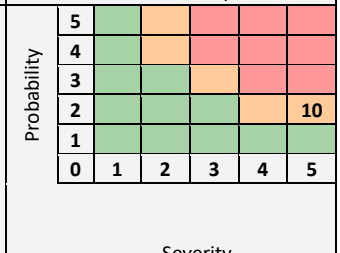
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
		Severity		Severity

F-JHG-RA 44 Weather Conditions

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

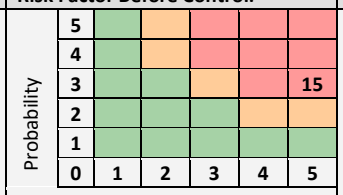
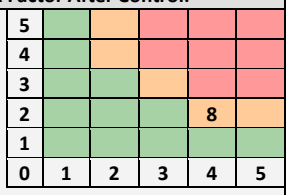
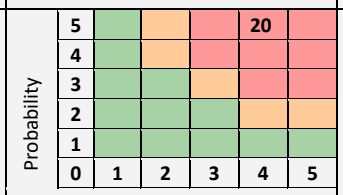
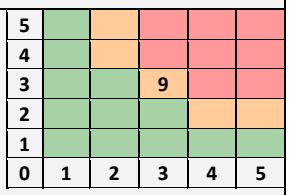
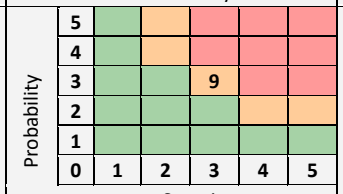
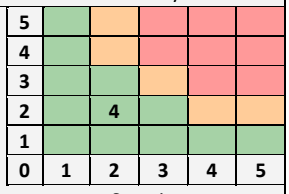
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Extreme cold weather conditions	Injury or death		Monitor local weather on an ongoing basis. No Climbing in strong or gusting winds, heavy or persistent rain. During times of poor visibility or ice or snow. Appropriate PPE and clothing should be worn. Remain within visual and or auditory contact at all times. Be aware of initial presentation of symptoms of hypothermia. Learn to recognise these in others.	
Extreme Hot weather conditions	Injury or death		Wear appropriate sun screen. Wear head protection. Drink plenty of fluids during the course of the day. Be aware the breeze may also increase dehydration. Move to shade and stop work if you start to feel lightheaded.	
Lightning Strike	Injury or Death		Take due care of weather forecast in area concerned during the development of the work schedule. Evaluate weather conditions at site. Constant evaluation of wether conditions when climbing, incoming rain or storms etc. only competent and experienced supervisory staff and workforce to be utilised for this type of work. No work will be permitted on or near to a towers location during athreat from lightning-contact operational control of electricity supply body.	

F-JHG-RA 45 Safe Use of Harness

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

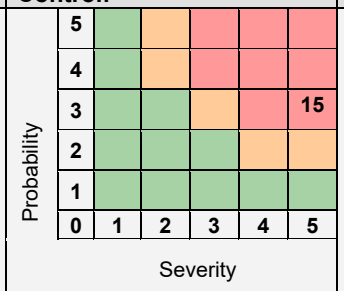
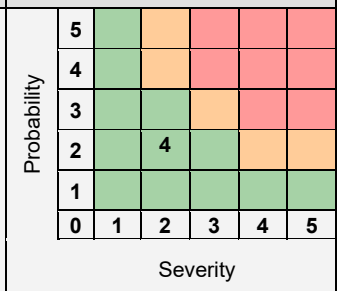
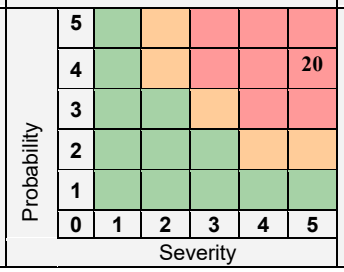
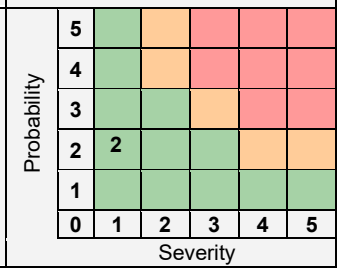
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Deterioration of material	Injury or death		Safety harness are issued to all staff who are trained in their use and in regular inspection of the harness. Harnesses must not be tampered with in any way nor should any material be put on the harness (permanent marker) All persons issued with a harness must have completed climbing training which also includes care of your equipment. Harness must be stored in a dry area and kept away from any chemicals.	
Cleansing of Harness	Injury or death		Harness must be kept clean and free from dirt via being washed in nothing stronger than luke warm soapy water. No chemicals are permitted to be used to clean climbing equipment.	
Adverse weather conditions	Risk of harness not providing required protection		If the harness has been exposed to severe weather conditions it must be left hung in a dry area to ensure that it is fully dry before next use and to prevent the build up of mould.	

F-JHG-RA 46 Falling Objects

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

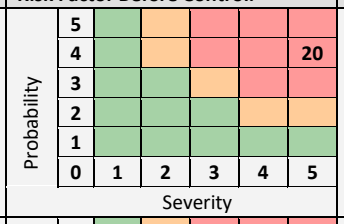
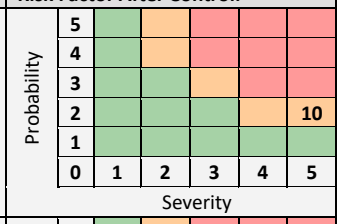
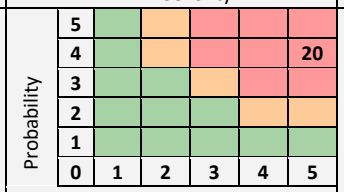
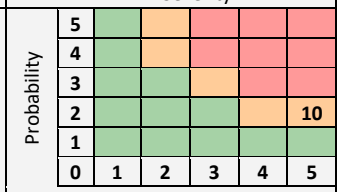
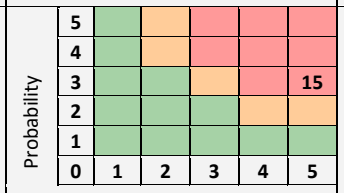
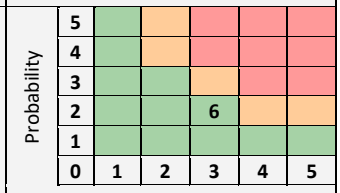
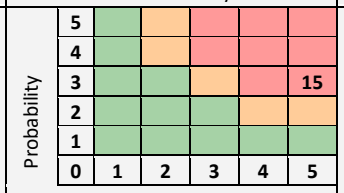
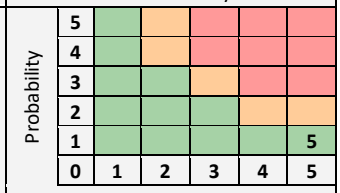
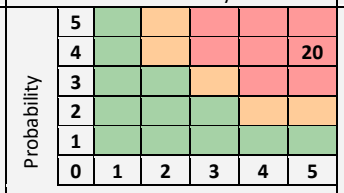
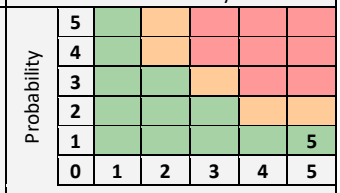
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Protection of public from falling objects	Injury or death		All objects that may fall from edge of structure must be secured. Where this is not possible area below should be coned off and a standby man provided to bar public access. Where this is not possible the work should be programmed for a time when public access is closed off. Where glass or fragile roofs are at risk the public should be barred from access and safety nets installed to prevent damage	
Working above public access areas	Injury or death		The area below must be coned off and a stand by man provided to bar public access. Where this is not possible the work should be programmed for a time when public access is closed off. Where glass or fragile roofs are at risk the public should be barred from access and safety nets installed to prevent damage	

F-JHG-RA 47 Banksman for MEWP

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

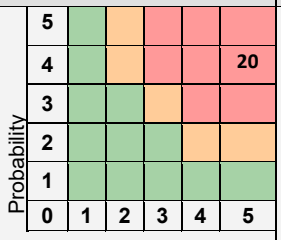
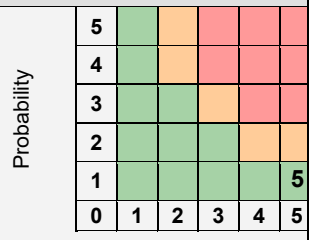
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Incompetent Banksman	Death or injury		The Person in charge of works (Supervisor/PDM) must check the banksman documentation to ensure that he holds a valid competency based qualification relevant to that work scope prior to commencement of work.	
Adverse weather conditions	Death or injury		The Supervisor/PDM will ensure that the MEWP operator carries out a windspeed check using an anemometer. The MEWP contractor will usually have their own limits above which the MEWP cannot be used, however even if below these levels the team leader has the final decision on whether it is safe to carry out the task or not. Where lightning is a risk, all work must cease immediately and all climbers are to descend to ground level. No work is to be carried out until the PICW is satisfied risk has passed.	
Working Adjacent to Highways, pathways and pedestrian Access	Death or injury		*The work area is to be cordoned off with suitable and sufficient barriers to eliminate unauthorised entry of other persons to the work area. Where work is carried out near to or on the roadside, appropriate warning signs must be displayed, and barriers put in place.*	
Contact with plant/ equipment/ machinery	Death or injury Damage to property		Banksman must be fully trained and certified to carry out his duties. He must ensure he considers all surrounding materials and ensure that any material that poses a threat is removed or the machine is relocated.	
Falling while signalling at height	Death or injury		Safety harnesses, lanyards, and adjustable loop lanyards are issued to all climbing personnel. All personnel are trained in their use and to carry out regular inspections. All staff on site must assess the equipment to be used before attempting to access a structure. All personnel when working in the confines of the platform must be attached at all times. To the designated safety anchor point. Under no circumstances must guard rails be stood on to achieve extra height.	

F-JHG-RA 48 Working Near Water

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

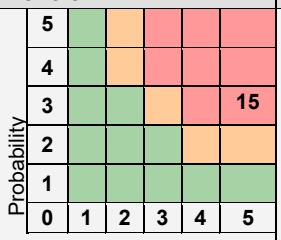
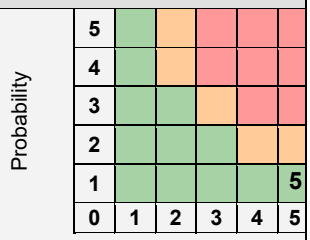
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Deep water	Drowning Death		If during a risk assessment of the work area it is discovered that works are taking place near the deep waters edge (within 3m) then contact your supervisor for further instruction. As it may be necessary to redesign the job. If shallow waters are within 3m of the work area, then the water's edge must be barriered off. All works must be carried out in the presence of your supervisor A safety briefing on the RAMS/POWRA must be communicated to all on site Adequate time must be assigned to the job to ensure that all works are carried out with the required caution Adequate PPE must be used	

F-JHG-RA 49 Handling Creosote - Refer to product specific MSDS & COSHH assessment

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

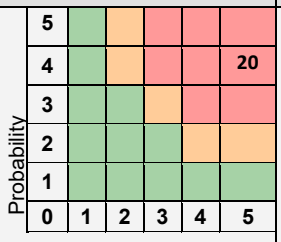
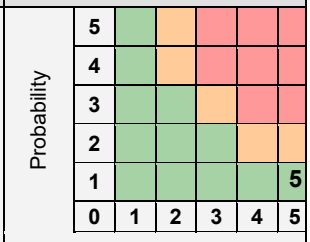
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Creosote (wood treatment)	Irritation to skin/ eyes Poisonous if ingested May cause irritation to lungs if inhaled		Wear gloves when handling poles covered in creosote, minimise handling where possible. Observe good hygiene and safety practices when handling this product. Creosote and wood dust are classed as Carcinogens. Wear clothing closed at the neck, long sleeves and non-porous type gloves. Industrial type resistant heavy duty flexible gloves required for prolonged or frequent contact. For dusty operations/ areas wear necessary resistant apparel including require head hand and safety footwear. Wear tightly woven overalls or long sleeved shirts and long pants. A complete soap and water shower at the end of each work day is recommended. Avoid breathing vapors or sawdust, ventilate work area, wear respirator, goggles or face shield. Ventilation necessary only if material handling generates dust. Provide sufficient general/ local exhaust ventilation in pattern/ volume to control inhalation exposures below current exposure limits and areas below explosive dust concentrations. Showering and clothing change at the end of each work shift is strongly recommended. If oily preservatives / sawdust soil clothes, launder work clothing separately from house clothing before reuse. A complete change of work clothes should be used each day if contaminated. Wherever possible sawing machining treated wood should be performed outdoors to avoid accumulation of airborne treated wood sawdust. Urethane/epoxy/shellac is acceptable sealer for Creosote treated wood. Coal tar pitch and coal tar pitch emulsions are effective sealers for creosote treated wood block flooring.	

F-JHG-RA 50 Handling Resin - Refer to product specific MSDS & COSHH assessment

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

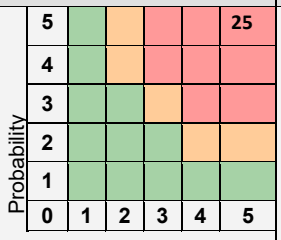
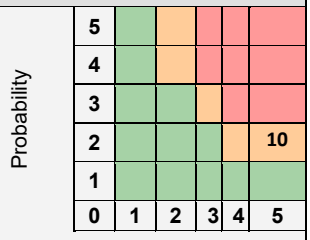
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Resin (substance used to seal cables in joints)	Irritation to eyes/ skin Poisonous if ingested		**Warning:** Under no circumstances should the resin be left tightly capped after mixing. Steps should be taken to avoid the entry of water since this can cause the resin to foam. Expiry dates of resin to be checked before use. Staff should adhere to a rigid hygiene policy Make sure the area is well ventilated Follow the manufacturers instructions on the use of resin packs Use suitable protective clothing when handling resin packs, including safety goggles, disposable gloves which are impermeable to the resin and/or barrier cream No smoking in the work areas No Consumption of food or drink in the work area Hands should be cleaned thoroughly after the work has been completed and if contamination has occurred during work. Ensure cuts and scratches are covered with a waterproof dressing before handling resin packs. Replace the skins natural oils with a good hand cream Any person showing symptoms of illness should cease using the resin pack immediately and seek medical attention. Wear your personal protective clothing – wash after use Resin tins to be disposed on in ASD.	

F-JHG-RA 51 Traffic Management

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

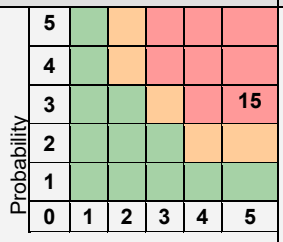
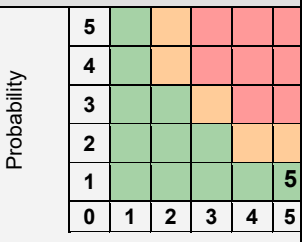
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Working near live traffic	Risk of contact with live traffic to workers or pedestrians resulting in Death or serious injury Risk of death or serious injury to drivers Minor injuries Damage of third party vehicles		During site survey assess the job by carrying out a risk assessment, including site measurements subject to chapter 8, traffic count, site sensitivity (i.e close to schools, hospitals etc) if too busy then check to see if job can be redesigned. It this is not the case contact site provider to confirm off peak lane closure times. If the traffic management is too complex to be managed in house then an expert traffic management compound must be used. If the traffic management can be handled in house then the survey information must be submitted to back office to draft up a traffic management design drawing. Once the design drawing is prepared it must be signed off by the supervisor. All traffic management must be setup by trained competent person(SLG) Stop the vehicle in a safe place switching on the roof mounted amber beacon. Ensure the required HV clothing and other protective equipment Risk assess the area and document on SSWP. If you can you must park your vehicle off road. If you cant you must first of all protect it from traffic going past by placing a keep right sign at the outside corner of the vehicle along with a traffic cone. Place the roadworks ahead sign at the correct distance as indicated in the traffic management plan. Work back towards the site placing more signs as necessary to keeping on the verge or foot way if possible. If you are on 2-way road repeat this procedure and place signs for traffic going in the opposite direction. If portable traffic signals or stop/go boards are needed start using them now Establish the safety zone by placing traffic cones around the work area always face the traffic when setting out cones commencing from the kerb with the lead in taper Complete the coning round the works leaving enough room for the working space Place keep right signs at the beginning and end of the lead in taper Place traffic barriers arounsdthe work space Place pedestrian access ways where appropriate Upon completion of work remove cones, barriers, signs in revers of the procedure outlined here. **ALL TRAFFIC MANAGEMENT SYSTEMS ARE TO BE ONLY SET UP/RE-LOCATED/REMOVED BY COMPETENT AND APPROVED TM OPERATIVES ONLY**	

F-JHG-RA 52 Storage & Transportation of Gas Cylinders

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

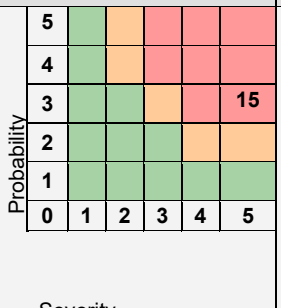
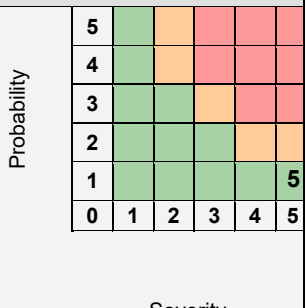
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Gas	Risk of explosion causing death, serious injuries or minor injuries		<u>Carrying and collecting Gas Cylinders</u> If possible carry cylinders in open vehicles or open trailers. If cylinders have to be carried in closed vans, ensure good ventilation at all times. If the load compartment is not separated from the driver and well ventilated do NOT carry toxic gas cylinders (those carrying a toxic gas label and having yellow as colour of cylinder) All cylinders are checked by BOC gases after filling for leak tightness. On loading the cylinder into your vehicle check again that there is no leakage of gas. Secure cylinders properly so that they cannot move in transit and do not project beyond the vehicle. Carry propane cylinders upright. Do not carry flammable cylinders in the same compartments as toxic gas cylinders. Never transport Cylinders with equipment attached to valves unless the cylinder is properly secured, and valve turned off. Do not smoke while carrying cylinders inside cars or vans Unload the cylinders as soon as possible and move to a secure well ventilated storage area. Do not use cylinders in a closed vehicle. If at any time you suspect a cylinder is leaking park the vehicle in a safe place, investigate the fault and if necessary, ring BOC gases for advice. <u>Safe Storage of Gas Cylinders</u> It is best to store compressed gas cylinders in the open, in a security fenced compound but with some weather protection. Within the storage areas oxygen cylinders should be stored well away from fuel gases. i.e. dissolved acetylene, LPG, Hydrogen etc. Full cylinders should be stored separately from the empties and empty oxygen cylinders should be stored separately from Fuel Gas cylinders. Other products should not be stored in the gas storage area, particularly oil or corrosive liquids. It is best to store all cylinders upright, taking steps to ensure that they are secured to prevent them from falling Acetylene and Propane must never be stacked horizontally in storage or in use. Your storage arrangements should ensure adequate turnaround of stock.	

F-JHG-RA 53 Wildlife Awareness

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

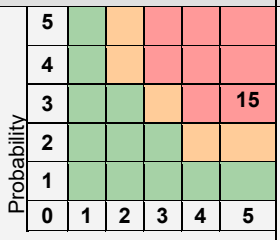
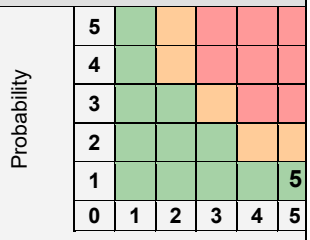
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Wildlife	Tree Death Land degradation		Under the Wildlife and Countryside Act, it's an offense to kill, injure or disturb any wildlife species or their habitat. A safety briefing on the SSWP must be communicated to all on site Adequate time must be assigned to the job to ensure that all works are carried out with the required caution Immediate report to supervisor and further instructions before proceeding the works.	

F-JHG-RA 54 Working Near Trees

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

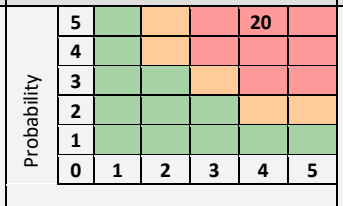
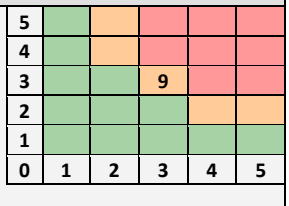
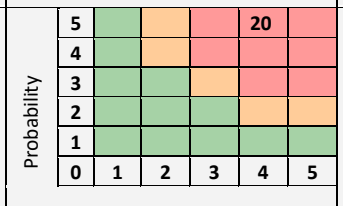
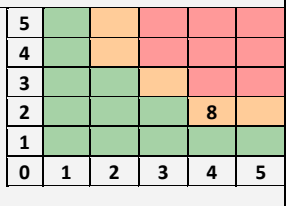
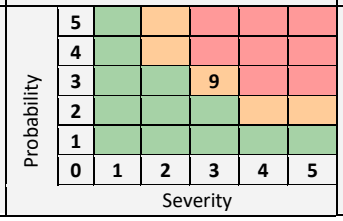
Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Tree roots	Tree Death Land degradation		If during a risk assessment of the work area it is discovered that works are taking place near trees (within 3m) then contact your supervisor for further instruction. As it may be necessary to redesign the job. No Dig Zone - 1 meter from the trunk: Excavation of any kind must not be undertaken within this zone unless in exceptional circumstances Hand Dig Zone - Area under the tree canopy (Half the height of the tree/ 12x trunk diameter, 4x trunk circumference, whichever is the largest). A safety briefing on the SSWP must be communicated to all on site Adequate time must be assigned to the job to ensure that all works are carried out with the required caution Adequate PPE must be used	

F-JHG-RA 55 Pollution control

Probability		Severity		
5	Very Likely	5	Fatality	Major ENV Incident
4	Likely	4	Major Injury	Severe Damage
3	Probable	3	Medical Injury	Damage
2	Possible	2	Minor Injury	Small Impact
1	Very Unlikely	1	No Injury	No Env Impact

Risk Factor = Probability x Severity
Low Risk = 1 to 6
Medium = 7 to 11
High = 12 +

The following guidelines should be applied to risk factors after control measures have been applied:
Risk Factors after control measures:1-6
OK to proceed
Risk Factors after control measures 7-11
Further control measures should be applied.
Seek further guidance from the Health, Safety and Environmental Department if unsure.
Risk Factors after control measures 12+
Unacceptable – Do not proceed

Hazard:	Risk:	Risk Factor Before Control:	Control Measure:	Risk Factor After Control:
Spills and leakage machinery	Land and Water pollution		Plant nappies deployed under all relevant plant when stationary for longer than 30minutes. Spill kits to accompany all plant and vehicles, operatives trained in use of spill kits. Environmental emergency procedures must be highlighted during site induction. Plant inspected and maintained. All Environmental permits and restrictions in place prior to work commencing. All relevant COSHH sheets always made available onsite	
Refuelling spills	Land and Water pollution		Store stockpiled material away from sensitive receptors, i.e., Road drains etc. No re-fuelling within 10 metres of a water course, sewer or drain. Silt bags for containment to protect gullies and drains within 10m. -HDD rig pits to be surrounded by bunds to contain run off as deemed necessary. -Monitor the levels of drilling mud in the bunded pit -Where required ensure tanker is available to remove excess drilling mud for disposal -Permit to pump to be in place for all pumping operations, pump away from all water courses, drains and gullies, operatives trained in Frac out plan available on site.	
Spills and Leakage from COSHH	Land and water pollution		All relevant COSHH Sheets should always be available on site. Plant nappies must be provided for all relevant plant and equipment.