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### 1. INTRODUCTION

The purpose of this manual is to expand on the already comprehensive Group Health and Safety Policy and Construction Safety Manual, taking into consideration the exact control requirements relating to Fibrenest Operatives work carried out on partially completed properties.

Specific work activities include the installation of electric cabinets, the splicing of fibres into a buried joint and the pulling of fibre connections from these joints to each individual plot are detailed in Group Fibrenest Operatives Method Statements & Generic Work Risk Assessment forms, which are enclosed.

You must follow these at all times and where this is not possible, work activities must be ceased at once and your Manager must be informed immediately and further specific risk assessment will be required.

Further information can be found by referring to the Persimmon Homes Construction Manual.

### 2. WORKING IN THE PUBLIC HIGHWAY

For works in the Public Highway the areas are to be guarded in accordance with the New Roads and Street Works Act (Chapter 8).

Where works are on private land (non-adopted roads etc.) areas are to be guarded in accordance with the Act and A.C.O.P's to ensure the safety of operatives, members of the public, clients and other road users.

### 3. ROAD TRAFFIC MANAGEMENT

Vehicles shall be parked and equipment unloaded in a considerate manner with respect to other road users and general public. Where provided, staff shall use authorised areas for parking and at all times shall park in accordance with the UK Highway Code of Practice.

### 4. PUWER REGULATIONS 1998

All portable tools must be inspected on a regular basis specifically prior to first use. A documented monthly check must be carried out on all tools other than hand tools. You are requested to complete the Fibrenest operatives checklist, noting any faults. Action will then be taken by the Manager to ensure actions are taken to service and maintain any defective equipment.

### Pneumatic Tools

You must check the hose and its connections and make sure the pressure gauges are working. Always shut off the air supply before changing or disconnecting a hose.

### 5. ELECTRICITY AT WORK REGS 1989

### Power Tools

Under no circumstances are you to carry out work on or near electrical wiring systems unless authorised by your supervisor.

Only competent personnel are authorised to work on such systems.

All portable appliances shall be tested on a regular basis. If you discover an appliance in use with an out of date test certificate you must report this immediately to your Manager. It is permissible to use power tools from a customer's property using a 240v protected circuit; otherwise you must always use a transformer when working to reduce the voltage to 110v maximum.

### 6. WORK AT HEIGHT REGULATIONS 2005

Wherever ladder work occurs, an assessment must be undertaken specific to the task. All ladders used on site must be checked daily for defects before first use and should only be used following an assessment of the type and duration of work to be carried out. If any faults are found the ladder must not be used and your Manager must be informed. You must ensure the ladder is:

a) Securely fixed near the upper resting place. Where this is not practicable the ladder must be footed by a second person to prevent slipping when in use.

- b) Have a firm level footing and not rest on any loose surface.
- c) Be appropriately secured against undue swaying or sagging
- d) Be evenly and properly supported on each side or stile.

### 7. MANUAL HANDLING REGULATIONS 1992

You must make full and proper use of any work equipment, system and training introduced by the company in compliance with the above Regulations. The most common injuries are to the back but others include pulled muscles, trapped and crushed fingers, hands and feet, plus cuts and grazes.

Do not try to lift anything which is clearly too large or awkward. Get Help.

### 8. NOISE AT WORK REGULATIONS 2005

You must take all reasonable steps to ensure that the risk of hearing damage to yourself and others from a noisy environment is reduced to a minimum. If the equipment you use is fitted with silencing controls, ensure they are in place. Follow the manufacturer's recommendations on hearing protection when using noisy machinery. It is your duty to follow all rules regarding noise and hearing protection.

### 9. PERSONAL PROTECTIVE EQUIPMENT (PPE) REGULATIONS 1992

You must wear the PPE provided and keep your general PPE in good order. Types of equipment provided include hard hats, safety footwear, Hi Visibility clothing, knee pads, dust masks, safety goggles, ear defenders and gloves.

### **10. WELFARE ARRANGEMENTS**

Welfare facilities are available on all Persimmon and Charles Church developments.

# 11. REPORTING OF INJURIES, DISEASES AND DANGEROUS OCCURRENCES REGULATIONS 2013

See Page 6 Accident & Incident Reporting.

### ACCIDENT REPORTING SYSTEM

An accident, however slight, must be reported to your Manager who will record the incident in the internal accident report form.

### 12. HEALTH AND SAFETY (FIRST AID) REGULATIONS 1981

You will be provided with an emergency First Aid Kit which must be kept replenished at all times.

### 13. COSHH REGULATIONS 2002

There are many materials, which can be a hazard to health and are controlled under these regulations. The manufacturers must provide information on the correct precautions to be taken when using such materials. These instructions must be followed and use protective equipment wherever necessary

All Fibrenest operatives must be given suitable information, instruction and training relating to all materials they are required to handle. To assist this process, generic COSSH assessment can be found in the Group COSHH Manual and these, together with any assessments of other specific hazardous materials should be brought to the operative's attention as part of their training.

### 14. MANNING LEVELS

Only work established as low risk should be allowed to be carried out by a single lone worker. Where the work involves working at height, excessive manual handling etc. then a further assessment of the correct manning levels should be carried out by Fibrenest Management Team.

### **15. TRANSPORT**

A van will be provided and the interior will be designed in order to carry tools and equipment safely giving due consideration to the security of the equipment in the way it is restrained. Passengers must only be carried where correctly fitted seats have been provided.

Should it be necessary to carry flammable materials and/or gases, then warning signs must be provided on the outside of the vehicle. When ladders are to be carried, ladder racks and clamps must be provided and used. A 2kg dry powder fire extinguisher must be provided in the van and be easily accessible.

### 16. TRAINING AND QUALIFICATIONS

All Fibrenest operatives are to hold current First Aid at Work, CSCS cards and the NSWRA Streetworks cards to ensure work both on and off the public highway is conducted in line with current legislation.

All operatives must have a full and valid driving licence.

This information will be documented within the central Fibrenest Training Matrices and administered by the Fibrenest New Sites Manager.

### **17. THIRD PARTY PROTECTION**

It is essential that Fibrenest personnel involved in this type of work appreciate the close proximity the work is likely to be to the general public. Those possibly affected could include children, home owners, family and visitors to the house as well as persons passing the location where work is taking place.

Consideration and care must be taken not to endanger these persons when involved in Fibrenest works. Where possible 'isolate' the area. Discuss the work with the house owner, if applicable and agree the isolation area. If necessary provide guards, fencing, barriers and/or a banksman to keep third parties out of the offending area. Provide adequate lighting. Where material has to be stored or where parts are removed and stored then ensure they are placed safely and protected in a lay down area.

### 18. GENERAL

There maybe times when the following work activities are required, however these must only be authorised and undertaken when specific Risk Assessments have been carried out. Examples may include:

### **Confined Spaces and Excavations**

Gas testing must be undertaken prior to working in footway pits and excavations.

Generic Risk Assessments relating to these work activities can also be found in the Construction Manual.

### **19. MONITORING COMPLIANCE**

The Fibrenest site supervisor is responsible for the compliance with this method statement on a daily basis. An entry will be made within the site diary detailing any required action to be taken.

Site inspections shall be conducted at random by the site supervisor/site manager.

Persimmon H&S Department personnel will also undertake random inspections and the findings input onto the COINS database and where any actions are assigned, a task owner will be identified to enable tracking of the task through to resolution.

If for any reason the site check identifies major non-conformances the works will be stopped and the process reviewed to find a more suitable option.

# Accident/Incident Reporting & Investigation

It is the policy of Persimmon Group to comply with the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) which came into effect on the 01 October 2013. The Persimmon Group use the reporting and investigation of accidents/incidents as a valuable tool in the prevention of injury.

### **Procedure**

All RIDDOR and non-RIDDOR accidents/incidents shall be recorded on form PHG/HS/:007 by Nominated Persons.

All RIDDOR related accidents/incidents shall be reported and investigated in line with the Accident/Incident Reporting and Investigation Flowchart – this should be posted on all site notice boards.

All RIDDOR Accident/Incidents shall be reviewed in line with the Accident/Incident Review Flowchart. A list of specified RIDDOR's are as follows:

### **Injuries reportable to the HSE**

Fatality, Major Injury, Over 7 day absence injury, worker over 24 hour hospitalisation, member of the public hospital visit.

### Specified injuries to workers include -

- A fracture, other than to fingers, thumbs and toes;
- Amputation of an arm, hand, finger, thumb, leg, foot or toe;
- Permanent loss of sight or reduction of sight;
- Crush injuries leading to internal organ damage;
- Serious burns (covering more than 10% of the body, or damaging the eyes, respiratory system or other vital organs);
- Scalpings (separation of skin from the head) which require hospital treatment;
- Unconsciousness caused by head injury or asphyxia;
- Any other injury arising from working in an enclosed space, which leads to hypothermia, heat induced illness or requires resuscitation or admittance to hospital for more than 24 hours.

### Over-seven-day injuries to workers -

• This is where an employee, or self-employed person, is away from work or unable to perform their normal work duties for more than seven consecutive days (not counting the day of the accident).

### **Dangerous Occurrences reportable to the HSE**

- Lifting equipment The collapse, overturning or failure of any load-bearing part of any lifting equipment, other than an accessory for lifting.
- Overhead electric lines Any plant or equipment unintentionally coming into contact with an uninsulated overhead electric line in which the voltage exceeds 200 volts or close proximity with such an electric line, such that it causes an electrical discharge.
- Electrical incidents causing explosion or fire Any explosion or fire caused by an electrical short circuit or overload (including those resulting from accidental damage to the electrical plant) which either results in the stoppage of the plant involved for more than 24 hours or causes a significant risk of death.
- Collapse of scaffolding The complete or partial collapse (including falling, buckling or overturning) of a substantial part of any scaffold more than 5 meters in height.
- Structural collapse The unintentional collapse or partial collapse of any structure, which involves a fall of more than 5 tonnes of material or any floor or wall of any place of work arising from, or in connection with, ongoing construction work (including demolition, refurbishment and maintenance), whether above or below ground. The unintentional collapse or partial collapse of any falsework.

### **Reportable Occupational Diseases reportable to the HSE**

- Carpal tunnel syndrome;
- Severe cramp of the hand or forearm;
- Occupational dermatitis;
- Hand arm vibration syndrome;
- Occupational asthma;
- Tendonitis or tenosynovitis of the hand or forearm;
- Any occupational cancer;
- Any disease attributed to an occupational exposure to a biological agent.

### General Internal Accident/Incident Reporting Form PHG/HS/:007

The document is made up of 7 Sections, for which the following information is required: -

### 1. Person Completing the Form; - Self Explanatory

- 2. Result of Incident a e; Self Explanatory
- 3. Injured Person/Person Involved in Incident; - Self Explanatory
- 4. Type of Incident; Ensure this is complete, to enable Persimmon Homes to establish trends in accident statistics, and, where applicable, implement suitable controls and training to reduce these.
- 5. Factual Details; State facts e.g. fall resulting in keg injury
- 6. Witness Details; Obtain the names, addresses etc of witness's and where possible obtain statements form them immediately.
- 7. Instructions given to Supply Chain Supervisors; In the event of an accident/incident occurring detail any instructions/actions requested that are given to supply chain supervisors e.g. toolbox talks etc.

### Actions in the event of an accident/incident.

The Nominated Person, who must hold relevant first aid certificates, will:

- a) Where necessary call the emergency services and administer suitable first aid as required.
- b) Complete the Group Incident Report Form PHG/HS/:007 and notify the Director responsible within the Operating Business and/or their internal safety support function at the first opportunity by telephone.
- c) Notify the relevant Group H & S Advisor by telephone to ensure that an immediate investigation is commenced.
- d) Request visual and non-visual witnesses to compete the Initial Account of Events Statement Form PHG/HS/:058.

The Group H & S Advisor will:

- e) Ensure that the Post Accident Checklist Form PHG/HS/:059 is distributed to site and office based management in order that they can confirm/collate all relevant documentation as part of any subsequent investigation.
- f) Inform the relevant Senior Group H & S Advisor and Group H & S Administrator or in their absence, the Group H & S Director by telephone of the facts surrounding the incident.
- g) Ensure that the Health and Safety Executive are notified of any RIDDOR in the time scales required.
- h) Produce a report as soon as possible to ensure a review can be undertaken by Senior Management within 2 weeks of the incident occurring.

**Note:** The Operating Business must ensure that the scene of the incident is not disturbed unless it is considered necessary to avoid further incidents or is given permission by the Health and Safety Executive Inspector/ Group Health and Safety Advisor investigating the incident.

The Operating Business and its workforce must co-operate fully with the Group Health and Safety Advisor, the Persimmon Group Legal Representative and/or the HSE Inspector investigating the incident.

### **Occupational Disease Reporting:**

- 1. Any employee who is diagnosed as suffering from certain occupational disease shall report this to their Senior Manager and/or Group H & S Advisor immediately
- 2. The Senior Manager responsible should, in the first instance, contact the Group HR Department immediately and inform them of the details of the matter.
- 3. The Group HR Department will co-ordinate any investigation into the matter including further work related risk assessment by the local Group H & S Advisor and/or support from other medical services.

The Group HR Department will ensue all record keeping associated with this matter is maintained. 4.

### **HSE Incident Selection Criteria**

The following information is provided as a guide to the HSE policy for investigating RIDDOR's and the type of Injury and Dangerous Occurrences that will be investigated:

HSE RIDDOR Investigation Policy is dependent on	Type of RIDDOR Incident Investigated
• The severity and scale of potential or actual harm	• All fatalities;
<ul> <li>The seriousness of any potential breach of the law</li> </ul>	• All amputations of digit(s) past the first joint
<ul> <li>Knowledge of the duty holder's past health and safety performance</li> <li>The enforcement priorities</li> <li>The practicality of achieving results</li> <li>The wider relevance of the event, including serious public concern</li> </ul>	<ul> <li>Amputation of hand/arm or foot/leg;</li> <li>Serious multiple fractures (more than one not including wrist and ankle);</li> <li>Crush injuries leading to major organ damage</li> <li>Head injuries involving loss of consciousness</li> <li>Burns and scalds greater than 10% of the su area of the body;</li> <li>Permanent blinding of one or both eyes</li> </ul>

- ) past the first joint;
- or foot/leg;
- es (more than one bone, nkle);
- major organ damage
- oss of consciousness
- than 10% of the surface
- e or both eyes
- Any degree of scalping •
- Asphyxiations
- Dangerous Occurrences with the potential for directly causing the death/major injuries to people

### **First Aid**

Operating Businesses must ensure that they have suitable and sufficient numbers of First Aider's, in line with Group Health and Safety Guidance, to cover all areas of its work activities. (See Procedure PHGPR:001a).

Members of staff, contractor's, site visitor's etc. should be notified of the name and location of all relevant First Aider's via induction training, notice boards etc.

### **Archiving of Incidents**

The incident report form is carbonated with white, blue, yellow and pink copies and a distribution list is detailed at the bottom of the form. Under the DATA Protection Act all copies of any incident reports must be kept secure and away form public consumption of the personal information held on file relating to any individual. These should be kept for a minimum of 5 years.



Hazard Or Work Activity Assessed :- Ref No								
MS:01. RODDING & ROPING OF DUCTS								
Site Location								
Risk Rating H = High M= Medium L= Low         Hazard = potential to cause harm.       Risk =probability of that harm occurring								
The risk rating criteria is detailed below								
High - Work activity which has the potential to cause a fatal								
Medium – Work activity resulting in loss time injury or signif								
Low – Work activity resulting in minor injury but not lost time SIGNIFICANT HAZARDS	e, or H	some M	male	WHO MAYBE HARMED				
Struck by vehicles / plant / equipment	п	IVI	L					
	$\checkmark$							
Injury to members of the public	•			Employees 🗸				
Muscular skeletal disorders (MSD's)	• √							
Injury to hands, feet, body or hearing	v							
Slips, Trips & Falls		<ul> <li>✓</li> </ul>		Official Visitors				
Falls of materials or equipment		$\checkmark$		Clients				
Suffocation	$\checkmark$			General Public				
MEASURES TO CONTROL SIGNIFICANT RISK								
MEASURES TO CONTROL SIGNIFICANT RISK         It is the responsibility of all personnel to carry out the works in accordance with this risk assessment and method statement.         All Operations will be under the control of a trained competent foreman.         All Operatives will receive an induction into this Risk Assessment and Method Statement prior to commencement of works. This will be recorded on the Site Specific Risk Assessment.         All operatives must have received a site induction prior to working on site.         Planning:         Collect all appropriate road signs (Chapter 8), and ensure location equipment is available and in good working order.         Check work pack and familiarise yourself with the work content         Ensure all equipment is available and within calibration date for task being undertaken.         Wear high visibility clothing, and complete the Site Specific Risk Assessment								
Task:								
Pedestrians and Vehicles Wear high visibility clothing and install road works guarding in accordance with Chapter 8. Ensure that hazard warning lights and flashing beacons are being used. Use sandbags to keep signs in correct position when in high wind conditions. All road signs and barriers must be inspected before use, and defective items not used. Poor visibility (weather/obstructions) Carry out a Site Specific Risk Assessment in order to identify additional hazards and controls.								

# Hazard Or Work Activity Assessed :- RODDING & ROPING OF DUCTS

Ref No

### Plant and Machinery

Ensure that all plant and equipment is kept within the guarded area

To be in good working order and properly maintained.

To have mufflers and silencers fitted where practicable.

Vehicles to be fitted with, and use amber rotating beacon/s.

Plant operators to be trained and competent in the use of the plant they are using.

Switch plant off when not in use.

Ensure that all guards are properly secured and unauthorised persons do not use the plant/vehicle.

Ensure the correct PPE is used for the type of equipment.

Ensure fumes do not enter confined space.

### **Confined Space Working**

Ensure that gas-testing equipment is available, and is used when entering joint boxes or manholes.

Where man entry is required ensure that all involved are trained and competent in confined space working for the classification of the space they are entering, and that there is an approved safe system of work and the confined space is continually gas monitored.

Ensure that in confined spaces where there is no free flow of clean air, ensure there is adequate ventilation and where practicable used forced ventilation.

# **Lifting Operations**

Refer to controls measures outlined in RA31 (Manual Handling) and RA003 (Mechanical Lifting Operations). When lifting manhole or box covers ensure that the proper lifting keys are used and that safe lifting techniques are employed. For carriageway covers lifting aids shall be used for lifting the covers wherever practicable, i.e. a suitable manhole lifter

# **Roding the Duct**

Using approved rods for the task.

Test rod the duct from the jointing chamber/cabinet at one of the duct, section through to the jointing chamber/ cabinet at the other end of the duct section.

If a blockage is found during the rodding process then the location is ascertained and either recorded and passed to the civils gang for clearance or cleared. All excavation works to be in accordance with RA08 (Underground Services) and RA07 (Excavations).

If blockage to be cleared then duct to be rodded whilst blockage open and once rodded the duct is to be repaired and then the excavation reinstated.

Once the rods have gone through the duct section a draw rope shall be tied to the end of the rods and pulled through.

The draw rope will be tied off at each end on the ironwork in the jointing chamber/manhole/cabinet. The draw rope must NOT be attached to any cable

Repeat the process from the jointing chamber/cabinet until all the specified ways have been rodded and roped.

### Hand Arm Vibration Syndrome

Refer to control measures outlined in Construction Manual

### Noise

All operatives in the working area must wear ear protection.

Compressor doors to be kept closed whilst running.

Compressors to be well maintained.

Compressors with defective silencers must not be used.

# **Manual Handling**

Refer to Control measures outlined in RA 31 (Manual Handling)

Particles ejected from compressor/hose.

Ensure that the valves are closed before starting the compressor.

Attach equipment to the compressor before opening valves.

Discharge air from compressor on completion of the works.

When blowing condensation from the hoses, always ensure that the pressure is turned down and that the open

ends are secure and are not pointing at the body or into a public area. Never use compressed air for blowing or removing debris from clothing. Never use compressed air for anything other than its designated purpose If horseplay is taking place report to the supervisor immediately

### **Defective Equipment**

All equipment must be checked before use.

Defective equipment should not be used i.e. burst or leaking hoses, broken or missing jockey wheels.

All trailers must be inspected regularly for defects.

All anchorage systems/points must be operational, and all operational equipment functional i.e. brakes, lights.

### Water in chambers

A water test to be performed prior to pumping out any water.

If test is clear identify a suitable place for the water to discharge (road drain/ditch etc.)

Ensure that pumped out water does not cause a hazard to other highway users. Extra care to be taken in cold weather as water may freeze.

If water contaminated contact supervisor and arrange for browser to take water away. **DO NOT** allow contaminated water to enter any drains or watercourses.

### Housekeeping

The roadwork's guarding and signs should be regularly checked to ensure they always meet the requirements of Chapter 8.

All vehicles and plant should be properly guarded in accordance with Chapter 8.

The site should be kept as clean and tidy as practicable during the works.

Always be polite to the general public

### Supervisory:

Managers/supervisors will ensure that all pre-planning has been put in place and that co-operation and coordination with site managers/users has taken place.

Managers/supervisors to check that the control measures detailed above are being adhered to.

# Once all control measures are applied the residual risk is classed as LOW

### INFORMATION INSTRUCTION TRAINING

Everyone involved will need to be properly trained and instructed to make sure they know what to do and how to do it safely.

PERSONAL PROTECTIVE EQUIPMENT		MANUAL HANDLING ASSESSMENT
Hi Visibility Clothing	$\checkmark$	
Head Protection	$\checkmark$	
Safety Footwear	$\checkmark$	
Eye Protection	$\checkmark$	
Hearing Protection	$\checkmark$	
<b>Respiratory Protection</b> (where applicable)	$\checkmark$	
Safety Harness	$\checkmark$	
Hand Protection	$\checkmark$	

Remember PPE is a last resort not a first option

Hazard Or Work Activit	y Assessed :-				Ref No
MS:02. UNDERGROUN	D CABLING & SUB DUCTING				
Site Location					
	Risk Rating H = High				
Hazard = potential to cal		=prob	ability	y of tl	that harm occurring
The risk rating criteria is					
	ch has the potential to cause a fata				
	resulting in loss time injury or signi				
SIGNIFICANT HAZARD	Ilting in minor injury but not lost tim	H H	M	mau	WHO MAYBE HARMED
Struck by vehicles / plan		п	IVI	<u> </u>	
Injury to members of the		$\checkmark$			Employees
Muscular skeletal disord	·	·		-	
		· √			-
Injury to hands, feet, boo	ly or hearing	v	$\checkmark$		
Slips, Trips & Falls			v √		Official Visitors ✓ Clients ✓
Falls of materials or equi	ipment		V		
Suffocation		$\checkmark$			General Public
	ROL SIGNIFICANT RISK				
order. Check work pack and fai Ensure all equipment is a Wear high visibility clothi <b>Task:</b> <b>Pedestrians and Vehic</b> Wear high visibility clothi Ensure that hazard warn Use sandbags to keep s All road signs and barrie	miliarise yourself with the work con available and within calibration date ing, and complete the Site Specific les ing and install road works guarding ing lights and flashing beacons are igns in correct position when in hig rs must be inspected before use, a	tent. e for t Risk i in ac bein h win nd de	ask b Asse corda g use d con	eing ssme ance ed. iditior ve ite	ent e with Chapter 8. ons.

Ref No

# Hazard Or Work Activity Assessed :- UNDERGROUND CABLING & SUB DUCTING

### **Plant and Machinery**

Park vehicles, trailers and winches so that they do not cause an obstruction to other road users or premises. Check the job pack or works instruction for the direction of the cable/sub-duct pull. Position the cable/sub-duct trailer and winch accordingly.

Ensure that all plant and equipment is kept within the guarded area

To be in good working order and properly maintained.

To have mufflers and silencers fitted where practicable.

Vehicles to be fitted with, and use amber rotating beacon/s.

Plant operators to be trained and competent in the use of the plant they are using.

Switch plant off when not in use.

Ensure that all guards are properly secured and unauthorised persons do not use the plant/vehicle.

Ensure the correct PPE is used for the type of equipment.

Ensure fumes do not enter confined space.

### Cabling

Check the scheme plans to identify which duct is to be cabled/sub-ducted.

If no draw rope rod and rope as per MS01 (Roding and Roping of Duct)

If lightweight cable is to be drawn in, then attach a stocking of the appropriate size to the cable.

Attach the draw rope to the cable/sub-duct and winch the draw rope and cable/sub-duct through the duct.

Ensure that there is sufficient cable/sub-duct left at either end to allow for jointing.

Ensure that cable ends are sealed against ingress of water.

If heavyweight cable or long length of sub-duct is required, the pull a cabling rope through the duct by means of the draw rope.

Winch the cable/sub-duct through using the cabling rope

If fleeting is required then ensure that there is sufficient space to "Figure of Eight" the cable within road-works guarding

If stoppages are encountered when rodding the duct, the supervisor shall be informed and a gang arranged to clear the stoppages.

# **Confined Space Working**

Ensure that gas-testing equipment is available, and is used when entering joint boxes or manholes. Where man entry is required ensure that all involved are trained and competent in confined space working for the classification of the space they are entering and that there is an approved safe system of work and the confined space is continually gas monitored.

Ensure that in confined spaces where there is no free flow of clean air, ensure there is adequate ventilation and where practicable use forced ventilation.

# Lifting Operations

Refer to controls measures outlined in RA31 (Manual Handling) and RA003 (Mechanical Lifting Operations). When lifting manhole or box covers ensure that the proper lifting keys are used and that safe lifting techniques are employed. For carriageway covers lifting aids shall be used for lifting the covers wherever practicable, i.e. a suitable manhole lifter.

### Hand Arm Vibration Syndrome

Refer to control measures outlined in Construction Manual

### Noise

All operatives in the working area must wear ear protection. Compressor doors to be kept closed whilst running. Compressors to be well maintained. Compressors with defective silencers must not be used.

### Manual Handling

Refer to Control measures outlined in RA31 (Manual Handling) **Defective Equipment** All equipment must be checked before use.

Defective equipment should not be used i.e. burst or leaking hoses, broken or missing jockey wheels. All trailers must be inspected regularly for defects. All anchorage systems/points must be operational, and all operational equipment functional i.e. brakes, lights. Water in chambers A water test to be performed prior to pumping out any water. If test is clear identify a suitable place for the water to discharge (road drain/ditch etc) Ensure that pumped out water does not cause a hazard to other highway users. Extra care to be taken in cold weather as water may freeze. If water contaminated contact supervisor and arrange for browser to take water away. DO NOT allow contaminated water to enter any drains or watercourses. Housekeeping The roadwork's guarding and signs should be regularly checked to ensure they always meet the requirements of Chapter 8. All vehicles and plant should be properly guarded in accordance with Chapter 8. The site should be kept as clean and tidy practicable during the works. Always be polite to the general public. Supervisory: Managers/supervisors will ensure that all pre-planning has been put in place and that co-operation and coordination with site owners/users has taken place. Managers/supervisors to check that the control measures detailed above are being adhered to. Once all control measures are applied the residual risk is classed as LOW INFORMATION INSTRUCTION TRAINING Everyone involved will need to be properly trained and instructed to make sure they know what to do and how to do it safely. PERSONAL PROTECTIVE EQUIPMENT MANUAL HANDLING ASSESSMENT **Hi Visibility Clothing**  $\checkmark$  $\checkmark$ **Head Protection**  $\checkmark$ Safety Footwear  $\checkmark$ **Eye Protection**  $\checkmark$ **Hearing Protection Respiratory Protection** (where ./ applicable) **Safety Harness**  $\checkmark$  $\checkmark$ **Hand Protection** 

Remember PPE is a last resort not a first option

Hazard Or Work Activity Assessed :-	Hazard Or Work Activity Assessed :- Ref No							
MS:03 WORKING WITH OPTICAL FIBRES								
Site Location								
Risk Rating H = HighHazard = potential to cause harm.RiskThe risk rating criteria is detailed belowRisk				Low at harm occurring				
<b>High</b> - Work activity which has the potential to cause a fata	al/maio	or iniu	irv or	health damage				
Medium – Work activity resulting in loss time injury or sign								
<b>Low –</b> Work activity resulting in minor injury but not lost tin	ne, or	some	mate	erial damage.				
SIGNIFICANT HAZARDS	H	Μ	L	WHO MAYBE HARME	כ			
Struck by vehicles / plant / equipment								
Injury to members of the public	$\checkmark$			Employees	$\checkmark$			
Muscular skeletal disorders (MSD's)	$\checkmark$							
Injury to hands, feet, body or hearing	$\checkmark$							
Slips, Trips & Falls		$\checkmark$		Official Visitors	$\checkmark$			
Falls of materials or equipment		$\checkmark$		Clients	$\checkmark$			
Suffocation	$\checkmark$			General Public	$\checkmark$			
MEASURES TO CONTROL SIGNIFICANT RISK								
<ul> <li>Where ever possible ensure that optical equipment can be undertaken.</li> <li>Task:</li> <li>Within Switch rooms/panels</li> <li>Road works instructions and ensure where possible equipment Familiarise yourself with the type of optical radiation prese Adapters within patch panel closures and free connectors and eye contact that might result in injury.</li> <li>Under no circumstances should connector end faces, prepresented from the optical fibre units are under local control a components using locally injected light but prevents remot Adapters within patch panel closures and free connectors and eye contact that might result in injury.</li> <li>The active equipment should also be labelled to warn other notifying you that it has been re-connected. This is particul equipment.</li> <li>Never look into the end of an optical fibre cable, terminated to active equipment.</li> <li>Damaged or broken optical fibres must be handled only willocate and remove once in the skin.</li> <li>Use correct tools to handle broken or cut fibres and dispose Protective covers shall be kept at fibre ends and on optical Never unplug patch leads without first turning off the active Always use and take note of appropriate warning labels ar required</li> </ul>	ment is nt. should pared o and ve e non- should er peop larly in d or ur hen wo se of a l fibre e equip	s isola d be p optica contri d be p ole no nporta n-term earing s haz powe	ated berma using olled berma ot to p ant if ninate g safe ardou r sou t.	nently capped to prevent accid pers be viewed directly unless a light meter. This allows insp activation's. nently capped to prevent accid lug the equipment back in with working remotely from the activ d, unless you are sure it is not ty gloves as fibre splinters are is waste. rces until final connections are	lental skin the power bection of lental skin out /e connected difficult to made.			

Hazard Or Work Activity Assessed :- WORKING WITH OPTICAL FIBRES Ref No

Splicing on site:

### Setting up optical fibre cables for jointing

Leather gloves must be worn to prevent injury occurring from steel strength members or fibres protruding from the uncapped ends of the cables.

Short lengths of scrap cables must be sealed at both ends to prevent possible escape of broken fibre.

# **Exposed Cable Core**

Optic fibres can enter the body as glass splinters and because of their size even enter the bloodstream, causing possible fatality. Therefore glass fibre pieces must be collected in a suitable container and sealed ready for disposal.

### Lasers or LED's

Light produced by lasers or LED's are carried along the optical fibre. The light is an invisible radiation and can be damaging to the eye.

You must confirm to the operations manager that your eyes are free of any defects, and that you are able to work on optical fibre cables, before you begin any work on behalf of Triax International involving optical fibre products or system.

You must report the operations manager any alleged exposure to laser radiation within 24 hours.

You must never attempt to view the end of unmated or broken fibre without first ensuring that no optical power is connected to that fibre, regardless of what light source is employed.

When you are required to work on fibres that are on an operational cable (i.e. maintenance work or extending a spur, which has a light source that may be in use, you must follow these instructions:

Confirm with your supervisor the appropriate procedure adopted by Triax International's clients for controlling the power source, turning on and off. This may also be referred to as power up & power shut-down.

Ensure that the procedure includes a nominated person on behalf of the client, who has responsibility for turning the power (laser or LED) on or off.

Agree the process for turning the power source on and off with the clients nominee. The process should include: Request power source to be turned off, on the appropriate fibres - - (you should have a record of fibres provided by the client.)

The client's nominee agrees to turn off power source and confirms the power source is off to you and provides a job no, the date and time.

An approved power meter should be used to confirm power is off.

You complete the work on the fibres.

You contact the clients' nominee to inform them that you have completed your work and that the power source to the appropriate fibres can be turned back on.

### Solvents

Only use the solvents provided by John Henry Group, or agreed for use by JHG if given as free issue from the client.

When using solvents never smoke or use near a naked flame

Dispense in small quantities.

# **Road Works/Guarding**

All must be set out in accordance with Chapter 8 Maintain a safe route for public past work operations Guard pedestrians from vehicles when directed in to carriageway Sign and barriers to be secured with sand bags where necessary

# Plant, Vehicles and Tools

When plant, vehicles or tools are not in use, these must be secured

All plant must have a valid SWL plate, inspection ticket, and all relevant safety markings

All plant must be kept within work area

All safety features must be in place and operating, silencers and guards must be maintained correctly Inspection records must been done before using plant with any defects reported to plant manager before use

Plant and machinery working in TM areas must display a flashing beacon

Turn off plant when not in use and remove key

Dust suppression must be used when necessary

Fuels and Oils must be stored in appropriate containers and adequately marked with its contents

# Method of Work

# General Preparation

Prior to jointing cables, the following actions should be taken:

Ensure you have all the appropriate stores and equipment to carry out the work involved.

Ensure the supports are correctly positioned in the jointing chamber, and that the cables can be adequately supported.

The minimum cable bending diameter is not exceeded (12 times the cable diameter).

The cables are laid around the jointing chamber and supported, allowing at least 3 meters slack at each joint, facilitating jointing outside of chamber.

Wipe clean the cables, removing cable lubricant and grime using a cloth dampened with white spirit if necessary. Keep tools and splicing machine clear of the work area while cable sheath stripping, and until the cable filling compound is cleared away.

# Cable Preparation

### General

The preparation of cable for optical splice closures will differ according to which manufacturers' joint closure kit, assembly and organiser trays are used. In each case the manufacturer provides comprehensive instructions which must be followed, unless the client stipulates their own methods must be adopted and provide all necessary instructions to complete the task.

The instructions provided should include the following:

General information

Product description

Specific safety procedures

List of items

Alternative methods (if applicable) for end cable or mid-span cable entry

Cable moisture blocking (as appropriate)

Methods for continuity or moisture barrier

Bonding and grounding instructions

Optical tray organisation and chassis assembly (if applicable)

Splice and fibre storage

Additional cable entries (is applicable)

Temporary sealing, closure and re-entry of joints (as applicable)

Should any of the required instructions be missing, you must inform your supervisor for further action.

The supervisor will liaise with the client and manufacturer as deemed necessary, and advise you accordingly,. Works Practices

In addition to the written instructions, the following accepted practices must be adopted:

When removing cable sheath to the stipulated length the appropriate cable stripper must be used to cut around the circumference of the cable in steps of 100mm to reduce strain on the cable core during the sheath and moisture barrier removal process.

All traces of filling compound must be removed and all cable components must be cleaned using white spirit (or approved alternative) and synthetic rags before splicing commences. This will include the cable core, fillers, strength members, fibre units and individual fibres.

The strength member must be cut the appropriate cutter.

A joint support must be used, securing the optical joint chassis.

Fire safety and history labels must be affixed to each of the optical trays, and a history label to each fibre holder cover (unless client stipulates alternative method).

# Splicing

General

Only fully skilled operators are permitted to use splicing equipment.

The splicing operation consists of four activities:

Fibre preparation.

Cleaving.

Splicing.

Encapsulation.

Always follow the instructions provided with the optical splicing equipment consisting of:

Fujikura fusion splicer.

Optical fibre cable preparation kit.

York technology fk-11 fibre cleaver.

The instructions are contained in the equipment manuals and the operator must be fully conversant with all aspects of the equipment's use for the job at hand.

The operator must ensure that the fusion splicing machine is certified for correct calibration prior to commencement of work.

The quality of splice, must be equal to, or better than, the clients specification for splicing when tested.

# **Fibre Preparation & Cleanliness**

You must ensure, when splicing fibre, that the fusion splicing machine, fibre preparation tools and the fibre itself are kept clean throughout the operation.

### **Cleaving Quality**

You must produce a clean end face to the fibre that is ideally perpendicular to the fibre axis.

### Acceptance Testing

Acceptance tests will be carried out subject to the clients agreed terms.

All testing must be carried out by fully skilled operators.

### Loss test, using loss test sets comprising of

a power meter

stabilising light source

Must be carried out in accordance with the manufacturers' equipment manuals. All results must be recorded on appropriate results sheets. One copy to be passed to customer, one copy to be held at John Henry Communications.

Optical time domain reflector test (OTDR) must be carried out in accordance with the manufactured equipment manuals. Normal requirements for acceptance testing will be:

individual splice loss.

fibre loss for given lengths (end to end).

It is recommended to carry out test prior to closing of joints. However, this will be subject to the clients requirements and job specification. All results must be recorded on appropriate results sheets. One copy to be passed to customer, one copy to be held at John Henry Communications.

If the client specifies a continuity test to be carried out, on Ohmmeter must be used to test continuity throughout: the moisture barrier.

the strength member.

All results must be recorded on appropriate results sheets. One copy to be passed to customer, one copy to be held at Head office.

# Setting Cable & Joint

The excess cable must be set using the full depth and length of jointing chamber

When setting the cable and joint, consideration must be given to how the joint can be taken out of the jointing chamber to remake any splices, with the minimum disturbance to other cables and joints.

All bending of the cable must be gradual and must not exceed minimum bending radius of the cable.

The completed joint must be fully supported in the jointing chamber, and secured using cable ties around the joint dome and support bar.

The cable must be marked fragile using clients recommended method.

The cable must be identified, using clients recommended method.

# Cable Tray

The requirement for the provision of cable tray to support wiring may be for external and internal wiring of premises. The size cable tray to be used will be stipulated by the client or given with the job plans.

Light gauge galvanised cable tray is provided, unless the client stipulates an alternative must be used.

# Cornering

Cable tray will be taken around corners, bends or changes in direction by neatly mitre cutting of butt fixing, unless the client stipulates manufactured bends and corners to be used. The method to be used must be agreed prior to commencement of work. If in doubt, contact your supervisor for confirmation before commencing work.

# Fixing

The cable tray must always be fixed in line of the route agreed. Vertical runs should be plumb lined and horizontal runs should be level following local building natural contours and as unobtrusively placed as is practical.

The cable tray must be secured to walls constructed of brick or concrete by either of the following methods: -

Drill holes for size 10 raw plug 1.5" deep and secure using 1.5" size 10 screw.

Fire shot nail into walls through cable tray pilot hole using a cartridge nail gun, in accordance with manufacturer's

### instructions.

NOTE: - Walls suspected of being cladded, of different material to brick or concrete or in poor repair, consult your supervisor before commencement of work.

### Risers

Cable tray being used in risers must be positioned as far from electrical services as is practical. The cable ties should be threaded in position at 300mm spacing prior to securing cable tray to wall.

On completion of wiring works, fire stopping must be used to block holes between floors. The method is to fill the core centre with mineral wool, and finally finish off with at least 3 inches of purimachos KOS fire cement both sides of the wool.

# Ceilings

Cable tray to be suspended from ceilings should be fixed using ceiling ties of the appropriate loading, at the spacing agreed with the client, or extension bolts if the tray is to be hung below an existing cable tray.

The cable tray must not be hung lower than the prescribed head clearance height.

The cable tray must not be hung such that it could impede the efficient spraying area if a fire sprinkler system is fitted.

Internal wiring provided above false ceilings must be neatly bunched and tied with cable ties, ensuring the wiring is clear of other services and access positions.

### Cleating

Plastic wiring cleats must be used for the individual wiring run away from the wiring loom to the customers point of entry if no other support is provided.

The cleating should be done at 300mm spacing, keeping a straight vertical or level horizontal line, using any available natural contours to disguise wiring run.

No more than 3 cables should be cleated adjacent to each other along the same wiring route.

### Cable ties

Cable ties must be used to keep multiple wiring neatly bunched and should be spaced every 300mm. Cable ties must be used for wiring supported in cable trunking, on cable tray, attached to catenary wire. Catenary wiring will require the cables being neatly bunched tied every 300mm and at measured lengths for each customers lead break out point. The bunch is then attached to the catenary wire by cable ties at 1m spacing.

### **Confined Space Working**

Ensure that gas-testing equipment is available, and is used when entering joint boxes or manholes. Where man entry is required ensure that all involved are trained and competent in confined space working for the classification of the space they are entering, and that there is an approved safe system of work and the confined space is continually gas monitored.

Ensure that in confined spaces where there is no free flow of clean air, ensure there is adequate ventilation and where practicable used forced ventilation.

# **Lifting Operations**

Refer to controls measures outlined in RA002 (Manual Handling) and RA003 (Mechanical Lifting Operations). When lifting manhole or box covers ensure that the proper lifting keys are used and that safe lifting techniques are employed. For carriageway covers lifting aids shall be used for lifting the covers wherever practicable, i.e. a suitable manhole lifter.

### Hand Arm Vibration Syndrome

Refer to control measures outlined in RA007 (Use of Vibrating Machinery) **Noise** 

All operatives in the working area must wear ear protection.

Compressor doors to be kept closed whilst running.

Compressors to be well maintained.

Compressors with defective silencers must not be used.

# **Manual Handling**

Refer to Control measures outlined in RA002 (Manual Handling)

Defective Equipment

All equipment must be checked before use.

Defective equipment should not be used i.e. burst or leaking hoses, broken or missing jockey wheels.

All trailers must be inspected regularly for defects.

All anchorage systems/points must be operational, and all operational equipment functional i.e. brakes, lights. **Water in chambers** 

A water test to be performed prior to pumping out any water.

If test is clear identify a suitable place for the water to discharge (road drain/ditch etc)

Ensure that pumped out water does not cause a hazard to other highway users. Extra care to be taken in cold weather as water may freeze.

If water contaminated contact supervisor and arrange for browser to take water away. **DO NOT** allow contaminated water to enter any drains or watercourses.

# Housekeeping

The roadwork's guarding and signs should be regularly checked to ensure they always meet the requirements of Chapter 8.

All vehicles and plant should be properly guarded in accordance with Chapter 8.

The site should be kept as clean and tidy practicable during the works.

Always be polite to the general public with

# Supervisory:

Managers/supervisors will ensure that all pre-planning has been put in place and that co-operation and coordination with site owners/users has taken place.

Managers/supervisors to check that the control measures detailed above are being adhered to.

# WORKING WITH OPTICAL FIBRES Planning:

All Equipment should have clear labels indicating optical hazards.

Laser	Risk	Labels	Notes
Class 1 No risk to eyes or skin None		None	laser products are defined as safe in normal operations under reasonably foreseeable conditions, including direct viewing of the laser beam with optics that could concentrate the laser output into the eye
Class 1M	Low risk to eyes. No risk to skin	Laser radiation. Do not view directly with optical instruments	laser products are defined as safe in normal operations under reasonably foreseeable conditions, including direct viewing of the laser beam, but only provided the user does not employ optics that could concentrate the laser output into the eye
Class 2	Low risk to eyes. No risk to skin	Do not stare into beam	laser products are defined as those emitting visible light for which the natural aversion response to bright light (including the blink reflex) prevents retinal injury, including direct viewing of the laser beam with optics that could concentrate the laser output into the eye. These lasers do however, present a dazzle hazard

		Do not stars inte	loopr products are	
Class 2M	Low risk to eyes. No risk to skin	Do not stare into beam or view directly	laser products are defined as those	
		with optical	emitting visible light	
		instruments	for which the natural	
			aversion response to	
			bright light (including	
			the blink reflex)	
			prevents retinal	
			injury for direct	
			viewing of the laser	
			beam but, as with	
			Class 1M laser	
			products, only	
			provided the user	
			does not employ	
			optics that could	
			concentrate the laser	
			output into the eye	
Class 3 R	Low risk to eyes.	Avoid direct eye	laser products are	
	Low risk to skin	exposure (0.4 - 1.4	defined as those for	
		μm) or avoid	which the output is	
		exposure to beam	up to a factor of five	
			over the maximum	
			allowed for Class 1	
			or Class 2. Because	
			of safety factors built	
			into the limits for	
			these classes, the	
			risk of injury for	
			direct viewing of a	
			Class 3R laser beam	
			remains low, but	
			greater efforts	
			should be taken in	
			the use of these	
			lasers to prevent	
			direct eye exposure,	
			especially for	
			invisible Class 3R	
			lasers	
Class 3 B	Medium risk to eyes.	Avoid exposure to	laser products are	
	Low risk to skin	the beam	defined as those for	
			which direct	
			exposure of the eye	
			is hazardous, even	
			taking aversion	
			responses into	
			account, but	
			scattered laser light	
			is usually safe. The	
			higher power Class	
			3B lasers are also a	
			skin hazard, but the	
			natural aversion	
			response to localised	
			heating generally	
			prevents a skin burn	
Class 4	High risk to eyes and	Avoid eye or skin	laser products are	
	skin	exposure to direct or	defined as those for	
		scattered radiation	which direct	
			exposure of the eye	
			and skin is	
			hazardous and	
			scattered laser light	
			may be hazardous to	
			the eyes. Such	
			lasers are also a fire	
			lasers are also a fire hazard.	

# Once all control measures are applied the residual risk is classed as LOW

### INFORMATION INSTRUCTION TRAINING

Everyone involved will need to be properly trained and instructed to make sure they know what to do and how to do it safely.

PERSONAL PROTECTIVE EQUIPMENT		MANUAL HANDLING ASSESSMENT
Hi Visibility Clothing	$\checkmark$	
Head Protection	$\checkmark$	
Safety Footwear	$\checkmark$	
Eye Protection	$\checkmark$	
Hearing Protection	$\checkmark$	
Respiratory Protection (where applicable)	$\checkmark$	
Safety Harness	$\checkmark$	
Hand Protection	$\checkmark$	
Remember PPE is a last resort not a first	option	

Hazard Or Work Activit	ty Assessed :-					Ref No	
MS:04 INTERNAL CABL	ING						
Site Location							
	Risk Rating H = High						
Hazard = potential to ca		=prob	abilit	y of ti	hat har	m occurring	
The risk rating criteria is							
	ch has the potential to cause a fata						
	resulting in loss time injury or signi						
SIGNIFICANT HAZARD	ulting in minor injury but not lost tim	e, or H	some M	e mat		amage. WHO MAYBE HARMED	
		п	IVI	L	-		
Struck by vehicles / plan		$\checkmark$					٦
Injury to members of the	A	▼ ✓				Employees 🗸	
Muscular skeletal disord		-					
Injury to hands, feet, boo	dy or hearing	$\checkmark$					-
Slips, Trips & Falls			$\checkmark$			Official Visitors	
Falls of materials or equ	ipment		$\checkmark$			Clients	
Suffocation		$\checkmark$				General Public 🗸	
MEASURES TO CONTR	ROL SIGNIFICANT RISK						
<b>.</b>							
Planning:	- even and and arread aviants actti		<b>c</b>				
	n arranged and agreed prior to setti	-	Ι.				
•	miliarise yourself with the work con						
	available and within calibration date			•		aken.	
	arriers and signs and ensure it is in	•					
Wear high visibility cloth	ing, and complete the Site Specific	Risk	Asse	essme	ent		
Teek							
Task: Arrival on Site:							
	in and advice of works to be under	taka			rtain a	ny inquestancer to be a	ioro of
	ge and advise of works to be under					The issues/concerns to be av	vale of.
3	the fire exit routes and any site spe						
	er (If building build before 2000, Not						it not
	bestos banned in the UK), and seek			-			
Receive site induction (if	f required) and use Geo-sight throu	ghou	t wor	ks to	record	Install/Issues	

# Hazard Or Work Activity Assessed :- INTERNAL CABLING Ref No Users of building: If ceiling tiles, cable risers, penetrations through walls/partitions etc. or any drilling works on cable route re-check asbestos register. Ensure barriers are erected around working areas (drum location, open pits, steps etc. and appropriate signage erected. Where required close off walk ways but seek permission from building controller prior to this ensuring fire routes and exits are maintained. Cabling: Provision Check the scheme plans to identify route to be cabled. Set up cable drum on 'A' frame or similar support. Operative to stay with drum during cabling process. Install cable along agreed route. If on cable trays ensure cable is laid back and temporally secured during cabling process. Care to be taken not to lay cable next to/parallel to electric cables. Where fixing to walls agree route with client and get written permission (add to SSRA). Ensure no services exist in walls (check with cable locator). If in doubt contact building owner for advice. Ensure that there is sufficient cable left at either end to allow for jointing. Ensure that cable ends are sealed and cable is marked up. If fleeting is required then ensure that there is sufficient space to "Figure of Eight" the cable within corridors/rooms and suitable barriers erected. Do not over-load the cable when pulling in and ensure it does not snag. Check minimum bending radius of cable and ensure this is not exceeded in the cabling operation. Once cable installed if in a tray apply appropriate fixings (Note:- cable ties to be cut off using appropriate tool so as to not leave sharp edges). Ensure all fire stopping is replaced to clients' specifications and no open holes left in fire breaks. Recoverv Remove cable ties/straps in area of operation Lift cable from tray or fixings and lower down (if in ceiling) Cut sections up into manageable lengths and store in a secure location. Ensure all cables left in situ are secured and apply new fixings if required. Ensure all fire stopping is replaced to clients' specifications and no open holes left in fire breaks. **Confined Space Working:** This may be in basements/cellars, troughs, risers or loft spaces. Ensure that gas-testing equipment is available, and is used when entering these structures and controls outlined in F-JHG-RA020 (Confined Spaces Risk Assessment) are adhered to. Always check with building owner to see if any special arrangements exist on site or any additional risks. Lifting/Pulling Operations: Refer to controls measures outlined in F-JHG-RA002 (Manual Handling) and F-JHG-RA003 (Mechanical Lifting Operations). When lifting service trench covers ensure that the proper lifting keys are used and that safe lifting techniques are employed. Working at Height/off Ladders/Stepladders/Tower Scaffolds: Where Ladders or stepladders are to be used refer to control measures outlined in F-JHG-RA004 (Use of Ladders and Step Ladders) and ensure base of ladder is cordoned off. Where required have a second person at foot of ladder to direct users. For general working at height refer to control measures outlined in F-JHG-RA008 (Working at Height) If Tower Scaffolds are required refer to control measures outlined in F-JHG-RA009 (Working off Tower Scaffolds) Hand Arm Vibration Syndrome:

Refer to control measures outlined in F-JHG-RA007 (Use of Vibrating Machinery) and record readings on SSRA. **Noise:** 

Where the noise level exceeds 85dB(A) hearing protection to be worn (muffs or plugs) as a rule of thumb if you

cannot hold a conversation at 2 Metres distance without shouting hearing protection is required.								
Prior to making excessive noise (or whilst drilling into walls) make users aware of the activity and expected duration.								
Use of Hand Tools/Electrical Equipment: Refer to control measures outlined in F-JHG-RA006 (Hand Tools) & F-JHG-RA005 (Use of Portable Electric Equipment) Defective Equipment : All equipment must be checked before use and check recorded on SSRA. Defective equipment should not be used and should be reported.								
<b>Housekeeping:</b> All guarding and signs should be regularly checked to ensure they are still in place and have not been moved. The site should be kept as clean and tidy practicable during the works. Do not let cables lay outside the guarded area where they can form a trip hazard. Always be polite to the building users and general public.								
Supervisory: Managers/supervisors will ensure that all pre-planning has been put in place and that co-operation and co- ordination with site owners/users has taken place.								
Managers/supervisors to check that the control measures detailed above are being adhered to.								
Once all control measures are applied the residual risk is classed as LOW								
INFORMATION INSTRUCTION TRAINING All operatives working in buildings to have received Asbestos Awareness Training								
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INFORMATION INSTRUCTION TRAINING         All operatives working in buildings to have received Asbestos Awareness Training         All operatives are to only carry out those tasks that they have been trained and authorised to do.         If fleeting is required then ensure that there is sufficient space to "Figure of Eight" the cable within road-works guarding         If stoppages are encountered when rodding the duct, the supervisor shall be informed and a gang arranged to clear the stoppages.         PERSONAL PROTECTIVE EQUIPMENT       MANUAL HANDLING ASSESSMENT         Hi Visibility Clothing       ✓         Head Protection       ✓         Eye Protection       ✓         Hearing Protection (where applicable)       ✓								

Remember PPE is a last resort not a first option

Hazard Or Work Activity Assessed :-	Hazard Or Work Activity Assessed :- Ref No							
MS:05 CABINET EARTH ELECTRODE INSTALLATION								
Site Location								
Risk Rating H = High M= Medium L= Low         Hazard = potential to cause harm.       Risk =probability of that harm occurring         The risk rating criteria is detailed below								
<b>High</b> - Work activity which has the potential to cause a fatal	l/mai	or iniu	irv or	health damage				
<b>Medium</b> – Work activity resulting in loss time injury or signi								
<b>Low</b> – Work activity resulting in minor injury but not lost tim								
SIGNIFICANT HAZARDS	H	M	L	WHO MAYBE HARMED				
Struck by vehicles / plant / equipment			_					
Injury to members of the public	$\checkmark$			Employees 🗸				
Muscular skeletal disorders (MSD's)	$\checkmark$							
Injury to hands, feet, body or hearing	$\checkmark$							
Slips, Trips & Falls		$\checkmark$		Official Visitors				
Falls of materials or equipment		·		Clients 🗸				
Suffocation	$\checkmark$	•						
Sunocation	v			General Public				
MEASURES TO CONTROL SIGNIFICANT RISK								
Planning								
Operatives shall receive adequate job instructions and site	•		-					
Operatives shall have access to appropriate manuals cover	-							
All teams will have available on site appropriate utility plans	e.g.	Elect	ricity,	Gas, Water etc.				
A site specific risk assessment shall be completed prior to t	he co	mme	ncen	nent of any site works.				
PPE appropriate for the task shall be worn.								
Safe manual handling techniques in accordance with F-JH0	G-RA	002 s	hall b	e adopted at all times.				
All work on the client's network will conform to their current	stand	lards.						
All work shall be carried out in accordance with the John He	enrv (	Group	Pro	cedures, the clients Operational				
Standards and Procedures and relevant Health and Safety								
<b>Task</b> In conjunction with current utility drawings using a currently certified CAT and Genny, survey the area for any buried services in accordance with F-JHG-RA013. Mark out all known and identified services within the area using appropriate spray paint.								
Access								
Clear access and egress to be maintained.								
Keep areas tidy and free of flammable materials.								
Before commencement of work on any public highway, staf								
attention has been given to the safety of the public and traff	ic an	d that	all w	orks confirm to the New Road and Street				
Works Act.								
Materials and Tools Under no circumstances are digging bars to be used to excavate the hole for the electrode								
			-	-				

### Hazard Or Work Activity Assessed :- CABINET EARTH ELECTRODE INSTALLATION Ref No

Tools and Equipment shall be kept tidy and away from side of excavations. Only insulated tools to be used for digging. **Defective Equipment** :

All equipment must be checked before use and check recorded on SSRA.

Defective equipment should not be used and should be reported.

### Hand Arm Vibration Syndrome:

Refer to control measures outlined in F-JHG-RA007 (Use of Vibrating Machinery) and record readings on SSRA.

### Noise:

Where the noise level exceeds 85dB(A) hearing protection to be worn (muffs or plugs) as a rule of thumb if you cannot hold a conversation at 2 Metres distance without shouting hearing protection is required. Prior to making excessive noise (or whilst drilling into walls) make users aware of the activity and expected duration.

# Use of Hand Tools/Electrical Equipment:

Refer to control measures outlined in F-JHG-RA006 (Hand Tools) & F-JHG-RA005 (Use of Portable Electric Equipment)

### Excavation

Excavate in accordance with F-JHG-RA015 using Safe Digging Practices (HSG 47) & Utility safe dig prints to be available on site at all times.

Visual & CAT & Genny surveys to take place & all identified services to be marked on the surface.

Trial excavations to be used to be utilised to confirm positions of services.

Ensure where necessary that correct trench wall supports are available and are used.

Excavated material shall be stored a safe distance away from the excavation to stop possible collapse into the excavation, but kept within the guarded area.

Mechanical excavation equipment shall not be used in the vicinity of other utility services.

Adequate access/ingress to be maintained at all times.

Following excavation to a depth of 600mm from the surface, re-use the Cable Avoidance Tool (CAT & Genny) and utility plans to recheck that there are no buried services at the point where the earth electrode is to be installed. Continue digging with an appropriate tool to enable the full length of the electrode to be placed into the ground. **The** 

# electrode is NOT to be knocked into place.

Remove excess water from excavation

Maintain adequate clearance from other services.

# Installation of electrode

The ground surrounding the electrode must then be reinstated using a Carbonite mix and compacted firmly using a suitable pummel.

### **Resistance Test**

Test the resistance of the electrode in accordance with the clients' requirements.

# Supervisory:

Managers/supervisors will ensure that all pre-planning has been put in place and that correct notices are in place. Managers to check that only qualified operatives used in the installation of electrodes. Managers/supervisors to check that the control measures detailed above are being adhered to.

# Once all control measures are applied the residual risk is classed as LOW

# INFORMATION INSTRUCTION TRAINING

All staff will have received the necessary instructions and training in safe methods of work. All teams will hold accreditations covering the type of work to be undertaken. Operatives must have received NRSWA Training and hold appropriate qualifications.

### MANUAL HANDLING ASSESSMENT

Hi Visibility Clothing	$\checkmark$
Head Protection	$\checkmark$
Safety Footwear	$\checkmark$
Eye Protection	$\checkmark$
Hearing Protection	$\checkmark$
Respiratory Protection (where	$\checkmark$
applicable)	
Safety Harness	$\checkmark$
Hand Protection	$\checkmark$

Remember PPE is a last resort not a first option

Hazard Or Work Activ					Ref No		
<b>RA:1 EXCAVATION</b>	S						
Site Location	Generic Assessments						
Risk Rating H = High M= Medium L= Low         Hazard = potential to cause harm.         Risk = probability of that harm occurring         The risk rating criteria is detailed below         High - Work activity which has the potential to cause a fatal/major injury or health damage.         Medium - Work activity resulting in loss time injury or significant material or environmental damage							
SIGNIFICANT HAZA	ing in minor injury but not lost t		e mate M	L	lamag	e. WHO MAYBE HA	DMED
Trench collapse	IKDS		IVI	L			KMED
	a aquaina dama ao ta comvisas	· ·			_	Emularias	
	s causing damage to services	•			-	Employees	•
Undermining adjacent st	uructures				_	Contractors	$\checkmark$
					_	Official Visitors	
					-		
					_	General Public	$\checkmark$
MEASURES TO CON	TROL SIGNIFICANT RIS	K					
<ol> <li>Plan the work, ensure that adequate resources are available to provide trench support and support for services.</li> <li>Ensure that people cannot be struck by material from the trench sides, spoil or stored materials falling into excavations, by keeping such hazards away from the sides of the excavation.</li> <li>Provide stop blocks, fencing and other physical barriers to prevent site vehicles toppling or sliding into excavations.</li> <li>Provide adequate fencing (Herras type 2m) to excavations in order to prevent the possibility of the general public falling into the excavations.</li> <li>Trench sheets, boxes etc. should be utilised in such a way that the top of the sheet or box protrudes 950mm above ground level, thus providing a physical barrier, preventing falling into the excavation.</li> <li>Avoid contact with underground services, especially gas and electricity, see Risk Assessment Number 8.</li> <li>When working adjacent structures, special care and planning should be taken to ensure that the excavation is supported adequately to prevent the collapse of the structure.</li> </ol>					als falling into or sliding into of the general trudes 950mm nber 8.		
Training on correct meth	nods of supporting excavation	ns. working	in a 1	restrie	cted s	pace, and confined sp	aces.
PERSONAL PROTEC						ASSESSMENT	
Head Protection Safety Footwear Eye Protection Hearing Protection Respiratory Protection Safety Harness Hand Protection Remember PPE is a last							

Hazard Or Work Acti	•				Ref No
RA:2 UNDERGROUND SERVICES.					
Site Location         Generic Assessments					
Risk Rating H = High M= Medium L= Low         Hazard = potential to cause harm.       Risk = probability of that harm occurring         The risk rating criteria is detailed below       High - Work activity which has the potential to cause a fatal/major injury or health damage.         Medium - Work activity resulting in loss time injury or significant material or environmental damage       Low - Work activity resulting in minor injury but not lost time, or some material damage.					
SIGNIFICANT HAZA		H	M	L	WHO MAYBE HARMED
Explosion Gas Release		$\checkmark$			Employees
					Contractors
					Official Visitors
					General Public 🗸
MEASURES TO CONTROL SIGNIFICANT RISK					
<ol> <li>Plan excavation work to avoid clashes with known services wherever possible.</li> <li>Mark out known services from service drawing (supplied by service companies).</li> <li>Use cable/service locating equipment to pinpoint the position of the service.</li> <li>Employ safe system of digging to locate services by trial holing.</li> <li>Once services have been located set out excavation limits</li> <li>Do not use mechanical excavators or power tools within 500mm of services especially gas or electricity.</li> <li>Areas to be excavated will be barriered off to prevent unauthorised access and protect members of the public.</li> <li>Where necessary a Permit to Dig should be used (assessment made by site manager/supervisors) whether hazard severe enough to warrant the use of PTW.</li> <li>Workers should know how to give emergency first aid until help arrives. Competence in cardiopulmonary resuscitation and the immediate care of burns and unconsciousness would be an advantage.</li> <li>When control measures are applied, the resultant residual risk must be at an acceptable level.</li> </ol>					
Service location drawin	os are essential Training on	correct use	of ca	hle/se	ervice locators. Training/instruction on
	. Appointed person emergen				
PERSONAL PROTEC	<u> </u>				LING ASSESSMENT
High Visibility Clothin					
Head Protection	$\checkmark$				
Safety Footwear	$\checkmark$				
Eye Protection					
Hearing Protection					
<b>Respiratory Protection</b>	n				
Safety Harness					
Hand Protection					
Remember PPE is a last	resort not a first option				

Hazard Or Work Activity Assessed :-				Ref No
RA:3 FIRE.				
Site Location Generic Assessments				
Risk Rating H = High M= Medium L= Low         Hazard = potential to cause harm.       Risk = probability of that harm occurring         The risk rating criteria is detailed below       Risk = probability or that harm occurring         High - Work activity which has the potential to cause a fatal/major injury or health damage.       Medium – Work activity resulting in loss time injury or significant material or environmental damage         Low - Work activity resulting in minor injury but not lost time, or some material damage.       Image: Comparison of the com				
SIGNIFICANT HAZARDS	H	Μ	L	WHO MAYBE HARMED
Fire Explosion as a result of fire	✓ ✓ ✓			Employees <ul> <li>Contractors</li> </ul>
				Official Visitors
				General Public 🗸
MEASURES TO CONTROL SIGNIFICANT RISK				
<ol> <li>Electrical equipment should meet standards that reflect the adverse conditions on construction sites.</li> <li>No unauthorised bonfires allowed on site.</li> <li>No smoking except in designated areas.</li> <li>Ensure any operative using blowtorches or Oxy-fuel equipment has been properly trained.</li> <li>All hot work must cease 60 minutes prior to site shutdown and the area must be checked by a competent person prior to leaving site.</li> <li>LPG and flammable liquids should be stored in well lockable ventilated containers. Quantities should be minimal.</li> <li>A fire action plan, fire marshals and adequate fire fighting equipment shall be available.</li> <li>Good housekeeping is essential, Especially within properties, all combustible items should be stored properly and waste moved to skips more than 3 metres from properties.</li> <li>Protective coverings should be of non-combustible materials.</li> <li>All contractors hot works to be controlled by a Hot Works Permit.</li> </ol>				
When control measures are applied, the resultant residual ris			I	
Fire precautions covered in site induction's fire evacuat adequately trained.	tion plan c	lispla	iyed i	n prominent places Fire Marshall's
	MANUAI	L HA	NDL	ING ASSESSMENT

Hazard Or Work Activity Assessed :-					Ref No	
	RA:4 WORKING WITH WET CONCRETE, WET CEMENT & MORTAR PRODUCTS					
Site Location Generic Assessments						
Risk Rating H =						
	=probability	, of th	at ha	rm occ	rurring	
The risk rating criteria is detailed below						
High - Work activity which has the potential to cause a fat	al/major inju	ry or	healtl	1 dama	ige.	
Medium – Work activity resulting in loss time injury or significant material or environmental damage						
Low - Work activity resulting in minor injury but not lost t SIGNIFICANT HAZARDS	H	M M	L	lamage	». WHO MAYBE HA	ADMED
Damage to skin – Allergic Dermatitis	11		L	-	WIIO MAIDE IIA	ANVIED
Damage to skin – Irritant Dermatitis		$\checkmark$			Employees	$\boxed{}$
Cement burns to skin or eyes		$\checkmark$			Employees	
		· ✓			Contractors	$\checkmark$
Slips, Trips, Falls		• •			Contractors	•
Contact with Machinery		v		-		$\checkmark$
					Official Visitors	v
				-	C	
					General Public	
MEASURES TO CONTROL SIGNIFICANT DIS	V					
MEASURES TO CONTROL SIGNIFICANT RISK         1. Keep wet product off skin by using gloves and other protective clothing such as long sleeves or overalls.						
						veralis.
2. Contaminated clothing should be removed – do n						
3. Wash cement based products from the skin at reg						
4. If clothing or boots become impregnated with cer						ean or replace.
5. Use wellington boots or similar when laying wet				ione g	ets inside the boot.	
6. If splashing, wet mixing or in windy conditions u	se eye prote	ectior	1.			
7. General housekeeping rules						
8. Mixing materials i.e. sand cement must be kept w				retain	ing walls	
9. Authorised personnel only signage required for m	nixing bay e	ntran	ice			
Note: - See attachment safety information					11	
When control measures are applied, the resultant residual <b>INFORMATION INSTRUCTION TRAINING</b>	risk must de	ai an	acce	piable	level.	
All employees working with such products and mach	inary to be	duic	ad of	tha h	aalth and cafaty haza	rds through
toolbox talks. Cement does contain chromium vi whi						
should be advised of this hazard, the precautions to ta						
skin problems, use eye protection when wet mixing )	ike (1.e. keej	011	экш,	use g		anis, report
All operatives to be informed of site housekeeping ru	les all othe	r one	rativ	es to b	e instructed in author	rised access
rules.	ics, all othe	i ope	1 4 1 1 1			lised access
PERSONAL PROTECTIVE EQUIPMENT	MANUAI	НА	NDI	JNG	ASSESSMENT	
Head Protection						
Safety Footwear	If product	is mi	xed o	on site	cement to be in 25kg	g bags
<b>Eye Protection</b> (where applicable)						
Hearing Protection						
Respiratory Protection						
Safety Harness						
Hand Protection						
Remember PPE is a last resort not a first option						

### **Risk Assessment of Wet Mixing of Mortar on Site – Additional Information**

- a) **Training** the person or people operating the mixing area should be trained in the use of the mixer, how to start and stop it, the required guarding, the mixing hazards in particular the health hazards associated with cement and wet cement, and the precautions to be taken.
- b) **Mixing area** the area should be selected and prepared so that it is convenient to the end user position (a balanced carry distance from mixer to the user), is accessible for sand and cement deliveries, there is water supply or access for water barrels, and the mixing area can be segregated form other site activities so plant operations etc do not endanger people working at the mixing area. If the site is prone to windy conditions, this should also be considered when selecting the mixing area to minimise wind blown sand and cement. The ground should be prepared by levelling and compacting. A suitable shovel must be provided of a size acceptable to the user, again striking a balance between the load on the shovel and the need for repetitive strokes to fill the mixer.
- c) **Mixing Machine** the machine must be in good condition, compliant to current standards with regards to machinery guarding, noise and emissions from engine. If electric mixer is being used this should either be at 110 volt (supplied via a transformer centre tapped to earth, or via a specific RCCB on the supply to the mixer and which is tested daily.
- d) **Sand** the supply of sand should be positioned local to the mixer to minimise handling requirements. Arrangements to minimise the sand spilling or blowing should be considered. Also consider the safe delivery of the sand to the mixing position.
- e) **Cement** Also see COSHH assessment Cement must be supplied in 25 KG bags only. The bags should be stored on pallets or other means to keep the bottom bags at least 150mm (preferably 300mm) above ground level. This will make manual handling of the bags significantly safer.
- f) **Health Hazards** When we mixing, light eye protection should be used to minimise the risk of a wet cement splash into the eye. Gloves and long sleeves or overalls should be worn at all times to minimise skin contact. Barrier creams and good washing faculties should be readily available so that cement or mortar can be readily washed form the skin if required.
- g) **Housekeeping in General** the mixing area should be kept clean and tidy with safe access across the ground, with cement bags being safely disposed off to waste skips or bins (consider wet spraying prior to disposal to minimise dust emissions from waste bags). If the wash out waste accumulates, this should be scraped away to maintain a good foothold.

Hazard Or Work Activity Assessed :- Ref No				
RA:5 USE OF COMPRESSED AIR EQUIPMENT				
Site Location Generic Assessments				
Risk Rating H = High M= Medium L= Low         Hazard = potential to cause harm.       Risk = probability of that harm occurring         The risk rating criteria is detailed below       Risk = probability of that harm occurring         High - Work activity which has the potential to cause a fatal/major injury or health damage.       Medium – Work activity resulting in loss time injury or significant material or environmental damage         Low - Work activity resulting in minor injury but not lost time, or some material damage.       Image: Comparison of the com				
SIGNIFICANT HAZARDS	Η	Μ	L	WHO MAYBE HARMED
Noise		$\checkmark$		
Penetrating injury		$\checkmark$		Employees 🗸
Air bubbles in skin or blood		$\checkmark$		
Flying dust and particles		$\checkmark$		Contractors 🗸
				Official Visitors
				General Public
MEASURES TO CONTROL SIGNIFICANT RISK				General i ubite
<ol> <li>Compressed air is used to run several items of equipment and also used to clean out voids and spaces especially in shutters before concrete pours. When the air lance is being used for cleaning, it must have an on/off regulator valve so the operative can control and isolate the lance at the operating position.</li> <li>If the compressor has an air receiver then there must be a thorough examination certificate for the receiver.</li> <li>All compressed air equipment must have a CE marking and documentation to show regular maintenance and inspection.</li> <li>There should be the safe working pressure clearly marked on the compressor and all compressed air equipment so that site operatives can easily check if the equipment can be safely used with the compressor.</li> <li>If air fed equipment such a blast hoods is to be used special conditions apply – see separate risk assessment.</li> <li>'Quiet' compressors to be used whenever possible</li> </ol>				
Head Protection✓Safety Footwear✓Eye Protection✓Hearing Protection✓Respiratory Protection✓Safety Harness✓	ecially Comp	abou ressec	t the l air s	hazards of compressed air penetrating
Hand Protection				

Hazard Or Work Activ					Ref No		
RA:6 HIGHLY FLAMMABLE LIQUIDS.							
Site Location	Generic Assessments						
Risk Rating H = High M= Medium L= Low         Hazard = potential to cause harm.       Risk = probability of that harm occurring         The risk rating criteria is detailed below       Risk = probability of that harm occurring         High - Work activity which has the potential to cause a fatal/major injury or health damage.       Medium – Work activity resulting in loss time injury or significant material or environmental damage         Low - Work activity resulting in minor injury but not lost time, or some material damage.       Image: Comparison of the com							
SIGNIFICANT HAZA		Η	Μ	L		WHO MAYBE HA	RMED
Fire			~			Employees Contractors	<ul> <li>✓</li> <li>✓</li> </ul>
						Official Visitors0	
						General Public	
MEASURES TO CONTROL SIGNIFICANT RISK							
MEASURES TO CONTROL SIGNIFICANT RISK         Highly flammable liquids (HFL's) are controlled mainly though a process of elimination. HFL's are seldom used on sites, the products being replaced by safer non-flammable alternatives         When control measures are applied, the resultant residual risk must be at an acceptable level.         INFORMATION INSTRUCTION TRAINING         If HFL's are used operative to have specific product information on the flash point and the precautions to be taken.							
PERSONAL PROTEC	CTIVE EQUIPMENT	MANUA	L HA	NDL	LING A	SSESSMENT	
Head Protection Safety Footwear Eye Protection Hearing Protection Respiratory Protection Safety Harness Hand Protection Remember PPE is a last f							

Hazard Or Work Acti	vitv Assessed :-				Ref No
	& WORK ON THE PUBLI	C HIGHW	VAYS	S & I	FOOTPATHS.
Site Location	Generic Assessments				
	Risk Rating H = 1	High M= M	lediur	m L=	Low
Hazard = potential to cau		=probabilit	v of th	at ha	rm occurring
The risk rating criteria is d					
	ch has the potential to cause a fata				
	resulting in loss time injury or sig				
Low - Work activity resulting in minor injury but not lost time, or some material damage.SIGNIFICANT HAZARDSHMLWHO MAYBE HARMED					
Stuck by moving vehicl		11 	IVI	L	WHO MATE HARMED
Striking underground se		√			Employees 🗸
Vehicles endangered by		✓			
Pedestrians ad public en			$\checkmark$		Contractors 🗸
Noise and dust			$\checkmark$		
Possible risk from overl	nead services	$\checkmark$			Official Visitors
					General Public 🗸
MEASURES TO CONTROL SIGNIFICANT RISK					
<ol> <li>Operatives and the supervisor to be trained in accordance with the New Roads and Streetworks Act</li> <li>All work to be signed, guarded and lit in accordance with the guidance to New Road &amp; Streetworks.</li> <li>Details of underground services to be on site together with a CAT locator.</li> <li>Area to be checked for overhead services. If there are any, details of the service, safe clearance distance and warning signs/barriers must be determined</li> </ol>					to New Road & Streetworks. tor. f the service, safe clearance distance and
	re applied, the resultant residual r	risk must be	at an	accep	ptable level.
INFORMATION INS	IRUCTION TRAINING				
Operatives and supervis	or to be trained in accordance	with the N	ew R	loads	& Streetworks Act
PERSONAL PROTEC	CTIVE EQUIPMENT	MANUA	L HA	NDI	ING ASSESSMENT
High Visibility Clothin					
<b>Head Protection</b>	$\checkmark$				
Safety Footwear	$\checkmark$				
Eye Protection					
<b>Hearing Protection</b>					
<b>Respiratory Protection</b>	1				
Safety Harness					
Hand Protection					
Remember PPE is a last	resort not a first option				

Page 2 of 2

Hazard Or Work Activ	vity Assessed :-					]	Ref No	
<b>RA:8 POWER TOOL</b>	S							
Site Location	Location Generic Assessments							
Risk Rating H = High M= Medium L= Low         Hazard = potential to cause harm.       Risk = probability of that harm occurring         The risk rating criteria is detailed below       High - Work activity which has the potential to cause a fatal/major injury or health damage.         Medium – Work activity resulting in loss time injury or significant material or environmental damage								
SIGNIFICANT HAZA	ting in minor injury but not lost t	H	mate M	L	amage		VRF HA	PMFD
	machine when in use i.e.:-							
Abrasive wheel disinteg		$\checkmark$				Employees		$\checkmark$
Sparks flying from mach	<u> </u>	✓				Linpiojees		
Fumes from petrol or di		✓				Contractors		$\checkmark$
Short circuit of electrica	<u> </u>	$\checkmark$						
	*					Official Vis	itors	
						General Pub	olic	
MEASURES TO CON	TROL SIGNIFICANT RIS	K						
			usec	1 for 1	that pa	rticular type	of job.	
· ·								
4. Has the operative be (abrasive wheels, dr		inar piece o	equ	ipine	in and	to confectly	mount u	le attachments
	ossession of the correct PPE e training in its correct use?	to use with	the p	ower	tool a	and does the	use of thi	is PPE require
6. Is anyone else at ris	k from the activity involving	the use of tl	ie po	wer t	ool?			
7. Is dust suppression	or any other associated contro	ol measure r	equir	ed to	be us	ed with this p	power too	ol (LEV?)
	be used in a confined space of quirements of working in that			-		If so then the	he power	tool will need
9. Does the power tool in place to deal with	l itself give off sparks or fum these.	es when in	use,	if so	then c	ontrol measu	ures will	need to be put
10. All attachments will	need to be compatible with l	ne power to	ol to	be us	ed and	l the job it is	required	to do.
When control measures ar	e applied, the resultant residual	risk must be	at an	acce	otable l	level.	•	
	<b>FRUCTION TRAINING</b>							
All operatives must have	e had adequate training and h	nave receive	d all	nece	ssary i	nformation i	n conjune	ction with the
power tool to be used.								
PERSONAL PROTEC	CTIVE EQUIPM <u>en</u> t	MANUA	L HA	NDL	ING	ASSESSME	<b>NT</b>	
Head Protection								
Safety Footwear								
Eye Protection	$\checkmark$							
Hearing Protection	$\checkmark$							
Respiratory Protection								
Safety Harness								
Hand Protection								
Remember PPE is a last	resort not a first option							

Haz	ard Or Work Activ	vity Assessed :-		Ref No						
RA	9 MANUAL HAN	NDLING								
Site	ite Location Generic Assessments									
Risk Rating H = High M= Medium L= Low         Hazard = potential to cause harm.       Risk = probability of that harm occurring         The risk rating criteria is detailed below       Risk = probability of that harm occurring         High - Work activity which has the potential to cause a fatal/major injury or health damage.       Medium – Work activity resulting in loss time injury or significant material or environmental damage         Low - Work activity resulting in minor injury but not lost time, or some material damage.       Medium – Work activity resulting in minor injury but not lost time, or some material damage.										
	NIFICANT HAZA		y out not lost	H	M	L	amag	WHO MAY	VBE HAF	RMED
	ing heavy or awkwar				 ✓			Employees		
								Contractors		$\checkmark$
-								Official Visi	itors	
								General Pub	olic	
	ASURES TO CON									
Am	anual handling asses	ssment must be c	carried out p	rior to the w	ork b	being	carrie	ed out.		
Whe	en you or your work	ers are involved	in manual ha	andling, pre	vent i	injury	v by:			
1.	1. Avoiding unnecessary handling;									
	Find ways of either manual handling;	r avoiding the h	nandling alto	ogether, or	using	; mec	hanic	cal aids to mi	inimise tł	ne amount of
	Sharing loads which is immune from inju		d by hand. H	Remember, v	while	som	e woi	kers are stron	ger than o	others, no one
	Positioning loads by distance over which			reduce the	heig	ht fro	om w	which they hav	ve to be	lifted and he
6.	Training workers in	safe lifting techn	niques and so	ensible hand	lling	of loa	ıds;			
7.	Not allowing any on	e on their own to	o lift buildin	g blocks we	ighin	g mo	re tha	an 20 KGs;		
	Ordering bagged ma			-	-	-				
	n control measures ar		•		-			level.		
	ORMATION INST	11 /				1				
	ure all operatives eng		handling op	erations are	train	ed to	carry	v out their task	s compete	ently,
	nout danger to thems		_							
	RSONAL PROTEC	CTIVE EQUIPM	<u>1ENT</u>	MANUA	L HA	NDL	ING	ASSESSME	NT	
	eralls		<b> </b>							
	d Protection		$\checkmark$							
	ety Footwear Protection									
•	ring Protection									
	piratory Protection		┝───┤							
	ety Harness		<b>├───┤</b>							
	nd Protection									
Rem	nember PPE is a last i	resort not a first o	option							

		r Work Activity Assessed :- Ref No					Ref No	
-	:10 USE OF LADDERS							
Site Lo	Site Location Generic Assessments							
Risk Rating H = High M= Medium L= Low         Hazard = potential to cause harm.         Risk =probability of that harm occurring         The risk rating criteria is detailed below         High - Work activity which has the potential to cause a fatal/major injury or health damage.         Medium – Work activity resulting in loss time injury or significant material or environmental damage				age. nental damage				
-	FICANT HAZA	ting in minor injury but not lost time, RDS	H	M	L	lamag	e. WHO MAYBE HARMED	
	f operatives from							
	A	adders onto people below	$\checkmark$					
							Contractors 🗸	
							Official Visitors	
							General Public 🗸	
		TROL SIGNIFICANT RISK	1 -			1.4		
	re suitable work a) short duration	equipment is not justified because n of the work	of the				which demonstrates that the use of	
	<i>,</i>	ures on site which cannot be altere						
con	2. Ensure that any surface upon which a ladder rests is stable, firm, of sufficient strength and of suitable composition safely to support the ladder so that its rungs or steps remain horizontal, and any loading intended to be placed on it.							
3. Ens	3. Ensure the ladder is so positioned to ensure its stability during use.							
	4. A suspended ladder shall be attached in a secure manner and so that, with the exception of a flexible ladder, it cannot be displaced and swinging is prevented.							
or	5. Any portable ladder must be prevented from slipping during use by a) securing the stiles at or near their upper or lower ends and b) an effective anti-slip or other effective stability device or any other arrangement of equivalent effectiveness.							
		used for access is long enough to p less other measures have been take					pove the place of landing to which it dhold.	
	interlocking or e er while in use.	extension ladder shall be used unle	ess its	sectio	ons ai	e pre	vented from moving relative to each	
8. An	y mobile ladder i	must be prevented from moving be	fore it	is ste	epped	l on.		
rea								
10. Eve	ery ladder shall b	e used in such a way that,						
	a) a secure hand	hold and secure support are alway	vs avai	lable	to the	e usei	·· ,	
	b) the user can maintain a safe handhold when carrying a load							
11. In case of a step ladder, where the maintenance of a handhold is not practicable when a load is carried, a risk assessment should be undertaken to demonstrate that the use of a stepladder is justified because of the low risk and the short duration of use. For example utilising the second rung of a ladder to access traditional housebuilding units for electrical/plumbing work could be classed as low risk. Alternatively standing on the top rung to pull cable on a refurbishment can be considered high risk.								
When co	When control measures are applied, the resultant residual risk must be at an acceptable level.							

### INFORMATION INSTRUCTION TRAINING

Operatives should be competent persons, the person undertaking the task should have such practical and theoretical knowledge and actual experience of the type of the ladder which he has to examine as well enable him to detect defects or weaknesses which it is the purpose of the examination to discover and to assess their importance in relation to the strength and functions of the ladder. In other words, the competent person must not only be able to discover defects but must be able to tell what effect they are likely to have.

# Information instruction and training can be achieved through bespoke courses and/or tool box talks etc.

PERSONAL PROTECTIVE EQUIPMENT	MANUAL HANDLING ASSESSMENT
Head Protection	
Safety Footwear	
Eye Protection	
Hearing Protection	
Respiratory Protection	
Safety Harness	
Hand Protection	
Remember PPE is a last resort not a first option	
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Hazard Or Work Activity Assessed :-						RefN	No
RA:11 HOUSEKEEPING							
Site Location	Generic Assessments						
Risk Rating H = High M= Medium L= Low         Hazard = potential to cause harm.       Risk = probability of that harm occurring         The risk rating criteria is detailed below       Risk = probability or that harm occurring         High - Work activity which has the potential to cause a fatal/major injury or health damage.       Medium – Work activity resulting in loss time injury or significant material or environmental damage         Low – Work activity resulting in minor injury but not lost time, or some material damage.							
SIGNIFICANT HAZA	- · ·	H	М	L		WHO MAYBE	HARMED
Rubbish and waste mate Timber with protruding		✓ ✓				Employees	$\boxed{\checkmark}$
Thazardous materials (su	en as onek aeld, penor ele j					contractors	
						Official Visitors	$\checkmark$
						General Public	$\checkmark$
MEASURES TO CONTROL SIGNIFICANT RISK							
<ol> <li>Plan how the site will be kept tidy. In particular, walkways and stairs should be kept free of tripping hazards such as trailing wires and loose materials.</li> <li>It is especially important to ensure that emergency routes are kept free from trip hazards.</li> <li>Remove nails from loose timbers to prevent foot and other injuries.</li> <li>Clear paper, timber offcuts and other flammable materials to reduce fire risks.</li> <li>Ensure that all substances which are hazardous to health are locked away in a secure room, when they have been used and finished with.</li> <li>Ensure that skips are removed from site when they are full, and where necessary closed skips should be used to prevent rubbish being blown over the site.</li> <li>When control measures are applied, the resultant residual risk must be at an acceptable level.</li> <li>INFORMATION INSTRUCTION TRAINING</li> <li>Ensure all operatives and supervisors attending the site are inducted into the housekeeping rules and systems to be employed on the site.</li> </ol>							
PERSONAL PROTEC	CTIVE EQUIPMENT	MANUAI	L HA	NDL	JNG	ASSESSMENT	
Head Protection Safety Footwear Eye Protection Hearing Protection Respiratory Protection Safety Harness Hand Protection Remember PPE is a last							

Hazard Or Work Activity Assessed :-						Ref No		
RA:12 HAND TOOLS								
Site Location	Generic Assessments							
Risk Rating H = High M= Medium L= Low         Hazard = potential to cause harm.       Risk = probability of that harm occurring         The risk rating criteria is detailed below       Risk = probability of that harm occurring         High - Work activity which has the potential to cause a fatal/major injury or health damage.       Medium – Work activity resulting in loss time injury or significant material or environmental damage								
Low – Work activity resul		y but not lost				lamage		DIADD
SIGNIFICANT HAZA	ARDS		H	Μ	L	-	WHO MAYBE HA	RMED
Broken/defective hand t	ools causing iniu	ITV	✓				Employees	$\checkmark$
Using incorrect hand to		ii y	√				Contractors	$\checkmark$
	or for the job							
							Official Visitors	
							General Public	
MEASURES TO CON	TROL SIGNIF	ICANT RIS	K					
<ol> <li>Hand tools should be visually inspected for defects, prior to use.</li> <li>Simple hand tools usually require minimal maintenance, but where necessary this should be carried out as and when required.</li> <li>Where necessary, defective hand tools should be replaced if it is not economical to have an effective repair carried out.</li> <li>Hand tools should only be used for the job they were designed to do, e.g. screwdrivers should not be used as chisels.</li> <li>Where specialist hand tools are to be used, training may be necessary prior to their use.</li> <li>When control measures are applied, the resultant residual risk must be at an acceptable level.</li> <li>INFORMATION INSTRUCTION TRAINING</li> <li>Where specialist hand tools are to be used instruction in their correct use may be necessary, i.e. some woodworking hand tools used by an apprentice may need to be under the instruction and guidance of a trained</li> </ol>								
joiner/tradesman.				TTA	NDI	INC	ACCECCMENT	
PERSONAL PROTEC	LIVE EQUIPN		MANUA	л пА	INDL	ang a	ASSESSMENT	
Head Protection Safety Footwear Eye Protection Hearing Protection Respiratory Protection Safety Harness Hand Protection	1							
Remember PPE is a last resort not a first option								

INFORMATION INSTRUCTION TRAINING	
All personnel in charge of or operating lasers must be adequa	ately trained in their use and associated hazards.
PERSONAL PROTECTIVE EQUIPMENT	MANUAL HANDLING ASSESSMENT
Head Protection	
Remember PPE is a last resort not a first option	

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