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D. HUGHES

DEMOLITION & EXCAVATION LTD.

Method Statement

Project:	Laystall Street Demolition	
Address:	Ducie Street, Manchester, M1 2JQ	
Client:	McCauls	
Issue Date:	18th January 2022	**Revision 1**
Prepared by:	Ryan Hughes Contracts Manager	**Signed:**
Reviewed by:	Dale Hughes Managing Director	**Signed:**
Plan reviewed and accepted by:	Site Supervisor	**Signed:**

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1. Introduction

This Method Statement has been prepared to demonstrate the safe working method for the demolition and site clearance including, soft strip and grubbing up all foundations. This to be read in conjunction with provided drawings and Hazard Surveys. All demolition work will be carried out in accordance with the relevant Codes of Practice and H.S.E. guidelines. All asbestos removal works to be carried out in accordance with The Control of Asbestos Regulations 2012 (CAR), H.S.E. Approved Code of Practice (ACOP) L143 Managing and Working with Asbestos and Health & Safety at Work Regulations and Legislation.

The Method Statement is intended to be a live document in accordance with the relevant Codes of Practice and H.S.E. Guidelines. The methods described herein are seen as the most appropriate for the works and are based on information available at the time of preparation. In the event of unforeseen circumstances, changes in conditions, requirements or timescale, this document may need to be amended or developed with the agreement of the Principal Contractor.

All work will be carried out in accordance with the relevant Health and Safety Regulations which may include:

- The Working at Height Regulations 2005
- Workplace (Health, Safety and Welfare) Regulations 1992
- The Management of Health and Safety at Work Regulations 1999
- The Control of Pollution Act 1989
- The Noise at Work Regulations 1989
- COSHH Regulations 2002
- RIDDOR Regulations 2013
- The Personal Protective Equipment Regulations 2016/425, enforced by the Personal Protective Equipment (Enforcement) Regulations 2018
- The Provision and Use of Work Regulations 1998
- The Control of Asbestos at Work Regulations 2012
- BS 6187:2011 Code of Practice for full and partial Demolition
- CDM Regulations 2015

As the Demolition Contractor we will

- Address the health & safety issues likely to be involved in the management of the demolition phase
- Plan, manage and monitor the demolition phase, providing adequate resources and competent site management that is appropriate for the risks envisaged during the project
- Provide contractors with the necessary information about the project that they need for them to carry out their works safely and without risk to health

2. Project details

Principal Contractor	
McCauls Astley House 61 Higher Green Lane Manchester M29 7HQ	Contact: Joseph McCaul
	Tel: 01942 878900 / 07951 518705
	Email: Joe@mccauls.co.uk
Demolition Contractor	
D Hughes Demolition & Excavation Ltd. Coteman Heights Farm, Hill Top Lane, Delph, Oldham, OL3 5RW	Contact: Ryan Hughes
	Tel: 0161 624 3460 / 07968 551318
	Email: info@dhughesdemolition.co.uk
Principal Hazard Management Consultant / Health & Safety Co-ordinator	
RGS Safety Services 55A Wotton Drive Ashton in Makerfield WN4 8XR	Contact: Gary Turnock B.Sc. Grad IOSH, CoCA (Asbestos)
	Tel: 07590 824270
	Email: rgssafetyservices@hotmail.com
Health & Safety Executive	
Health & Safety Executive, Redgrave Court, Merton Road, Bootle, Merseyside, PR1 2HS.	Contact: Tel: 0151 951 4000

Location of the works: Laystall Street, Manchester

Programme	Working Hours
Start date: TBC.	Monday to Friday: TBC

3. Existing Site Features

➢ The Site & Surrounding Areas

The site is bounded by Laystall Street, Brock Street and Pigeon Street. Laystall Street is situated off the A665 Great Ancoats Street and is surrounded by large shopping units and apartments. There is a car parking area to the west side of the building

Letters detailing the proposed works and programmed dates will be distributed to all adjacent residents and businesses.

➢ Existing Services

The existing gas, electric and water will be disconnected by the Client. DHD & EL will require written confirmation of the disconnections prior to commencing on site.

➢ Site Access & Egress

Access and egress will be via Laystall Street. Vehicles entering and leaving the site must drive with the utmost caution showing due care and consideration to residents and other road users and the rights of free access for the public will be maintained at all times.

The safe access and egress to the site for labour, plant and vehicles is paramount. Drivers of vehicles must adhere to the traffic plan always produced by the Principal Contractor and the instructions of

the traffic marshal. Under no circumstances will a vehicle reverse without the attendance of the banksman/traffic marshal and on leaving the site, vehicles will be signalled by the banksman/traffic marshal to exit. There will be a 5mph limit on all vehicles visiting the site and under.

➢ Ground Conditions

Prior to commencement of the works, the site will be inspected to identify the location of any weak and variable areas and the presence of overhead hazards.

Before breaking ground, checks will be carried out that there are no underground services, (electricity, gas, water, telecommunications etc.) that will be damaged during the work activity. Service plans / drawings will be reviewed beforehand.

Further investigations may be necessary for the grubbing up of the foundations.

➢ Existing Structures

A brick-built Victorian Structure constructed circa 1840. No elements that can be classed as structurally sensitive.

➢ Existing Drawings

The following documents have been supplied by the Principal Contractor:

- Laystall St. – Demolition Plan
- Laystall St. – Demolition Scope of Works
- Asbestos Management Report revised
- 17F094 Basement

4. Method Statement

➢ Scope of Work

- Site Establishment
- Asbestos Removal (All asbestos will be removed prior to demolition works taking place. An ASB5 Notification will be submitted to the HSE at least 14 days before the start date of the asbestos removal. A separate Plan of Works will need to be prepared and submitted to the Client for approval and to the HSE if requested by them)
- Soft Strip Out
- Demolition
- Removal of the Hard Standing / Ground Foundation
- Crushing & Stockpiling
- Site Finish

➢ Resources

General Staff	
Director of Safety	Dale Hughes
Contract Manager	Ryan Hughes
Site Supervisors	Reece Hughes
Plant Operatives (CPCS & CCDO)	4
Site Operatives (CCDO)	4
(The frequency of the site based, and non-site-based personnel will be dependent on operations and programme demand)	

Plant & Equipment	
Komatsu 490 high reach hydraulic Excavator Komatsu 360 hydraulic excavator Various attachments- grapple, pulveriser, magnet, buckets etc. RORO truck & waste skips Work vehicles / vans Hand tools Access Equipment: MEWP Podium Hop-ups	Please note: This is not an exhaustive list and plant, and equipment will be provided at a frequency to deliver the works in a safe manner and in accordance with the agreed programmed works. All plant to be turned off when standing idle or if the operative leaves the cab. Bungee keys to be supplied to be used on all plant.

➢ Soft Strip Out

Prior to the commencement of any strip out works we will ensure that disconnection certificates are in place for services feeding the area.

HOLD POINT
Confirmation that services have been identified and disconnection certificates are in place.
Site Supervisor
Signature:
Date:

An exclusion zone with warning signs will be erected around the work area to prevent unauthorised persons from entering the area during soft strip operations.

The removal of the following will be included in the soft strip activity:

- Fixtures and Fittings
- Doors, Doorframes and Skirting's
- Partition Walls-(Non-load bearing)
- Removal of Sanitary Ware
- Removal of Floor Coverings
- All surface mounted electrical cabling & pipework

The materials will be stripped from their fixings and sorted into their waste streams and placed in the relevant waste skip; from there they will be disposed to a waste recycling facility

Fixtures and Fittings:

All loose fixtures and fittings will, where of a suitable size be removed from the building whole; taken to the disposal point by hand before being placed directly into the waste skip positioned to the work as closely as practicably possible. Any larger items will be dismantled /downsized using small tools, reduced into manageable sections and transported to the disposal point.

Suspended Ceilings:

To reduce the risk of working at height, all suspended ceilings and any ceiling tiles will be left in situ to be demolished with the main structure.

Doors, Doorframes and Skirting:

Doors, door frames and skirting will be removed using various hand tools; screw drivers, pry-bars and hammers. Working in pairs, operatives will unscrew the door hinges using screwdrivers with the correct type head; the doors will be placed in the wood skip for re-use or disposal to a wood recycling facility. The skirting boards and doorframes will be prised from their place of fixing, (skirting will be removed first followed by the doorframes); any obtrusions and nails will be removed or hammered over with all resultant materials then being placed into the waste skip.

Partition Walls-(Non load bearing):

Plasterboard panels will be prised from their fixings employing claw hammers or pry-bars, any nail heads will be hammered into the timber frame. Removal of the plasterboard will expose the timber frame supports which will then be removed, de-nailed or nails hammered over and transported to the waste skip.

Removal of Sanitary Ware

Confirmation that the water supply has been isolated must be obtained before commencement of these works. The units will be carefully removed by unscrewing their fixings or where this is unsuitable; they will be removed by breaking into the surrounding brickwork to release.

Removal of Floor Coverings

Carpets: Operatives using hand tools will prise any carpet off their gripper strip. The lifted carpet will be rolled up and placed into the waste skip. Any larger carpets will be cut in sections employing a Stanley knife to minimise manual handling.

Floor tiles: Any floor tiles will be lifted using suitable hand tools, and immediately placed into a wheelbarrow and transported to the waste skip to prevent tripping hazards for the remainder of the works.

All Surface Mounted Electrical Cabling & Pipework

All pipework will be cut out; any cables will be severed using cable cutters and any brackets unbolted or severed using Stihl saws.

Hot work permits will be required detailing control measures, specific location, duration and equipment to be used including type of fire extinguisher.

Wall mounted heaters / radiators will be prised / dismantled from their fixings and carted from the work area to the disposal point; associated pipework / cables will be removed in a methodical manner using cable cutters / Stihl saws

Lighting units will have their cables severed and the units prised free from their fixings.

All waste steelwork / pipework will be removed to the designated storage area.

Plant, Storage Tanks & Machinery

To reduce the risk of manual handling, the removal of any plant, storage tanks, machinery, etc. throughout the building will be by mechanical means utilising the excavator as part of the main demolition. They will be removed whole where possible and placed into a designated exclusion zone to be downsized if necessary and placed into the correct skip to be taken for recycling.

Transit Route

Good housekeeping practices must be maintained at all times; the work area should be cleared as work progresses and waste will not be allowed to accumulate. All corridors, walkways to the disposal point must be kept clear of any obstructions to eliminate slip and trip hazards.

All materials arising from the soft strip activities will be segregated and placed into the relevant waste skips. As and when required the waste skips will be removed off site and the contents disposed of at a recycling centre or an approved tip

A trained site supervisor will oversee the works at all times. All operatives have received training in Manual Handling and will be issued with suitable R.P.E. and P.P.E.

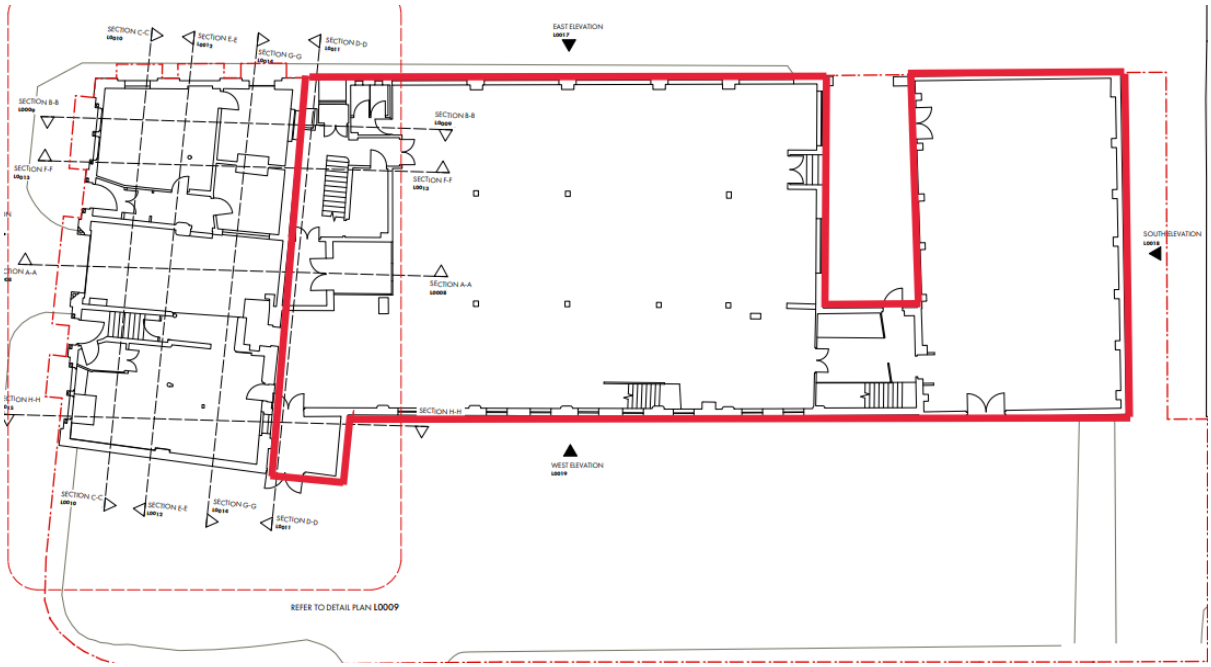
HOLD POINT
Confirmation that the soft stripped building has been fenced off to ensure no unauthorized access prior to machine demolition
Site Supervisor
Signature:
Date:

➢ Demolition

Prior to any demolition, a survey of the structures will be carried out to determine any irregularities in the structures. Any irregularities will be dealt with, and amendments made to the Method Statement.

The extent of the demolition is outlined in red below. A section of the brick-built Victorian Structure fronting Laystall Street is to be retained.

The ancillary building is to be demolished down to existing basement floor level to allow archaeology to commence. The excavator will assist the archaeologist working under his/her instructions. It is anticipated that the Archaeologist will be on site for approximately one week.



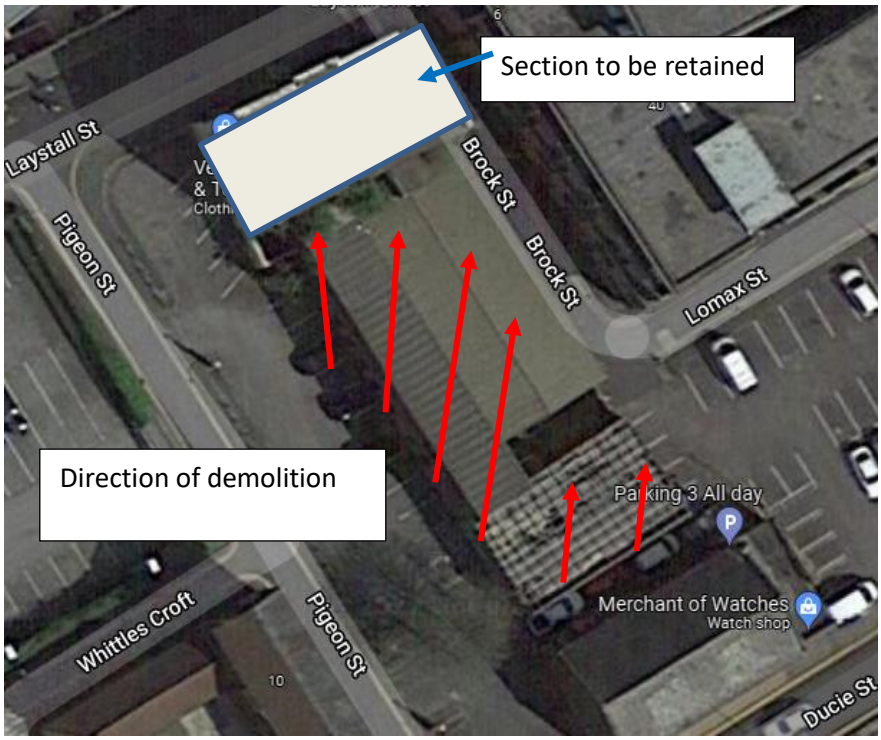
The building will be demolished top down by mechanical means using high reach hydraulic excavators fitted with rotating grapple attachments.

A demolition exclusion zone will be created in accordance with BS6187: 2011, Clause 13: Safe Working Spaces and Exclusion Zones inclusive of the designated 'Debris Drop Area'-which is the immediate hazard area where arising's are designed to fall, the 'Predicted Drop Area'- the area of predicted limit or extent where falling debris may travel and the 'Buffer Area'- planned to allow for any unpredicted event; people beyond the external perimeter of this area are safe from the effects of the demolition activity

Trained banksmen will be in position around the exclusion zone to eliminate un-authorised access; any un-authorised personnel will be cleared from the area during the demolition works.

HOLD POINT
Confirmation that banksman is in position prior to commencement
Site Supervisor:
Signature:
Date:

HOLD POINT
Confirmation that the building and exclusion zone has been checked for unauthorised personnel prior to commencement of the demolition
Site Supervisor:
Signature:
Date:



The starting point of the demolition will be the west elevation (Pigeon Street elevation). The high reach excavator fitted with a grapple attachment will be sited on the car park and create an opening at the roof/eave elevation of the two-storey ancillary building progressing across the width of the elevation reducing in height several course at a time. The excavator will carefully push the elevation into the footprint of the building, allowing the masonry to fall to the floor naturally.

Always maintaining a safe distance from the demolition face, the excavator will continue reducing the western and southern elevations / guiding them inwards into the building's footprint working towards the eastern elevation adjacent to Brock Street as shown in the diagram above.

This sequence of mechanical demolition will continue along the length and across the building.

When the eastern elevation is almost reached, the demolition of the structure will be kept stepped back at an approximate 45º angle from the ground floor upwards, this will help keep the structure of the building stable whilst the Brock Street elevation is pulled inwards.

Works will continue towards the listed building which is to be retained adjacent to Laystall Street. Mechanical demolition will cease before the point of separation and the final section to be demolished will be completed by hand.

Access will be gained from a MEWP (Cherry Picker). Any operatives operating the MEWP will hold IPAF certification. Operatives have received training in the Use of Safety Harnesses and Working at Height.

All operatives working from the hydraulic platform will wear full body harnesses and short lanyards anchored securely to the operating cage. A rescue plan will be formulated, and the MEWP operators will be fully conversant with the emergency procedures if the operator becomes incapacitated, First Aiders will be present throughout the operation.

Using hand tools; pry-bars, hammers, operatives will carefully remove the bricks back to the separation point at the natural joint taking care not to cause damage to the listed building and masonry features. Any metal ties will be cut flush using reciprocating saws.

Throughout the demolition process, the fallen material from the inside of the building will not be allowed to build up and will be continually retrieved as works progress.

Wet suppression techniques to suppress any dust, etc. will be applied when necessary (water to be supplied by the Client)

Four dust management points external to the site will be established; a nominated person will carry out daily checks, mist cannons (dust busters) will be readily available if necessary and during dry periods.

As works progress all materials/arising's will be cleared from the exclusion zone at regular intervals and processed on site. All materials arising suitable for crushing will be left stockpiled on site; any non-crushable materials will be loaded into waste skips, removed off site and the contents disposed of at licensed waste recycling facilities.

At the end of each working day any remaining structure of the building will be left in a stable and safe condition.

Fully experienced banksmen will assist the excavator operators and a trained site supervisor will oversee the works at all times.

➢ Removal of Hard-standings, Ground Foundations

The hydraulic excavator fitted with the bucket attachment will be used to lift the ground bearing slab.

HOLD POINT:
Confirmation that services have been identified and disconnection certs are in place. A permit to excavate has been issued by DHDEL
Site Supervisor:
Signature:
Date:

Once the structures have been demolished all redundant material will be cleared from the working area leaving only the ground bearing slab and foundations.

To reduce the risk of noise, a hydraulic excavator fitted with the bucket attachment will be used to lift the ground bearing slab.

Starting at one corner of the slab, a small excavation will be dug to expose the underside of the slab. The excavator will then sit on the slab which will be lifted out under mechanical pressure.

If the slab is resistant, the hydraulic excavator will be fitted with a breaker attachment and weaken the slab in strategic locations to allow the slab to be lifted.

When the slab has been removed the foundations will be grubbed out.

Two hydraulic excavators will be used to break out all hard standings, ground foundations, one excavator fitted with a pulverising attachment will break up the hard standing's, ground foundations/substructures, whilst the other excavator fitted with a bucket attachment will excavate the materials out.

➢ Crushing & Stockpiling

Setting up procedure:

The area where the crushing operation is to be carried out will be designated as a working zone / exclusion zone and will be clearly marked to prevent inadvertent access. Fully trained banksman will man the access point at all times throughout the operation. Only a fully trained operator holding CPCS certification will operate crusher at all times

Operatives will wear the appropriate PPE:

- Hard Hat
- Hi visibility tabard
- Steel toe capped boots
- Safety googles
- Gloves
- Sundstrom SR100 half face mask fitted with a P3 filter having an assigned protection factor of 20

Manual controls will be locked shut, including all remote controls.

All stop switches and emergency stop switch, guards and panels will be checked prior to starting work and daily by the operator.

The crusher operator will maneuver the crushing plant to the designated working zone using the remote-control panel and start the main engine allowing it to run for a few minutes; he will check the operation of:

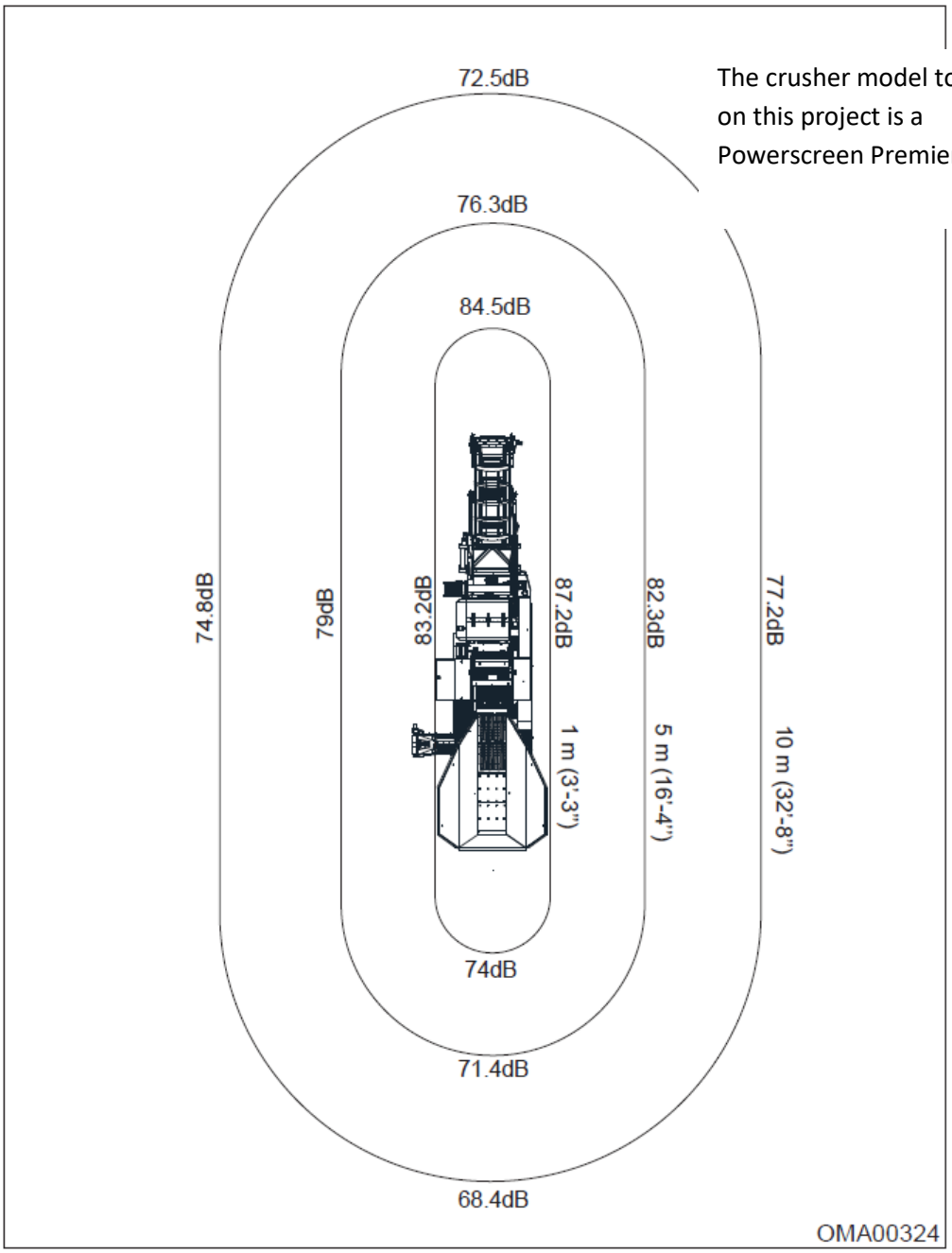
- Main belt
- Magnet belt
- Jaw operation
- Grizzler operation

At no point will the area be left unsafe whilst unattended

Feeding:

The mobile crusher is to be fed directly by the hydraulic excavator fitted with a bucket attachment.
The excavator will sit on a solid pad positioned higher than the crusher to ensure safe loading.
All dangerous parts of the crusher should be suitably guarded.
All personnel and obstructions are to be excluded from the bucket operating arc.

(1) Tier 4 Noise Levels



The crusher model to be used on this project is a Powerscreen Premiertrak R400

Figure 3.9 - Tier 4 Noise Level

All operatives working within the vicinity of the crushing plant will be required to wear ear defenders.

The jaw will be set to produce the correct size material as required 6F2

HOLD POINT
Confirmation that all checks have been carried out and logged by the crusher operative prior to commencement of operation
Site Supervisor:
Signature:
Date:

The 360 º excavator loading the material into the crusher will be positioned higher than the crusher to ensure safe loading.

A second 360º excavator will clear the crushed material away from the mobile crusher plant from the discharge end.

As the material passes through the mobile crushing plant all deleterious materials will be removed

The 6F2 product will be screened to remove any unsuitable elements (in accordance with the Highways Agency Specification (Series 600).

The crushed material will be stockpiled in a location to be determined by the Client.

All unsuitable materials arising will be loaded into waste skips, removed off site and the contents disposed of at a waste recycling facility.

Dust controls will be in place to suppress the release both on the stockpiles and the crusher unit using a regulated fine water spray, the quantity of water will be controlled to prevent flooding. Dust monitoring will be maintained throughout the process.

- **Site Finish**

All voids to the footprint of the buildings will be backfilled with crushed material. On completion of all the works a joint inspection will be carried out between DHDEL. and the Client to ensure that the works have been completed to the standard specified/expected. Any outstanding works will be undertaken.

5. Amendments to the Method

Supervisors must advise Managers of any changes required to the method of work. Supervisors are only permitted to carry out 'minor changes' following authorisation from the Manager – Ryan Hughes. A record of any such changes will be made using the table below to summarise changes and amending in writing any relevant parts of the method.

Only to be completed after consultation with the Manager					
Amendment to the Method or Work					
Supervisor:		Signature:		Date:	

The employees detailed below have signed to confirm that they: - • Have received a briefing from the Site Manager / Site Supervisor and have read and fully understood the method amendment. • Will notify their Site Manager / Site Supervisor should there be any abnormalities or areas of concern regarding the works		

6. Health & Safety Goals

DHD & EL's safety goal is that there should be no RIDDOR incidents on this project or any incidents involving the public.

We aim to achieve:

- Zero complaints in relation to health, safety and welfare matters
- Zero accidents, incidents and near misses
- Meet site objectives and legal requirements both during and after the works safeguarding all

The Health and Safety principles are set out in DHD & EL's Health and Safety Policy.

Independent Health and Safety Consultants are employed by DHD & EL to advise, instruct and update on procedures and new legislation. It is in their jurisdiction to advise DHD & EL who in turn advises their site-based employees by weekly in house meeting and briefings.

It is the Contracts Manager and site supervisors' responsibility to ensure that all Health and Safety matters are adhered to on site.

It is the Contracts Manager and the site supervisor's responsibility for monitoring compliance with safety of scaffolding and maintenance of plant, details are recorded.

DHD & EL will collect and record information on all site accidents and near misses and investigate them so that measures can be put in place to prevent a reoccurrence. Where applicable, these incidents will be reported to the H.S.E.

An operative trained in First Aid will be on site throughout the contract.

First Aid will be administered on site.

7. Site Security

Security fencing will be provided by the Principal Contractor.

"Danger / Demolition in Progress / No Un-authorised Entry" warning signs are to be erected along each elevation adjacent to the perimeter fence.

The perimeter fence is to be maintained in an effective condition throughout the period of the contract.

Any work on the building will not be allowed to start until the whole of the site fencing has been erected, inspected and approved by the Engineer.

8. Site Inductions & Onsite Training

The Principal Contractor will give a site induction to all contractors working on their site.

In addition, all DHD &EL operatives required to work on site will undertake a full site induction delivered by DHD & EL site supervisor prior to commencement.

The site induction will include the full explanation of:-

- Senior management commitment to health and safety
- The outline of the project
- The individual's immediate line manager and any other key personnel
- Any site-specific health and safety risks, for example in relation to access, transport, site communication, hazardous substances and manual handling
- Control measures on site, including:
- Site rules
- Permit-to-work systems
- Traffic routes
- Security arrangements
- Arrangements for Personal Protective Equipment (PPE), including what is needed, where to find it and how to use it
- Arrangements for housekeeping and material storage
- Facilities available, including welfare facilities
- Emergency procedures, including fire precautions, the action to take in the event of fire, escape routes, assembly points, responsible people and the safe use of any fire-fighting equipment
- Arrangements for first aid
- Arrangements for reporting accidents and other incidents
- Details of any planned training, such as 'Toolbox' talks
- Arrangements for consulting and involving workers in health and safety, including the identity and role of any:
  Appointed trade union safety representatives
  Representatives of employee safety
  Safety committees
  Information about the individual's responsibilities for health and safety

Once induction training has been delivered by the Site Supervisor, personnel will be required to sign a control document to confirm they have read and understood the content of their induction training.

Toolbox talks will be held weekly in the site office to discuss normal issues and any other developments which may need addressing. All employees are required to attend and need to sign the register of attendance for our records. During these talks employees are encouraged to voice any concerns/issues regarding health and safety. These concerns are recorded and acted upon

9. Personal Protective Equipment

- Mandatory PPE:
- Safety Helmet
- Hi-viz coat or vest
- Safety footwear (steel toe-capped boots)
- Cut resistant gloves (cut level 5)

The use of personal protective clothing and equipment (PPE) should not be considered as an alternative to efforts to reduce or eliminate hazards. It is possible to minimize exposure to risk by careful selection of plant and material, e.g., by minimizing noise at source rather than providing ear defenders. Suitable and compatible personal protective equipment appropriate to the task must be worn at all times.

Any PPE that is identified as a requirement for tasks to be undertaken in a safe manor will be provided by DHD & EL, e.g., dust masks (non-nuisance type FFP etc.).

When selecting PPE, it is important that it is appropriate for the hazard and compatible with other items of equipment. Items selected will conform to relevant standards and bear the appropriate BS EN Number. Where work is carried out on or adjacent to a highway open to traffic, high visibility clothing complying with BS EN 471 (Class3) will be worn by the workforce and the site supervisory staff.

Where a significant risk exists to employees e.g., falling materials, handling heavy materials, they should be provided with the appropriate safety footwear. As a minimum, the operative will be issued with steel toe capped boots that should be worn at all times.

Where there is a foreseeable risk of injury to the head, eyes and/or hearing, all persons working on site should, at all times, wear safety helmets, suitable eye protection and/or ear defenders as appropriate to the task and location.

10. Welfare Facilities

The Principal Contractor will provide welfare facilities on site which comply with the Construction (Design & Management) Regulations 2015.

Canteen / Site Office / Toilet; including:

- Hot / cold running water supply
- Basin, soap and towels
- Drinking water
- Restroom / Eating Area
- Clothes Drying Area
- Adequate supplies of toilet paper
- Microwave and kettle

11. Fuel Storage & Refuelling

The fuel requirements for all plant and equipment will be stored in 45-gallon drums stood on nappy pads within the sealed compartment of the works vehicle.

The vehicle will be locked at all times and spill kits will be readily available.

The vehicle will be located in a designated area as agreed by the Client.

Fuel will be pumped into the machine directly from the drums still positioned in the vehicle; drip trays will be placed directly under the point of re-fuelling.

12. Accidents / First Aid

DHD & EL have made adequate provision for first aid (including trained first aiders supported by an appointed person where deemed as being required) proportional to the numbers and type of work to be undertaken on site, in accordance with the Health and Safety (First Aid) Regulations Approved Code of Practice and Guidance (L74).

Appropriate levels of first aid equipment including a Data Act compliant accident report book will be maintained on site and in the works vehicles at all times

Notices will be posted on site with the location of the first aid box and the names of the trained personnel.

DHD & EL emergency procedure will clearly set out the means of dealing with any emergency including the means of summoning assistance and setting out arrangements made with local Accident and Emergency Hospital.

The nearest Accident and Emergency Hospital to the Site is: -

Manchester Royal Infirmary

1.3 miles

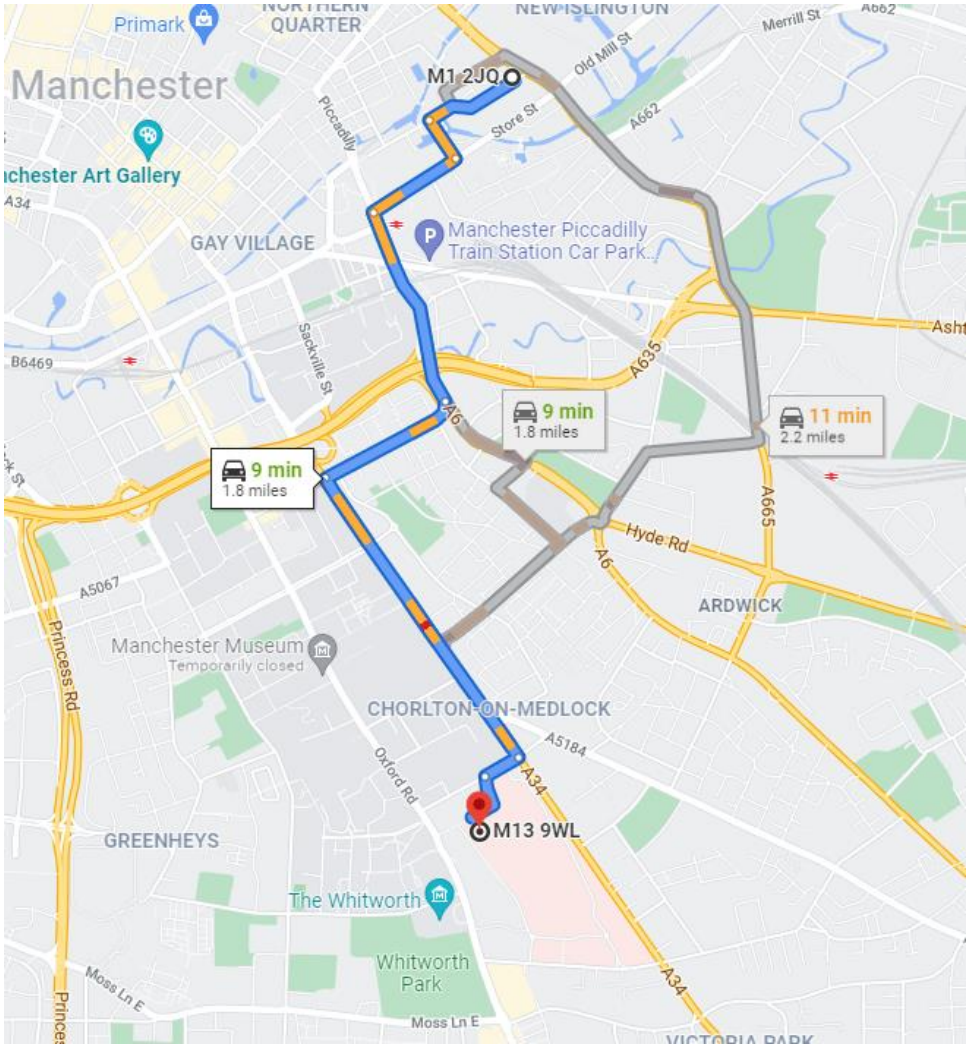
Tel: 0161 276 1234

Oxford Road

Manchester

Greater Manchester

M13 9WL



Account shall be taken of emergency services response time, access to communications and first aid personnel on site. DHD & EL will ensure that his operatives and contractors are in possession of a fully charged mobile phone in case of an emergency when the telephone services to the site are cut off or are unavailable for use. Details and route to nearest A & E hospital will be displayed on notice boards. All identified emergency escape routes and fire exits on site shall be kept clear and signed. The Health and Safety (Safety Signs and Signals) Regulations 1996 set standards for these signs.

Emergency First Aid Procedures-

- Immediately dial "999" for Ambulance, give exact location of accident.
- Attend to casualty but do not move them unless life threatening.
- Observe casualty and check for breathing, Bleeding
- Await further instruction from emergency services.
- Do not leave Casualty, Reassure them
- Liaise with Medical practitioners.

13. RIDDOR

All incidents which must be reported to the H.S.E. will be coordinated through DHD & EL's head office.

The site supervisor is responsible for notifying head office of all such matters and to collect witness statements as quickly as possible after the event.

An accident book is kept on site by the site supervisor to report any incidents that may occur.

14. Risk Assessments and Safe Systems of Work

Full and thorough risk assessments will be carried out prior to any works commencing in accordance with the HSE's Guidance:

1. Look for the hazards
2. Decide who might be harmed and how
3. Evaluate the risks and decide what control measures are required
4. Record the findings
5. Review the assessment and revise it if necessary

- All demolition work will be carried out by experienced operatives in accordance with the Method Statement, with structures being taken down as near as possible in the reverse order to which they were originally erected.
- All drivers making deliveries will be informed of the nature of the site and the specific risks to personnel, children and traffic in the area specifically at the site entrance.
- All non-construction personnel will be directed away from the site and its access routes using barriers.
- The use of hydraulic excavators and demolition work will only be carried out when banks men are in attendance.
- Waste material will be removed in stages keeping a tidy safe site at all times.
- Once internal strip outs have been completed and all glass and timber removed the main structural walls will be demolished by mechanical means thus minimizing the risk to site operatives.
- Site fencing will be erected to inhibit access by the public and to create a protected zone around the site so that general pedestrian traffic can keep away from high-risk areas.
- Temporary lighting and traffic signs will be erected for the duration of the contract as necessary.

15. Site Rules

All operatives will wear equipment suitable for the activity being performed at all times (P.P.E.); and as a minimum, steel toe capped safety boots, hard hats, high visibility vests and cut/ puncture resistant gloves

No alcohol is to be consumed on site. Operatives that appear to have consumed alcohol will not be allowed on site

No Drugs to be used on site. Operatives that appear to have used drugs will not be allowed on site.

Radios are not permitted on site

Smoking will not be allowed on site

Fires will not be allowed on site

No fuel, oil or other combustible materials will be stored on site. Daily re-fuelling will take place on site in the designated area

DHD & EL will comply with the local existing parking restrictions

Strict working hours agreed at the commencement of the contract will be adhered to

All work to comply with requirements of the Control of Pollution Act 1974 relating to noise

A suitably trained site supervisor is to regularly and frequently check on the conditions and maintenance of all equipment

Vehicles and personnel to move around site in safe areas designated by the site supervisor

New personnel on site to be accompanied by an experienced employer of DHD & EL

Vehicles to enter and exit site at non-peak periods

Experienced banksmen to assist both vehicles and pedestrian movements

No works to be undertaken on land which is suspected to be contaminated

Undertake testing procedures and follow all necessary Health and Safety Guidelines and Regulations

Any open excavations to be clearly identified with high visibility netting, barriered off and or covered over with steel plates

Any works suspect to causing dust to be suppressed with water as and where possible

Vehicles leaving site to check wheels for cleanliness and if necessary to wash off debris

No works in confined spaces to be undertaken without prior approval with the site supervisor

All necessary safety requirements to be adhered to

No personnel to operate any powered hand tools without prior training and if necessary, hold relevant certificates

All staff to attend regular training sessions and site management to hold weekly toolbox talks

All site visitors to undertake site induction and abide by the site rules and to always wear appropriate P.P.E.

Any necessary permits to work must be obtained before works commence

Hot works permits must be obtained before works commence. All necessary fire precautions must be strictly adhered to

All accidents must be reported to the site supervisor and recorded in the site accident book. The company's reporting of accident system to be strictly adhered to

All vehicles to be parked on site in a designated area appointed by the site supervisor

Vehicles parked off site must be in accordance with the local authorities

No mechanical handling of large or heavy items of material to be undertaken without prior approval from the site supervisor

Manual handling of large or heavy materials not to be undertaken without prior risk assessments made and a method of work agreed with the site supervisor.

16. Fire and Emergency Procedures

The procedure to be followed on site in the event of a fire emergency is:

1. Evacuate scene of fire immediately.

2. Assembly is outside the site cabin / welfare facility

3. Await instructions from Site Supervisor

4. Do not leave assembly point until authorised by Site Supervisor.

5. Immediately dial "999" for fire service, give exact location of fire.

6. Ensure all employees and visitors are accounted for and at assembly point,

7. Do not attempt to extinguish the fire with available firefighting equipment unless it is in the route of your exit

8. Liaise with Fire Officer and Police.

9. Emergency escape routes will be updated as work proceeds

Throughout the demolition works a temporary fire escape route will be employed. Where possible, fire escape signs will be affixed to direct all personal out of the building. All doors and exits to the escape routes will be kept unlocked and clear of debris while works take place on site.

Fire extinguishers will be present throughout the works.

In the event of an uncontrollable fire an audible warning system will be used. The building will be evacuated in a safe manner and the personnel will assemble at the assembly point.

The emergency services will be contacted, and the assembled personnel will be checked against the site visitor's book. On no account will any person re-enter the building.

17. Plant & Equipment Delivery

Any necessary loading, unloading and storage will be undertaken in the site compound. Any storage of materials will be undertaken in a safe area within the site compound. Deliveries to and from the site shall avoid the peak hours of 08:00-09:00 and 17:00-18:00.

Delivery of abnormal loads to site will be considered on an individual basis as necessary and under the direction of the Principal Contractor to be recorded in their Traffic Management Plan.

There is expected to be a reasonable amount of vehicle movement, with the delivery, plant and equipment and the removal of reclaimed materials and arising's. For this DHD & EL will ensure:-

- Deliveries are managed in a 'just in time' basis as to minimize the likelihood of congestion to the public highways and the access road.
- Banksmen must be used where required and that all such persons will be familiar with signals and suitably qualified to CSCS (or equivalent level). Banksman to wear high visibility clothing at all times
- Wheel washes or road sweeps must be provided where required.
- The removal of waste from site will incorporate the above controls where applicable.
- To reduce the hazards caused by air borne dust vehicles carrying loose aggregate and workings are to be sheeted where required. Stockpiles of soils and materials are to be located as far as possible from sensitive properties and boundary roads used by the public, taking account of prevailing winds.

- The unloading/loading area will be pedestrian free due to the amount of reversing during the unloading/loading of vehicles. If this is not possible all audible and visual devises will be used i.e., reversing alarm and flashing beacon; and high visibility clothing worn at all times.
- It will be necessary to undertake regular visual inspections of the site perimeter to check for dust deposition (evident as soiling and marking) on vegetation, cars and other objects and taking remedial measures, if necessary; this is to include the local highways.
- There will be NO burning of waste material at any time anywhere on site.

18. Working at Height & preventing falls on site

Working at height will be restricted to a minimum, with the majority of high-level demolitions being carried out by mechanical means i.e., Demolition type excavators / Plant fitted with controlled attachments such as mechanical grapples. All work at height will be undertaken in accordance with the Work at Height Regulations 2005 which requires duty holders to ensure:

- All work at height is properly planned and organised
- All work at height considers of weather conditions that could endanger health and safety
- Those involved in work at height are trained and competent
- The place where work at height is done is safe
- Equipment for work at height is appropriately inspected
- The risks from fragile surfaces are adequately controlled
- The risks from falling objects are adequately controlled

For work at height the following hierarchy of control will be followed at all times:

1. Avoid the risk of working at height wherever possible.
2. Where this is not possible, employ measures to prevent falls of people or objects from the elevated position.
3. Where the risk of people or objects falling remains, mitigate the consequences of a fall by minimising the distance that a person or object can fall.

Mobile elevated working platforms will only be sourced from a reputable supplier and will only be operated by IPAF qualified operatives

Podium steps will be prioritised over ‘A’ frame steps or ladders where possible. They will be inspected by the user prior to use.

The use of a ladder on site will be avoided whenever possible. If this is unavoidable, they should only be used as means of access, not as a working platform

All excavations will be adequately protected by physical barriers to prevent falls into the excavation. No person shall enter the excavation without a suitable rescue plan being produced and discussed as part of the risk assessment briefing.

➢ 19. Confined Space

N/A

20.Plant & Competency Training & Test Certificates

All plant and machinery have recent test certificates pertaining to the machine type. DHD & EL will ensure such certificates and proof of maintenance are checked in accordance with PUWER (1998) and LOLER (1998), and that testing has not exceeded the stipulated timeframe as laid down in law.

All plant and equipment will be visually inspected and recorded daily. Inspection check sheets for each piece of plant to be maintained and kept current.

Immediate supervisors have received training in the safe operation of plant and vehicles.

Senior management appreciates the risks resulting from the interaction of vehicles and the workplace.

All operatives hold current CPCS cards (or equivalent) for machine type to be operated.

21.Permits to Work

Permits to Work will be issued as and when necessary; Permit to Dig, Roof Access Work, Hot Works etc. The permit checklist will be completed by the Site Supervisor who will also sign it and also the person/operative carrying out the work. One copy will be held by the operative and one copy will be filed by the Site Supervisor. Upon completion of the work, the operative is to return their copy to the Site Supervisor. The permit is then cancelled. The Site Supervisor will carry out a physical check of the work area during or before expiry of the permit.

The permit will be cancelled when:

- All works to which the permit relates have ceased
- The area has been checked and is free from residual risk

The supervisor will sign that this is the case.

22. Arrangements for controlling significant site health risks

➢ Asbestos

The asbestos survey has been produced by:

Fibre Safe Ltd.
Report number:MAN336

D Hughes Demolition & Excavation Ltd have a held a full license for the removal of asbestos since 1985.

All asbestos operatives are trained to the relevant standard as required for the type of removal work required of them and hold current Medical Certificates, Mask Face Fit Tests, etc.

All D Hughes Demolition & Excavation Ltd. operatives have attended an Asbestos Awareness course and are trained to recognize ACM's.

Should any further asbestos containing materials be found or be suspected which are not noted in the report then all operations must cease immediately, and the Client will be informed. The Client will at this point liaise with D. Hughes Demolition & Excavation Ltd. over the safe removal of any further confirmed asbestos containing materials.

➢ Manual Handling

DHD & EL will as far as is practicable, try to eliminate the manual handling of heavy items; mechanical means will be employed for the loading and unloading of workplace vehicles and of the lifting of heavy equipment and materials.

Manual handling that cannot be avoided will be carried out in accordance with the Manual Handling Operations Regulations 1992 (as amended 2002) and guidance issued by the HSE (L23)

Components weighing 20kg plus must not be lifted by a single person and any repetitive lifting over 20kg will be assessed and the appropriate actions to reduce the risk carried out.

All persons involved with manual handling will be instructed on how to carry out the task safely and have received manual handling training.

If mechanisation is not an option, and where lifting of equipment or materials exceed the limitations of the personnel; then a manual handling risk assessment will need to be undertaken.

➢ COSHH

Full sets of COSHH Assessments are held on site for all materials that may be used during the works. Any new materials encountered will have a COSHH Assessment undertaken as soon as practically possible.

COSHH Assessments are regularly checked to ensure that they are relevant to the operations being carried out or when operating circumstances change.

Prior to any works taking place the building will be inspected for any substances either within the structure or left within the building. Any substances found which appears to be a hazard to health will be reported to the client and procedures will be arranged for dealing with such matters. Any amendments will be made to the Method Statement.

➢ 'Sharps'

Hypodermic syringes / needles may be present on site and therefore all operatives / personnel will remain vigilant at all times.

Should any 'SHARPS' be found the client will be informed and arrangements will be made for dealing with such matters. Any amendments will be made to the Method Statement.

23. Environmental Considerations

➢ Environmental Rules

DHD & EL will execute the works sympathetically to the surrounding environment. The site will therefore be subjected to the following environmental rules:

- During the works a watching brief will be in place to ensure the controls in place to control dust migration are sufficient
- Demolition dust will be controlled by applying wet suppression
- All reasonable measures will be taken to prevent dirt being deposited on the site access road including good housekeeping on site and effective traffic management
- Any re-fuelling required will be in the designated area away from drains/water courses with a spill kit available
- Any static plant will be supplied with a drip tray to prevent environmental contamination
- All wastes are to be disposed of in the correct waste streams
- No substances are to be discharged into drains or Controlled Waters (Controlled Waters include all watercourses and water contained in underground strata)

➢ Noise / Vibration

Due to the nature of the work, it is known that activities on site will have a noisy nature and may cause vibration. If required, DHD & EL. will monitor vibration with appropriate equipment /apparatus to ensure activities are not affecting local businesses. We will undertake an assessment of the equipment and put all appropriate control measures in place.

The strategy for reducing the risk from Hand-Arm Vibration and Whole-Body Vibration has been be addressed by:

Finding a way of completing the task without using high vibration tools, Where-ever practical avoid operations involving impacts, Looking for mechanical methods for completing the task.

We will adhere to the recommendations in BS 5228-2: Noise and Vibration Control on Construction and Open Sites (Part 2).

The works will be addressed daily, and various methods of work will be undertaken to reduce the inconvenience and nuisance to any nearby premises.

➢ Dust / Fumes

Any operations undertaken on site which may cause dust will have prior assessment and any possible dust suppression techniques will be undertaken when necessary.

- Any plant on site will be used in well ventilated areas. Plant which is used in confined or non-ventilated areas will have the exhaust fumes directed outside the building
- Dust monitoring will be undertaken at the site boundary
- Sheeting of vehicles transporting materials to and from site
- Limiting the speed of site vehicles to 20 mph
- Provision of wheel washing facilities and/or road sweepers at access points when necessary
- Damping down of haul roads
- Assessment will be made of workload to determine those activities that may generate dust
- COSHH data sheets will be checked for those materials producing dust, any toxic material identified, assessment to be made as to, who, what and where work shall be completed
- Dust emissions will be minimized and/or contained to boundaries of the construction site, e.g., re-specifying work to eliminate or reduce dust hazards, use exhaust ventilated tools, dampening work during demolition work
- Wind-blown dust from large, disturbed areas will be reduced by dampening down the surface and where possible, restricting the extent of such areas
- Extra care will be taken when loading materials onto trucks or when excavation work is taking place
- Prohibition of eating and smoking to be enforced in dusty atmospheres, especially where toxins may be present
- Adequate means of monitoring / measuring toxic dust will be provided and workplace exposure limits (WEL's) will be checked
- Operatives will be briefed regarding the hazards of dust to their health
- Operatives will be briefed regarding PPE and toxic dust

➢ Waste Management

To minimize the generation of waste and waste disposed to landfill, all spoil, demolition arising's and wastes will be managed in accordance with the waste hierarchy and relevant regulatory controls:

- Measures to reduce excessive quantities of material storage on site will include adopting a just in time approach to material deliveries
- A comprehensive Site Waste Management Plan (SWMP) will be developed and updated as the works progress capturing any changes that may result in differing waste streams and quantities.
- Compliance with all aspects of the Duty of Care (Environmental Protection Act 1990) will be achieved during demolition to protect the interests and safety of other from the potential effects of handling, storing, transporting and disposing of materials and wastes arising from the works.
- Disposal of waste from site will be carried out by a licensed waste carrier
- All non-hazardous waste leaving site will be accompanied by a waste transfer note

- Copies of waste transfer notes for non-hazardous wastes will be kept for a minimum of 2 years
- If waste is deposited, kept or treated on the site, a Waste Management License or an exemption will be obtained
- Copies of documentation for the transport of hazardous waste will be kept

➢ Pollution Prevention

Suitable pollution prevention measures (e.g., nappies) should be put in place under attachments, parked plant or static equipment whenever there is a risk of fluid leaks or spillages, especially during refuelling operations or within 10m of a watercourse.

Spill kits must be appropriate to the risk and amount of fuel and oils on site and located to be readily available should there be a spillage.

Suitable PPE, (goggles and impermeable gauntlet gloves) must be included in the spill kits.

Suitable provision must be provided on site for storage of hazardous waste (following a spill) prior to its removal from site by a licensed waste carrier

Maintenance of site plant will be done in a way to minimise the environmental risk with appropriate control measures in place.

All hydraulic oils supplied in plant under this Code of Practice must be defined as 'Readily Biodegradable' and meet OECD 301B.

➢ Environmental Incidents

All environmental incidents and significant near misses must be reported to the Environmental Agency Incident hotline – 0800 80 70 60 at the earliest opportunity and then to the Client

Appendix A: Crusher – Safe Working Procedures

Appendix B: Risk Assessments & COSHH Crusher – Safe Working Procedures

Appendix C: Working at Height-Rescue Plan

Employee Sign-up Sheet

Appendix A: Crusher-Safe Working Procedures:

SAFE WORKING PROCEDURE

Crushing & Stockpiling

Setting up procedure:

The area where the crushing operation is to be carried out will be designated as a working zone / exclusion zone and will be clearly marked to prevent inadvertent access.

All operatives, including maintenance staff, must be fully trained, competent and authorised to operate this type of machinery.

A fully trained competent banksman will man the access point at all times throughout the operation.

Only a fully trained competent operative holding CPCS certification will operate the crusher at all times

Pre-checks/Guarding

Failing to ensure that adequate guards are in place before the machine is used will present a significant risk which could result in substantial harm. The fully trained competent operatives must ensure that prior to starting work and daily that:

- Manual controls are locked shut, including all remote controls.
- All stop switches, emergency stop switch, guards and panels are in place and that interlocking devices are functioning.
- Belt scrapers are correctly adjusted and maintained.
- Conveyor skirts are maintained and in good condition.
- Guard rails are fitted to access platforms.
- Where a potential to fall is likely then appropriate measures must be put in place to prevent the fall. Suitable and adequate harness to be worn
- Traffic routes around the working area to be organised, controlled and have suitable speed restrictions in place.
- Operatives working within the vicinity of the machine are wearing appropriate personal protective equipment (PPE) i.e., dust masks (Sundstrom SR100 half face mask fitted with a P3 filter having an assigned protection factor of 20), gloves, hearing protection, safety goggles, hard hat, overalls and protective footwear.

Positioning of Machine

The crusher operator will manoeuvre the crushing plant to the designated working zone using the remote-control panel.

When considering the positioning of the machine it must be ensured that:

- Sufficient space is allowed for the deployment of conveyor arms and spoil heaps.
- Sufficient space is allowed for feeding.
- The ground is level and capable of supporting the load of the machine including processing / processed materials and the loading machine.
- The operation will not affect nearby pedestrians and traffic routes and that there is adequate access for operatives to and from the work area.
- Emissions from the process such as dust and noise are controlled wherever possible by means such as dust suppression and ensuring machine inspection and maintenance regimes are in place to ensure noise levels are not increased due to faults with the machine.

An ear protection zone will be in place to reduce the numbers of operatives being at risk from noise.

The crusher model we use is a Powerscreen Premiertrak R400

Suitable hearing protectors will be provided for staff and staff will be trained how to use, check and maintain them according to advice given by supplier.

The crusher operator will start the main engine allowing it to run for a few minutes; and will check the operation of the:

- Main belt
- Magnet belt
- Jaw operation
- Grizzler operation

At no point will the area be left unsafe whilst unattended.

(1) Tier 4 Noise Levels

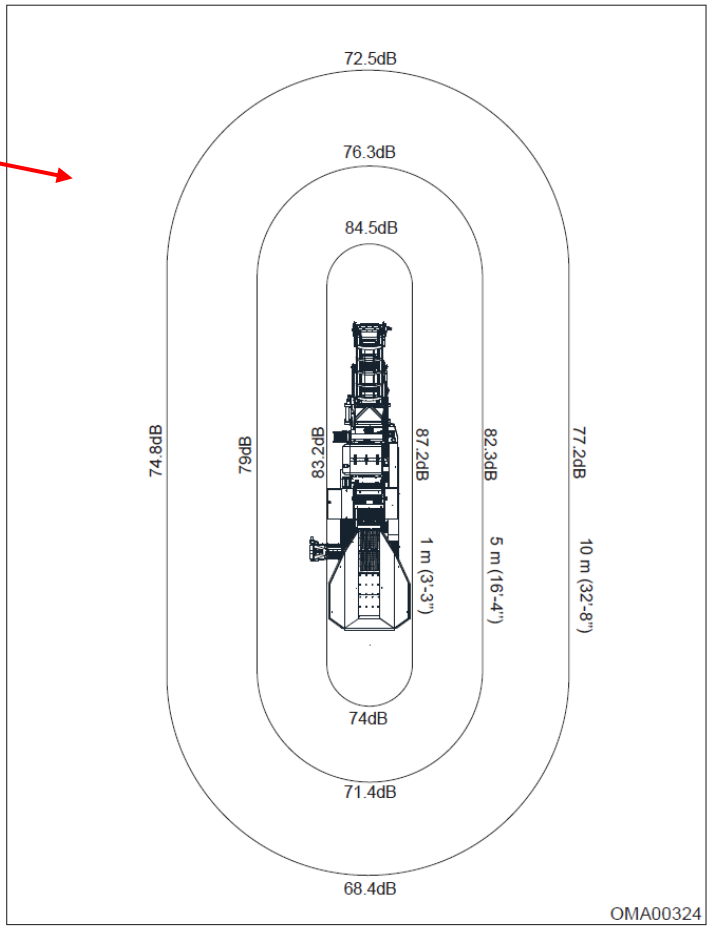


Figure 3.9 - Tier 4 Noise Level

Feeding:

- The mobile crusher is to be fed directly by the hydraulic excavator fitted with a bucket attachment.
- The excavator will sit on a firm stable level pad positioned higher than the crusher to ensure safe loading and is at such a height that it allows the operative to see the feeder hopper from the cab. Safe access / egress to the cab must also be provided.
- An exclusion zone will be set up covering the radius of the reach of the machine but will also take into account the falling of materials from either the spoil heap or from the bucket as it swings.
- A pre-check will also take place to ensure that the bucket is not too big for the hopper to avoid overloading.
- All dangerous parts of the crusher will be suitably guarded.

If wheeled loading shovels are to be used, the ramp should be wide enough to allow for adequate edge protection (min 1.5m high) on either side of the ramp as well as for the travel of the machine.

The maximum gradient of the ramp should be within the capacity of the loader (a maximum gradient of 1.10 is recommended).

All personnel and obstructions are to be excluded from the bucket operating arc.

Operatives positioned on the crusher platform when the crusher is running, presents the following potential significant hazards:

- Being struck by objects in the crusher or by those being loaded.
- Being struck by the bucket of the loading machine.
- Falling from the crusher platform.
- Being drawn into the crusher hopper when trying to clear materials.
- Exposure to hazardous dusts such as silica and caustic concrete dust.
- Exposure to whole body vibration.
- Exposure to significant levels of noise.

However, it is a necessity for the operatives to be positioned on the crusher platform in order to:

- Visually monitor the speed of the hopper to make sure it is set at the correct rate to produce the required size of crushed material
- Visually monitor material being loaded to avoid entry of tramp metal or wood.

The potential hazards are reduced by implementing the following measures:

- Ensure only competent CPCS trained operatives working on the crusher
- Secure platform with handrails fixed in position
- Ensure fixed guards do not allow operatives to reach in; at no point will the operator working on the platform reach into the hopper
- PPE must be worn by the operative including head, eye, hand, respiratory, slip resistant foot protection and high visibility clothing
- The plant operator operating the loading machine will be in view of the operative working on the crusher platform at all times to avoid collisions
- Task rotation / frequent breaks for operatives working on the crusher platform

If any tramp metal or wood is observed, the operator will give the signal to stop the operation to avoid the crusher from blocking up / stalling.

The crusher, feeder and main conveyor must be shut down and isolated before the tramp metal or wood can be removed off the conveyor

Blockages

The manual clearing of blockages within a crusher is a high-risk task and as such a specific risk assessment must be undertaken as detailed below. To reduce the severity of blockages the machine should be stopped as soon as a blockage is thought to exist. Any operative involved with an unblocking operation will need to be adequately trained and supervised.

Wherever possible, blockages should be cleared by mechanical means and then by hand using tools such as bars and hammers. Blockages must not be cleared without the machine, including the feeder, first being isolated and locked off.

The following hazards need to be considered when conducting the risk assessment:

Risk Assessment Blocked Crusher:

Hazards encountered may be:

- Access - height, slipping, small spaces etc.
- Stored energy from electrical, hydraulic, compressed air, mechanical sources or gravity causing the sudden movement of the machinery or materials within.
- Manual handling - heavy, sharp, awkward or unstable loads.
- Drawing in / trapping / crushing caused by the machine start up (isolate and lock off!).
- Materials striking or falling onto the operative.
- Poor or difficult access.
- Accidental start-up of feeder, crusher or adjacent plant.
- Being struck by material from the feed, chute or projected material.
- The movement of any material present inside the crusher.
- Slipping and falling.
- Manual handling of rocks and equipment.
- Unexpected movement of crusher components.
- Damaged electrical cable.
- Noise.
- Unsafe placement of material removed from the crusher.

Prevention is better than cure and every effort will be made to prevent oversize material or tramp metal from entering into the crusher feed hopper by:

- Reducing oversize material utilising a hydraulic pulveriser / breaker.
- Experienced operatives to carry out the feeding of the material to be crushed.
- Follow the manufacturer's recommendations on the rate, presentation of feed and crusher settings
- Good housekeeping to prevent scrap metal being inadvertently loaded into the crusher.
- Correct size of loading bucket to accommodate crusher.

- Bucket teeth to be regularly inspected to avoid them becoming detached during loading.
- The use of level indicators for feed control.
- Maintenance of drive systems.

Stalling or bridging of machine:

Stalling-Possible causes:

- Electrical or mechanical failure.
- Material jammed in the chamber causing an overload.
- Overfeeding material.
- Entry of tramp metal or wood.
- Accumulation of material in the crash box.
- Accumulation of fine material in the crusher discharge chute.

A stalled crusher should be treated as possibly being jammed with tramp metal which could be ejected with fatal consequences.

The procedure to follow in the event of a crusher stalling:

- The site supervisor must be notified of the stall.
- The area should be cleared of personnel to avoid the risk of being struck by ejected materials.
- The machine, including the feeder, should be isolated and locked off before any attempt is made to inspect or clear it. **Maintenance / Repair Isolation & Lock off Site Procedure** to be followed.
- The inspection of the machine must be carried out by a competent person working under a permit to work system.
- Notify the site supervisor of the stalled crusher if, after careful examination there appears to be no electrical or mechanical reasons why the crusher has stalled, it may indicate that the crusher is jammed by tramp metal or oversized material.

A 'stalled crusher permit to work' system should be implemented. This work should only be carried out by fully trained and competent person/s

- Wherever possible, any inspection of the crushing cavity of a jaw crusher or crushing chamber of an impact crusher should be carried out with great care.

Bridging-Possible causes:

- Oversize feed material.
- Excessive clay or other fines in the crushing cavity preventing small material passing through the crusher.
- A foreign body in the crusher feed or discharge chamber obstructing the feed material.

The preferred method of clearing a bridged crusher is by utilising the excavator fitted with a hydraulic breaker.

Other methods, such as the use of bars, hand hammers or hydraulic jacking systems may be employed. The crusher, feeder and main conveyor must be shut down and isolated before any activity starts and carried out under a permit to work system.
Careful consideration must be given to the risk of large pieces of feed material moving and causing trap or crush injuries. Wedges must not be used due to risk of them becoming a projectile.
Maintenance / Repair Isolation & Lock off Site Procedure

In the event of material blockage, any malfunction or operational difficulty, stop the engine, isolate, remove ignition key and tag out, and ensure that all parts are de-energised before carrying out any maintenance procedures. **All stored energy must be safely released** prior to working on equipment (moving parts or equipment is chocked or safely secured).

Only fully trained and competent operatives can work on / operate the machinery.

Implement tag and lockout procedures, follow instructions for commissioning and shut down of the machine as per the **Crusher operation manual** and training received.

Lockout and tag procedure

How to fit a single tag

1. Ensure ignition key is in the 'OFF' position. Remove the ignition key and keep it with you.
2. Turn battery isolation switch to the OFF position.
3. Attach your lock or tag across isolation switch holes to show you are working on the machine.

Note: The lock or tag must have a 7.9mm (5/16in) diameter shackle so the isolation switch cannot be turned on.

Note: Use a gang tag if more than one person is at work on the machine.

To remove a single tag

1. Ensure ALL maintenance and work has been completed and no persons are on or near the machine.
2. Fit and secure all guards. Check all guards are operational.
3. Unlock and remove your single lock or tag from isolation switch.
4. Replace the ignition key.

REMEMBER that you are responsible for ensuring that the equipment is safe to run if your padlock is the last to be removed from the isolator.

CHECK, before removing your lock, that:

- Moving parts are free and clear to run
- Guards have been properly fixed
- Stop buttons are reset
- All persons are clear of the danger area

PERSONNEL HAZARD

Working on or in close proximity to the machine whilst it is on and or operating could cause serious injury or death.

Access must be restricted to essential staff. Limit access to the equipment and its surroundings by erecting barrier guards, minimum distance 1.5m (5ft) away to reduce the risk of other mechanical hazards, falling loads and ejected materials. Ensure an observer is present.

Attach hazard sign(s) to equipment in appropriate positions to alert all personnel of potential hazards.

Switch off engine, isolate, remove ignition key and tag out, and ensure that all parts are de-energised before carrying out any maintenance procedures. NEVER isolate a drive if it is running: use a stop button first.

Ensure at least the minimum Personal Protective Equipment (PPE) is worn during maintenance.

NEVER work or stand under suspended loads.

The removal of large or heavy components without adequate lifting equipment is PROHIBITED; this could cause serious injury or death.

Falling from and/or onto this equipment could result in serious injury or death.

When reaching any points 2m (6ft) or more above ground level, ALWAYS use CE certified safety harness.

ONLY use Maintenance Platforms provided on the equipment, ensure hand rails are fixed in position. ALWAYS perform work from an approved, safe and secure platform. Ensure that all ladders are lowered and fixed in position.

On completion of works make sure all safety devices and guards are installed correctly before lock out is removed.

Key points for Crusher Operations

- Minimise blockages through pre-sorting.
- Ensure fixed guards do not allow operatives to reach in.
- Make use of viewing aids such as viewing panels, CCTV and mirrors to monitor the process.
- Make sure daily visual checks are carried out by a competent person.
- Ensure an efficient defect reporting system is in place.
- Ensure all isolation switches are clearly labelled showing their capability and are able to be locked off when required.
- When locking off locks must be suitable and the keys controlled.
- Ensure that the manufacturer's instructions are available and specific operating instructions are followed.
- Monitor operatives and ensure appropriate PPE is worn and safe systems of work are adhered to.
- Ensure the working area is cleared of potential trip hazards regularly.

APPENDIX B:

RISK & COSHH ASSESSMENTS

KEY	Persons at Risk	S = Severity	P = Probability	R = Risk = S x P
	P = Public E = Employees S = Sub=contractors	1 = Trivial 2 = Minor injury 3 = Major injury to one person 4 = Major injury to several people 5 = Fatal	1 = Improbable occurrence 2 = Remote occurrence 3 = Possible occurrence 4 = Probable occurrence 5 = Likely occurence	15-25 = High risk 8 – 12 = Medium risk 1 – 6 = Low risk

Hazard:	Persons at Risk			Initial Assessment			Control Measures	Residual Risk		
Demolition	P	E	S	S	P	S x P + R		S	P	S x P = R
Falling debris: Cuts, abrasions, bruising, crushing injury, fatality	✓	✓	✓	5	3	15	Work zone established and fenced. Pedestrian walkways established and demarcated. Only authorised personnel allowed in the work zone e.g., plant operator and banksman. Work equipment subject to annual certificate of thorough examination, regular maintenance and weekly inspection to prevent mechanical failures. Only CPCS trained workers to operate excavators. Appropriate personal protective equipment issued to workers. All workers undertaking other works in proximity to the demolition works should be kept at a safe distance. A safety exclusion zone should be established around the perimeter of the demolition works, only authorised persons shall be permitted to enter the exclusion zone. Rubble netting, brick guards and fans shall be considered to provide protection to persons below. **Additional measures:** First Aid qualified person available on site with an appropriate First Aid Kit for the scope of works. Management to ensure that the correct excavator for the job has been selected. All operatives to be made aware of the risks and hazards associated with the task and to be instructed in the contents of the method statement and safe system work. Safety Helmets are to be worn at all times.	5	2	10
Falls from heights:	✓	✓	✓	5	4	20	All operatives to be made aware of the risks and hazards associated with working at height and to be instructed in the contents of the method statement and safe system work. No materials or debris shall be allowed to be thrown from the work area.	2	2	4

Broken bones, cuts, bruises, fatality etc.							The working area shall provide protection from and to pedestrians and other road users where applicable. Use of ladders will only ever be used for short duration work where there is no viable alternative; work by ladder to be minimised and only under risk assessment showing no safe option is available. A ladder permit would be required prior to use and a risk assessments on the use of ladders would be produced. All workers undertaking other works in proximity to the demolition works should be kept at a safe distance. A safety exclusion zone should be established around the perimeter of the demolition works, only authorised persons shall be permitted to enter the exclusion zone. All access/work platforms to be erected by competent persons and subject to appropriate inspection regimes. **Additional measures:** Adequate exclusion zones to be set up in accordance with BS:6187 2011 'Code of Practice for Full and Partial Demolition'. Operatives to have demolition awareness training. Toolbox Talks to be conducted. Warning signs shall be erected stating “men working overhead. Use the HSE Wait to ensure suitable access equipment is used for the task. Ensure all demolition works are carefully planned and sequenced to prevent premature collapse. Ensure a pre-demolition survey is undertaken to determine how the structure is built. No lone working will be permitted.			
Exposure to hazardous substances; e. g. Asbestos: Asbestosis mesothemolia, respiratory problems	✓	✓	✓	5	3	15	Ensure up to date asbestos survey is in place prior to works. Operatives informed of and adhere to method statement for works. Workers trained in the handling of contaminated materials. Work areas are segregated and labelled. Appropriate personal protective equipment is provided and its use enforced. Workers practice high levels of personal hygiene. Health surveillance is provided where appropriate. Withdraw from area if ill effects experienced. Ensure all hazardous materials are removed prior to the commencement of demolition works. Avoid exposure wherever possible. **Additional measures** Asbestos awareness and procedure on discovery training for operatives. Hazardous materials that need to be considered include dust, asbestos and respirable crystalline silica (RCS). Operatives to be notified of pertinent information from survey reports or Health and Safety files. Seek advice from OHP to see if health surveillance is required.	5	2	10

Noise: Noise induced hearing loss	✓	✓	✓	3	3	9	Noisy work restricted to 'ear protection zone' to reduce the numbers at risk. Suitable hearing protectors provided for staff and staff trained how to use, check and maintain them according to advice given by supplier. Staff trained in risk of noise exposure. Check manufacturers guidance to ensure the correct SNR of hearing protection is issued. **Additional measures:** A separate risk assessment is required for noise exposure levels. Ensure Hearing protection works with other protective equipment. Workers to be shown HSE's Noise Web Pages (www.hse.gov.uk/noise/index.htm) Seek opinion of OHP whether health checks required.	3	1	3
Dust: Damage to lungs, eyes, dermatitis	✓	✓	✓	3	3	9	RPE for the task is issued and used with appropriate filters. (FFP3-Press to check) Good ventilation (forced if necessary). Dust suppression techniques to be used at all times. **Additional measures:** Face fit testing of operatives. Ensure that dust-suppressing techniques are adopted, such as damping down of work areas such as the point of demolition and haul routes particularly during dry weather. Forced ventilation or extraction may be required. Monitoring of PPE use. Seek advice from OHP to see if health surveillance is required.	3	2	6
Vibration: Whole body vibration, fatigue, musculo skeletal disorders, health problems		✓		3	3	9	Whole body vibration exposures assessed. Procurement policy in place to ensure new equipment purchased has good vibration control devices in place. Machine inspection and maintenance regimes in place to ensure vibration levels are not increased due to faults with the machine. Task rotation implemented when workers are likely to be exposed above daily exposure limits. Health surveillance programme in place where applicable. **Additional measures:** Carry out whole body vibration assessment.	3	1	3

Hazard:	Persons at Risk			Initial Assessment			Control Measures	Residual Risk		
Soft Stripping	**P**	**E**	**S**	**S**	**P**	**S x P + R**		**S**	**P**	**S x P = R**
Contact with sharp objects: Cuts, lacerations, puncture wounds		✓	✓	3	4	12	Suitable PPE to include safety boots and cut resistant gloves (EN388) gloves are worn at all times. All workers undertaking other works in proximity to the demolition works should be kept at a safe distance. A safety exclusion zone should be established around the perimeter of the demolition works, only authorised persons shall be permitted to enter the exclusion zone. **Additional measures:** All operatives to be made aware of the risks and hazards associated with demolition works and to be instructed in the contents of the method statement and safe system work. Ensure adequate supervision is provided and that control measures remain valid for the duration of the work.	3	2	6
Contact with live services: Electrocution, burns, death		✓	✓	5	3	15	Ensure all live services are disconnected before work commences. All operatives to be trained in emergency procedures to be followed in the event of a service strike. **Additional measures:** All services should be assumed live until proved otherwise.	5	2	10
Noise: Tinnitus, hearing loss	✓	✓	✓	4	4	16	Noisy work restricted to 'ear protection zone' to reduce the numbers at risk. Suitable hearing protectors provided for staff and staff trained how to use, check and maintain them according to advice given by supplier. Staff trained in risk of noise exposure. Check manufacturers guidance to ensure the correct SNR of hearing protection is issued. **Additional measures:** A separate risk assessment is required for noise exposure levels. Ensure Hearing protection works with other protective equipment. Workers to be shown HSE's Noise Web Pages (www.hse.gov.uk/noise/index.htm) Seek opinion of OHP whether health checks required.	2	2	4
Impact injury: Loss of consciousness, bruising, cuts and abrasions		✓	✓	4	4	16	PPE appropriate to the task is issued and used, e.g. hard hats, safety footwear, impact resistant goggles, ear defenders, dust masks and gloves. All operatives using equipment should be instructed to warn other persons in the area who may be affected by their work and ensure that they remain at a safe distance. Daily briefing to be provided to ensure operatives are informed of any other activities which may be undertaken in the vicinity of their work. **Additional measures:** Toolbox Talks to be conducted. First Aid qualified person available on site with an appropriate First Aid Kit for the scope of works. Contact details of local Health Authority readily available.	3	2	6

Manual handling: Sprains and strains, pulled muscles and torn ligaments.		✓		4	4	16	Mechanical aids to be used to move heavy bulky items. Operative involved in handling is to be assessed for physical capability prior to lifting and carrying (operative to be trained in kinetic method of lifting). Operative is to seek assistance if the load is too heavy (a team lift should be used if necessary). All staff to be instructed on the safe systems of work. Ensure the workplace is kept clean and tidy with walkways unobstructed. Provide mechanical handling equipment to deliver materials to point at which they are needed. **Additional measures:** Comply with relevant manual handling assessment using Task, Individual, Load and environment. Ensure adequate supervision is provided and that control measures remain valid for the duration of the work. Implement Toolbox Talks to refresh operatives on safe Manual Handling	2	2	4
Exposure to hazardous substances e.g. Asbestos: Asbestosis, mesothemolia, respiratory problems	✓	✓	✓	5	4	20	Ensure up to date asbestos survey is in place prior to works. Operatives informed of and adhere to method statement for works. Workers trained in the handling of contaminated materials. Work areas are segregated and labelled. Appropriate personal protective equipment is provided and its use enforced. Workers practice high levels of personal hygiene. Health surveillance is provided where appropriate. Withdraw from area if ill effects experienced. Ensure all hazardous materials are removed prior to the commencement of demolition works. Avoid exposure wherever possible. **Additional measures:** Asbestos awareness and procedure on discovery training for operatives. Operatives to be notified of pertinent information from survey reports or Health and Safety files. Seek advice from OHP to see if health surveillance is required.	5	2	10

Hazard:	Persons at Risk			Initial Assessment			Control Measures	Residual Risk		
Hand Tools	**P**	**E**	**S**	**S**	**P**	**S x P + R**		**S**	**P**	**S x P = R**
Falls due to access problems: Physical impact, minor or major injury, possible death	✓	✓	✓	5	3	15	Ensure access platforms erected by trained, competent persons. Ensure that the access is safe with any working platform compliant with Work at Height Regulations 2005. Ensure that the operative is trained in site safety. Ensure that lighting is sufficient. Work should be scheduled / phased. Works shall not be permitted to take place during periods of adverse weather such as in strong winds or wet weather. Additional measures: Toolbox Talks to be conducted. Ensure adequate supervision is provided and that control measures remain valid for the duration of the work.	5	2	10
Impact with the tool: Minor injuries, cuts and abrasions		✓		3	3	9	Ensure that the tool is in good order and suitably sharp and that the tool is correct for the job. Ensure that the operative is instructed how to use the tool safely. PPE appropriate to the task is issued and used, e.g. hard hats, safety footwear, impact resistant goggles, ear defenders, dust masks and gloves. All operatives using equipment should be instructed to warn other persons in the area who may be affected by their work and ensure that they remain at a safe distance. **Additional measures:** Toolbox Talks to be conducted. First Aid qualified person available on site with an appropriate First Aid Kit for the scope of works. Contact details of local Health Authority readily available.	3	1	3
Inhalation of dust: Respiratory problems	✓	✓	✓	4	4	16	RPE for the task is issued and used with appropriate filters. Good ventilation (forced if necessary). Dust suppression techniques to be used at all times. **Additional measures:** Face fit testing of operatives. Ensure that dust-suppressing techniques are adopted, such as damping down of work areas such as the point of demolition and haul routes particularly during dry weather. Forced ventilation or extraction may be required. Monitoring of PPE use.	4	1	4
Manual handling:		✓		3	5	15	Operative involved in handling is to be assessed for physical capability prior to lifting and carrying (operative to be trained in kinetic method of lifting).Operative is to seek assistance if the load is too heavy (a team lift should be used if necessary).	3	2	6

Sprains, strains, pulled muscles and torn ligaments							All staff to be instructed on the safe systems of work. Ensure the workplace is kept clean and tidy with walkways unobstructed. Provide mechanical handling equipment to deliver materials to point at which they are needed. Ensure knee pads are worn and regular breaks are taken." **Additional measures:** Comply with relevant manual handling assessment using Task, Individual, Load and environment. Ensure adequate supervision is provided and that control measures remain valid for the duration of the work. Implement Toolbox Talks to refresh operatives on safe Manual Handling techniques.			
Contamination with substance being worked with: Absorption of hazardous substances through the skin, ingestion.		✓		3	4	12	Workers trained in the handling of contaminated materials. Work areas are segregated and labelled. Appropriate personal protective equipment is provided and its use enforced. Workers practice high levels of personal hygiene. Health surveillance is provided where appropriate. Withdraw from area if ill effects experienced. Ensure all hazardous materials are removed prior to the commencement of demolition works. Avoid exposure wherever possible. **Additional Measures:** Ensure information from COSHH Assessments is communicated to those involved in the work. Provide adequate welfare facilities, including clean water, soap, nailbrushes, disposable paper towels, and where heavy contamination is foreseeable, showers.	3	2	6
Falling materials, operatives: Physical impact, minor or major injury, possible death	✓	✓	✓	5	3	15	All leading edges must be guarded with double rails and toe boards to comply with Work at Height Regulations 2005. Ensure that the operative is suitably trained in site safety. All operatives to be made aware of the risks and hazards associated with working at height and to be instructed in the contents of the method statement and safe system work. No materials or debris shall be allowed to be thrown from the work area. The working area shall provide protection from and to pedestrians and other road users where applicable. Use of ladders will only ever be used for short duration work where there is no viable alternative; work by ladder to be minimised and only under risk assessment showing no safe option is available. All waste materials will be either lifted off in skips or deposited in skips at ground level via a rubble chute.	5	2	10

							All workers undertaking other works in proximity to the demolition works should be kept at a safe distance. A safety exclusion zone should be established around the perimeter of the demolition works, only authorised persons shall be permitted to enter the exclusion zone. **Additional Measures:** Adequate exclusion zones to be set up in accordance with BS:6187 2011 'Code of Practice for Full and Partial Demolition'. Operatives to have demolition awareness training. Toolbox Talks to be conducted. Warning signs shall be erected stating “men working overhead Rubble netting, brick guards and fans shall be considered to provide protection to persons below. Use the HSE Wait to ensure suitable access equipment is used for the task. Ensure all demolition works are carefully planned and sequenced to prevent premature collapse. Ensure a pre-demolition survey is undertaken to determine how the structure is built. No lone working will be permitted.			

Hazard:	Persons at Risk			Initial Assessment			Control Measures	Residual Risk		
Abrasive wheels	**P**	**E**	**S**	**S**	**P**	**S x P + R**		**S**	**P**	**S x P = R**
<u>Entanglement of clothing in moving parts</u> Cuts, lacerations and bruising		✓	✓	3	3	9	Checks to be made to ensure the correct disc has been selected. No loose clothing or other material shall be worn or in the vicinity of the cutting operation. Operators shall only commence cutting operations when it is safe to do and they shall ensure that they have a firm footing at all times. Ensure guards are properly positioned to minimise the risk of injury should the cutting disc/wheel fail. All operatives using abrasive wheels should be instructed to warn other persons in the area who may be affected by their work and ensure that they remain at a safe distance. All wheels/discs to be inspected prior to use/mounting. Checks to be made to ensure the correct disc has been selected. Equipment is not be used unless guards are fitted." **Additional measures:** Refer to HSG17 Safety In the Use of Abrasive Wheels. First Aid qualified person available on site with an appropriate First Aid Kit for the scope of works. Contact details of local Health Authority readily available.	3	2	6
<u>Electrocution</u> Death, burns		✓		5	3	15	All electrically operated tools are to be PAT tested. All electrical power tools to be 110v or less. All operatives should be instructed in how to inspect and check the equipment prior to using it. All operatives to be trained in the use, selection and storage of the tools they use. Trailing cables shall be managed to reduce the risk of slips, trips and falls. All tools shall be earthed or double insulated. Temporary and impromptu repairs shall not be allowed. All tools and cables shall be inspected before use. Transformers shall be centre tapped to earth. When not in use, all tools shall be disconnected from its electrical supply. All damaged and defective equipment shall immediately be taken out of use, reported to the supervisor and marked as being defective. **Additional measures:** At least one person on site shall have received training in electric shock treatment.	5	2	10

							A planned preventative maintenance system shall be implemented whereby all equipment shall be regularly inspected, tested and maintained in accordance with manufacturers recommendations.			
Flying debris Eye injuries, cuts		✓	✓	4	3	12	Impact resistant goggles to be worn. Staff to ensure that the area adjacent to the cutting operations are either kept clear or that sufficient shielding is provided to guard other operatives/members of the public from flying sparks, dust and other debris. **Additional measures:** First Aid qualified person available on site with an appropriate First Aid Kit for the scope of works. Contact details of local Health Authority readily available.	4	2	8
Noise Hearing loss, tinnitus		✓	✓	4	4	16	Purchasing policy to replace tools with quietest option. Noisy work restricted to 'ear protection zone' to reduce the numbers at risk. Suitable hearing protectors provided for staff and staff trained how to use, check and maintain them according to advice given by supplier. Staff trained in risk of noise exposure. Check manufacturers guidance to ensure the correct SNR of hearing protection is issued. **Additional measures:** Workers to be shown HSE's Noise WebPages (www.hse.gov.uk/noise/index.htm) Seek opinion of OHP whether health checks required.	3	3	9
Abrasive wheel shattering Cuts, abrasions		✓	✓	3	4	12	Only trained persons are permitted to operate equipment. Blade to be used is inspected to ensure that it is of the correct type and in good condition. Correct type of disc to be used. Condition of disc to be monitored and replaced when necessary. Only trained operatives to fit disc. Operators shall not apply excessive pressure to the disc during the cutting operation and shall ensure that the correct speed is used for the disc. **Additional measures:** Acceleration speed of equipment to be ascertained and daily exposure restricted accordingly. Managers to ensure that sufficient supplies of the correct type of cutting disc/wheel are always available.	3	3	9
Hand arm vibration syndrome (HAVS) Vibration white finger		✓		3	4	12	Procurement Policy in place to ensure tools that produce the least possible vibration are purchased. Inspection and maintenance regime in place to ensure vibration levels aren't increased due to faults. Vibration levels assessed.	3	2	6

							Vibration exposure levels set and monitored. Task rotation in place where operators are likely to exceed exposure limits. Operators issued with sufficient clothing to protect them from cold conditions. Sufficient welfare facilities in place where operators can get warm and have access to warm drinks and food. Operators encouraged to quit smoking where applicable. Operators issued with appropriate personal protective equipment and its use enforced. E.g., anti-vibration gloves. Health Surveillance programme in place where applicable. **Additional measures:** Operatives to be briefed on dangers of HAVS and a programme of health surveillance to be instigated where exposure levels meet daily recommended dosages. Acceleration speed of equipment to be ascertained and daily exposure restricted accordingly. Supervisors will check that specific controls are being implemented.			

Hazard:	Persons at Risk			Initial Assessment			Control Measures	Residual Risk		
Concrete crushing	**P**	**E**	**S**	**S**	**P**	**S x P + R**		**S**	**P**	**S x P = R**
<u>Crushing:</u> Broken bones or amputation		✓	✓	5	3	15	Machine Guarding/Screens and Guard railing. Emergency Isolation Points/ Interlocks/Trip Guards. Information/instruction/training. PPE including, head, eye, hand, respiratory, foot protection and High Visibility Clothing. A safety exclusion zone should be established around the perimeter of the crushing works, only authorised persons shall be permitted to enter the exclusion zone. All operatives to be made aware of the risks and hazards associated with concrete crushing and to be instructed in the contents of the method statement and safe system work. Use hydraulic concrete crushers (where appropriate). **<u>Additional measures:</u>** Adverse weather conditions, management to monitor forecast for snow, ice and salt accordingly. Assessment of materials and implementation of suitable control measures. Implementation of safe system of work detailing blockage removal. Ensure adequate supervision is provided and that control measures remain valid for the duration of the work.	5	2	10
<u>Electric shock (where applicable)</u> Severe burns		✓		5	3	15	Equipment operated by trained workers. Electrical equipment is subject to a regime of maintenance and inspection. The electric cables are to be checked daily for abrasion/damage and all kit complies with electricity at work regulations. Plant to have maintenance and inspection records available (PUWER). All electrical power tools to be 110v or less. Ensure competent operative. Trailing cables shall be managed to reduce the risk of slips, trips and falls. All tools shall be earthed or double insulated. Temporary and impromptu repairs shall not be allowed. All tools and cables shall be inspected before use. Transformers shall be centre tapped to earth. When not in use, all tools shall be disconnected from its electrical supply. All damaged and defective equipment shall immediately be taken out of use, reported to the supervisor and marked as being defective. **<u>Additional measures:</u>** A planned preventative maintenance system shall be implemented whereby all equipment shall be regularly inspected, tested and maintained in accordance with manufacturers recommendations At least one person on site shall have received training in electric shock treatment.	5	2	10

							First Aid qualified person available on site with an appropriate First Aid Kit for the scope of works. Contact details of local Health Authority readily available.			
Whole-body vibration exposure Whole body vibration, fatigue musculoskeletal disorders, health problems		✓		3	3	9	Whole body vibration exposures assessed. Procurement policy in place to ensure new equipment purchased has good vibration control devices in place. Machine inspection and maintenance regimes in place to ensure vibration levels are not increased due to faults with the machine. Task rotation implemented when workers are likely to be exposed above daily exposure limits. Health surveillance programme in place where applicable. **Additional Measures:** Carry out whole body vibration assessment.	3	1	3
Noise exposure: Noise induced hearing damage		✓	✓	4	3	12	Noise risk assessment to be carried out. Purchasing policy to replace tools with quietest option. Noisy work restricted to 'ear protection zone' to reduce the numbers at risk. Suitable hearing protectors provided for staff and staff trained how to use, check and maintain them according to advice given by supplier. Staff trained in risk of noise exposure. Check manufacturers guidance to ensure the correct SNR of hearing protection is issued. **Additional measures:** Acoustic barriers to be used in public areas. A separate risk assessment is required for noise exposure levels. Ensure Hearing protection works with other protective equipment. Workers to be shown HSE's Noise WebPages (www.hse.gov.uk/noise/index.htm) Seek opinion of OHP whether health checks required.	4	2	8
Inhalation / Ingestion of dust: Respiratory diseases, dermatitis		✓	✓	3	3	9	Use only trained/experienced operators. PPE to include impervious gloves, safety footwear, goggles to BS EN 166B, dust mask. Where RPE is worn then individual Face Fit Tests should be completed. Refer to findings from COSHH assessment to clarify what PPE is required. All staff to be informed of the health hazards (Silicosis and Dermatitis) associated with inhaling brick dust and from contact with mortar. Staff to be informed of the hazards and risks (concrete burns and dermatitis) from contact with concrete. **Additional measures:** Health surveillance may be required, seek advice from your OHP. Wash all concrete off skin immediately.	3	1	3

							Carry out COSHH assessment on all substances used, wherever possible substitute for less hazardous substance. Ensure findings are communicated to operatives.			
Falls from height Fractures, bruising, cuts and lacerations		✓		3	3	9	Retro-fit safety equipment to the equipment if necessary. Provide protective equipment such as slip- resistant safety footwear. Keep equipment in good order. Respond to ideas for preventing falls from vehicles. Follow safe systems of work for loading and unloading vehicles. Make sure you have been trained in and follow the company's safe ways of working if you have to use equipment. Always use steps and handholds if provided. Take a few seconds to climb down from the cab, load area or catwalk facing the vehicle and use the handhold. Report missing or damaged equipment. Before stepping off the vehicle, check for uneven surfaces such as potholes or kerbs which may cause you to slip. Carry out pre-use checks on your vehicle. For example, check any steps or handholds are in good condition. Additional measures: Ensure that suitable training is provided to drivers/operatives.	3	2	6
Being struck by ejected materials Cuts, abrasions, impalement		✓	✓	3	3	9	PPE including, head, eye, hand, respiratory, foot protection and High Visibility Clothing. Machine Guarding/Screens and Guard railing to be fitted. Segregation zone between operative and plant. Additional measures: Ensure adequate supervision is provided and that control measures remain valid for the duration of the work.	3	2	6
Falling Debris Cuts, bruises, fractures, crushing, death		✓	✓	5	3	15	Work zone established and fenced. Pedestrian walkways established and demarcated. Only authorised personnel allowed in the work zone e.g., plant operator and banksman. Work equipment subject to annual certificate of thorough examination, regular maintenance and weekly inspection to prevent mechanical failures. Only CPCS trained workers to operate equipment. Appropriate personal protective equipment issued to workers. First aid assistance provided. **Additional measures:** First Aid qualified person available on site with an appropriate First Aid Kit for the scope of works. Management to ensure that the correct equipment for the job has been selected.	5	1	5

							All operatives to be made aware of the risks and hazards associated with the task and to be instructed in the contents of the method statement and safe system work. Safety Helmets are to be worn at all times.			
Struck by the loading machine, i.e. excavator Impact injury, cuts and lacerations		✓	✓	4	3	12	A minimum distance of 600mm shall be left between the outer radius of the machine and any structures/obstructions Work zone established and fenced. Pedestrian walkways established and demarcated. Only authorised personnel and plant allowed in the work zone e.g., plant operator, banksman, water bowser etc. Only CPCS trained workers to operate excavators. Vehicle movements controlled by a banksman when field of vision is limited and/or when other workers are in the work area. All workers wearing appropriate personal protective equipment e.g., hi viz waistcoat or jacket. First aid assistance provided. Signal System (light/audible/hand). **Additional measures:** Carry out first aid training. Daily briefing to be provided to ensure operatives are informed of any other activities which may be undertaken in the vicinity of their work	4	2	8

Hazard:	Persons at Risk			Initial Assessment			Control Measures	Residual Risk		
Excavators	**P**	**E**	**S**	**S**	**P**	**S x P + R**		**S**	**P**	**S x P = R**
<u>Falling Debris</u> Cuts, bruises, fractures, crushing, death		✓	✓	5	3	15	Work zone established and fenced. Pedestrian walkways established and demarcated. Only authorised personnel allowed in the work zone e.g., plant operator and banksman. Work equipment subject to annual certificate of thorough examination, regular maintenance and weekly inspection to prevent mechanical failures. Only CPCS trained workers to operate excavators. Appropriate personal protective equipment issued to workers. First aid assistance provided. Loads must not be slued over persons, site accommodation or other occupied areas. Tools or materials should never be thrown into an excavation, pass them hand to hand or lower them by rope if it is too deep to pass them. **<u>Additional measures:</u>** First Aid qualified person available on site with an appropriate First Aid Kit for the scope of works. Management to ensure that the correct excavator for the job has been selected. All operatives to be made aware of the risks and hazards associated with the task and to be instructed in the contents of the method statement and safe system work. Safety Helmets are to be worn at all times.	5	1	5
<u>Dust from worked material/contact with substances</u> Damage to lungs and eyes/dermatitis		✓	✓	5	3	15	Dust produced by demolition processes assessed. Fuel used during machine refuelling process assessed. Dust suppression techniques to be used. Where required ensure that PPE is worn appropriate to the findings from the COSHH assessment. **<u>Additional measures:</u>** Carry out COSHH Assessments, implement control measures and communicate to workers.	5	2	10
<u>Machine tipping over</u> Crushing injuries, entrapment injuries, death		✓	✓	5	3	15	Site survey carried out to identify ground instabilities and features. Safe routes identified and demarcated. Machine Operator CPCS trained. Machine fitted with roll over protection and machine operator wears the lap belt. Banksman provided when machine operating in conditions with limited visibility or high-risk areas e.g., close to deep excavations. Ensure stop blocks are fitted when vehicles or plant is tipping into an excavation and that the vehicle or plant is guided by a signaller. **<u>Additional measures:</u>** Procure site survey.	5	1	5

							Supervisors are to ensure safe excavating techniques are implemented at all times. Care to be taken when operating on inclines and when traversing slopes.			
Machine refuelling Fire, explosion, burns, skin irritation		✓	✓	4	3	12	Refuelling activities planned. E.g., refuelling point or mobile refuelling facility. Refuelling operative trained and competent to carry out refuelling activity. Fire controls in place. E.g., no smoking zone, fire extinguishers, etc. COSHH Assessment carried out on fuel substance. Personal protective equipment issued and its use enforced. **Additional measures:** Establish if machine will be refuelled at a refuelling point or if a mobile tank will be taken to the machine to refuel it. Carry out COSHH Assessment on fuel.	4	1	4
Striking underground services Fire, explosion, flooding and entrapment		✓	✓	5	4	20	All operatives should be trained in the requirements of HSG 47 Avoiding Danger from Underground Services. All operatives to be trained in emergency procedures to be followed in the event of a service strike. Confirm the location of services with a cable detection tool. Hand dig around services to avoid damage. **Additional measures:** Obtain copies of services drawings and mark them out on the surface prior to starting work Implement a permit to dig system. A detailed method statement outlining the work should also be provided. All services should be assumed live until proved otherwise.	4	2	8
Machine manoeuvres Impact/crushing injuries, death impact with buildings/vehicles/other plant		✓	✓	5	3	15	A minimum distance of 600mm shall be left between the outer radius of the machine and any structures/obstructions Work zone established and fenced. Pedestrian walkways established and demarcated. Only authorised personnel and plant allowed in the work zone e.g., plant operator, banksman, water bowser etc. Only CPCS trained workers to operate excavators. Vehicle movements controlled by a banksman when field of vision is limited and/or when other workers are in the work area. All workers wearing appropriate personal protective equipment e.g., hi viz waistcoat or jacket. First aid assistance provided. **Additional measures:** Carry out first aid training. Daily briefing to be provided to ensure operatives are informed of any other activities which may be undertaken in the vicinity of their work.	5	2	10

Noise Noise induced hearing loss		✓	✓	2	3	6	Noise exposure levels assessed. Noise reduction measures in place. "Buy quiet" procurement policy in place for new equipment. Machine inspection and maintenance regimes in place to ensure noise levels are not increased due to faults with the machine. Task rotation implemented when workers are likely to be exposed to noise levels above daily exposure limits. Suitable hearing protection is provided and its use enforced. Check manufacturers guidance to ensure the correct SNR of hearing protection is issued. Health surveillance programme in place where applicable. **Additional measures:** Carry out noise assessment. Workers to be shown HSE's Noise WebPages (www.hse.gov.uk/noise/index.htm) Seek opinion of OHP whether health checks required.	2	1	2
Vibration Whole body vibration, fatigue musculoskeletal disorders, health problems		✓		3	3	9	Whole body vibration exposures assessed. Procurement policy in place to ensure new equipment purchased has good vibration control devices in place. Machine inspection and maintenance regimes in place to ensure vibration levels are not increased due to faults with the machine. Task rotation implemented when workers are likely to be exposed above daily exposure limits. Health surveillance programme in place where applicable. **Additional measures:** Carry out whole body vibration assessment.	3	1	3

Hazard:	Persons at Risk			Initial Assessment			Control Measures	Residual Risk		
LOADING/UNLOADING PLANT TRANSPORTER/DELIVERY/REMOVAL OF PLANT	**P**	**E**	**S**	**S**	**P**	**S x P + R**		**S**	**P**	**S x P = R**
Plant falling from loader Death, damage to equipment	✓	✓	✓	5	3	15	Transporters to be positioned on firm level ground, brakes on. Loading/unloading carried out at slowest possible speed and with utmost care. All machine drivers are to be competent for the specific plant they operate, this should include formal certification to CPCS or equivalent. Driver to dismount the vehicle whilst it is being loaded. Clearly marked pedestrian routes shall be identified on site to ensure vehicular and pedestrian traffic are kept separate. No persons to be permitted within the operating range of the machine without the operators permission. Before loading, check the load platform, bodywork and anchor points to make sure that they are suitable for the load, are clean and are in a good working order. **Additional measures:** Exclusion zone should be considered around loading area. Daily briefing to be provided to ensure operatives are informed of any other activities which may be undertaken in the vicinity of their work. Manager to ensure driver is given appropriate instruction or training. All operatives to be made aware of the risks and hazards associated with working on transporters and to be instructed in the contents of the method statement and safe system work.	2	3	6
Trapping Death, fractures, cuts & abrasions		✓	✓	5	3	15	Persons not involved in the process are kept clear. Banksmen to be employed both on and off the transporters. All contractors on site need to ensure that designated loading off loading areas are kept clear during operations. Where banksmen are used, you must be clear about what their signals mean and obey them. If you can't see your banksman at any time when moving -Stop! Ensure that appropriate high vis clothing is worn and PPE (as required). **Additional measures:** Ensure adequate supervision is provided and that control measures remain valid for the duration of the work.	2	2	4
Falls from height Broken bones, serious injury		✓	✓	3	4	12	Ensure steps are taken to prevent falls from height when accessing the rear of the transporter. Loading/unloading process organised to minimise time spent on trailer. **Additional measures:**	3	1	3

							All operatives to be made aware of the risks and hazards associated with working at height and to be instructed in the contents of the method statement and safe system work.			

Hazard:	Persons at Risk			Initial Assessment			Control Measures	Residual Risk		
Working at Height	**P**	**E**	**S**	**S**	**P**	**S x P + R**		**S**	**P**	**S x P = R**
<u>Operatives falling from height.</u> Serious injury or possible fatality if a worker falls.		✓	✓	5	4	20	Working at height is avoided where possible. The most reasonably practicable means of access is used where working at height cannot be avoided. Operatives are fully trained & instructed in safe use of all work equipment. All staff to be trained in the use and inspection of their harnesses and lanyards (where required). Only competent operatives are authorised to erect, alter and dismantle platforms. Where used, guard rails, toe-boards, unprotected gaps shall conform to requirements of the Work at Height Regulations i.e. top rail at 950mm min, toe-boards 150mm min, gaps of 470mm max. All selected work equipment is suitable and fit for purpose. Statutory weekly inspections of scaffold are carried out where appropriate (all platforms and temporary access equipment above 2m in height are to be inspected, including mobile towers). All other work equipment is regularly inspected & maintained in good order. **<u>Additional measures:</u>** Reference to separate risk assessments for use of specific equipment e.g. Towers, MEWPS. Ensure that physical capabilities are taken into account when allocating works. Weather conditions to be monitored. In addition to the inspections before use, a formal recorded examination of each safety harness and lanyard shall be carried out every three months. No lone working will be permitted. Only competent and experienced scaffolders shall be permitted to erect, modify or dismantle any scaffold. Scaffolders shall hold a valid CITB/CSCS certificate in scaffolding. Persons inspecting scaffolds shall also be competent to do so and have the appropriate CSCS certification. All users of the scaffold shall be trained to identify potential defects and inadequacies in the scaffold and the measures to be taken in such instances. All users of the scaffold to be made aware of the dangers of making unauthorised modifications to the scaffold, such as the removal of guard rails and scaffold ties.	4	3	12
<u>Items falling from height</u>		✓	✓	5	3	15	Where used, guard rails, toe-boards, unprotected gaps shall conform to requirements of the Work at Height Regulations i.e. top rail at 950mm min, toe-boards 150mm min, gaps of 470mm max.	4	2	8

Serious injury or possible fatality if an item falls onto persons below.							All reasonably practicable measures are taken to prevent unauthorised access to works area – barriers, signage etc. to be used. Rubble netting, brick guards and fans shall be considered to provide protection to persons below. Works shall not be permitted to take place during periods of adverse weather such as in strong winds or wet weather. No materials or debris shall be allowed to be thrown from the roof. Debris or rubble chute should be implemented and used. **Additional measures:** Monitoring is required to ensure that the controls remain effective. Visual inspection of work equipment prior to use. Weather conditions to be monitored. Warning signs shall be erected stating "men working overhead			
Equipment failure and/or collapse Serious injury or possible fatality following equipment failure or collapse.		✓	✓	5	3	15	Statutory weekly inspections of scaffold are carried out where appropriate (all platforms and temporary access equipment above 2m in height are to be inspected, including mobile towers). All other work equipment is regularly inspected & maintained in good order. Safe Working Load (SWL) of any access equipment is never exceeded. **Additional measures:** Monitoring is required to ensure that the controls remain effective. Visual inspection of work equipment prior to use. Weather conditions to be monitored.	4	3	12

Hazard:	Persons at Risk			Initial Assessment			Control Measures	Residual Risk		
MOBILE ELEVATED WORKING PLATFORMS (MEWP)	**P**	**E**	**S**	**S**	**P**	**S x P + R**		**S**	**P**	**S x P = R**
Trapped / crushed by MEWP against structures Crushing injuries, fractures, death.	✓	✓	✓	5	3	15	Exclusion zone shall be established around the base of the MEWP. Establish safe working distance from overhead and adjacent structures (allow for machine run off). **Additional measures:** On going supervision required.	5	2	10
Failure of MEWP Impact injuries from falling cage/boom arm. Damage to property. Death	✓	✓	✓	5	3	15	Lifting equipment to be thoroughly examined at least every 6 months and certificated. A competent person shall carry out weekly inspections of lifting equipment and record the findings. Manufacturer's operating instructions are to be available to the operator. **Additional measures:** Ongoing supervision shall be provided to ensure that controls are being adhered to. Rescue plan to be developed and operatives briefed on the plan.	5	1	5
Tipping of MEWP Crushing injuries, fractures, death. Damage to property		✓	✓	5	3	15	All operators shall be trained and competent in the use of the equipment. Ensure that ground is firm and level at workface and access route. Manufacturer's operating instructions are to be available to the operator. Pre use checks to be carried out and periodically recorded. MEWP not to be turned on an incline, or used on unstable ground. Turning at speed to be avoided. Machine only to be used in accordance with the manufacturers instructions and limitations (rated capacity must not be exceeded). A certificate of thorough examination (within previous 6 months if lifting persons) to be available on site for all lifting equipment. A Safe System Of Work should be in place before work commences. **Additional measures:** Supervisor to ensure all operatives are I.P.A.F trained. Ensure adequate supervision is provided and that control measures remain valid for the duration of the work. First Aid qualified person available on site with an appropriate First Aid Kit for the scope of works. Contact details of local Health Authority readily available. Site review to determine the specific work equipment for work at height. Complete the Work at Height Permit if required.	5	2	10
Falling from MEWP Fractures, death.		✓		5	3	15	Operatives shall use full-body harness & lanyard attached to suitable anchorage point. All staff to be trained in the use and inspection of their harnesses and lanyards. All operatives to be made aware of the risks and hazards associated with working at height and to be instructed in the contents of the method statement and safe system work. **Additional measures:** Emergency rescue procedure should operator fall when using fall arrest equipment.	5	1	5

							In addition to the inspections before use, a formal recorded examination of each safety harness and lanyard shall be carried out every three months. Ensure adequate supervision is provided and that control measures remain valid for the duration of the work.			
Dropping tools and materials from MEWP Fractures, death.		✓	✓	5	3	15	Tether off tools. Exclusion zone will be maintained around our work areas to ensure any falling objects do not land on any other person. Good general housekeeping will be maintained at all times. **Additional measures:** On going supervision required.	4	2	8
Struck by MEWP Fractures, death.	✓	✓	✓	5	3	15	Exclusion zone shall be established around the base of the MEWP. Operator to look all around before moving off. Travel at a speed consistent with the work conditions. Pedestrians to use designated walkways. Site operatives to wear hi visibility clothing. **Additional measures:** On going supervision required.	5	2	10
Electrocution due to contact with overhead cables. Burns. death		✓		5	3	15	Establish safe working distance from overhead cables (allow for machine run off). **Additional measures:** Ensure adequate supervision is provided and that control measures remain valid for the duration of the work. Safe System of Work implemented and communicated to operatives. Permit to Work completed as required.	5	1	5

Hazard:	Persons at Risk			Initial Assessment			Control Measures	Residual Risk		
Hop-ups	**P**	**E**	**S**	**S**	**P**	**S x P + R**		**S**	**P**	**S x P = R**
Hop-up toppling over (Uneven surfaces) Fractures, bruises		✓		3	4	12	Hop ups are used only on a firm, level base; not placed on trailing leads, etc. If hop ups are to be used then ensure they are 600 x 600mm. All tools, equipment and access facilities shall be checked and inspected before use. **Additional measures:** All staff to be fully briefed of the hazards and the control measures necessary to reduce the risk. Toolbox Talks cab be used to refresh operatives on the use of hop ups.	3	2	6

Hazard:	Persons at Risk			Initial Assessment			Control Measures	Residual Risk		
Exclusion Zones	**P**	**E**	**S**	**S**	**P**	**S x P + R**		**S**	**P**	**S x P = R**
<u>Injury to members of the public on site</u> Death, crush injuries, cuts and lacerations (dependant on work activities)	✓			5	3	15	Site entrances should be clearly marked and there should be separate access for vehicles and pedestrians. Both visitors and workers should report their presence on site as soon as they arrive. Clear signs should be used so everyone knows where and how to enter the site. They should be directed to a fixed control or reporting point and safe access to this point should be provided. On a small site the site hut is likely to act as the reporting in point but on a larger site a staffed security booth might be needed. Do not allow visitors and workers to walk around unaccompanied unless they are familiar with the site and the risks they may be exposed to. Keep a record of who is on site and when they arrive and depart. This helps keep track of people and can be used as an aid for the emergency services in the case of a fire or accident. It may also improve security of plant and materials. At the access point people new to the site can be given information about relevant hazards on site and any necessary training about special rules, emergency procedures etc. This can include any changes which may have taken place since they were last on site. Daily briefing to be provided to ensure operatives are informed of any other activities which may be undertaken in the vicinity of their work. The working area shall provide protection from and to pedestrians and other road users where applicable. Provide safe access between the site entrance(s) and the control point; making sure the route between the entrance and the reporting-in point is clearly marked. Make sure people are accompanied around site, and issued with ID if needed. **<u>Additional measures:</u>** Depending upon hazards on site it may require the presence of 24 hour security supervision. Make sure your authorisation procedures are implemented and that they remain effective as the work progresses. Make sure the scheme matches the precautions to the risks, and is adapted as these risks alter. Monitor and review the scheme, as necessary." "The precautions taken to secure the site perimeter should reflect the level of risk. The site perimeter and fencing should be checked on a regular basis.	5	1	5

Hazard:	Persons at Risk			Initial Assessment			Control Measures	Residual Risk		
Housekeeping & waste control	**P**	**E**	**S**	**S**	**P**	**S x P + R**		**S**	**P**	**S x P = R**
Manual handling injuries Musco-skeletal injuries, strains and sprains		✓		3	4	12	Manual handling assessment to be carried out for lifting of heavy/awkward loads. Use lifting and carrying aids as appropriate. **Additional measures:** Operative to be made aware of manual handling assessment findings and any related COSHH assessments. Manual Handling assessment to incorporate Task, Individual, Load & Environment.	3	2	6
Slips, trips and falls. Cuts, broken bones		✓	✓	4	4	16	Maintain good housekeeping practices. Do not allow waste to accumulate. Use skips and designated waste areas. Area should be cleared as work progresses. Operatives must report poor housekeeping practices. Re-usable or surplus materials to be stacked and returned to supplier/stores as soon as possible. Make sure that all corridors, stairways, footpaths or other areas used by pedestrians are kept clear of obstructions at all times. Tie up loose cables, particularly along corridors. Make sure that steps into site cabins are properly constructed. Additional measures: Ensuring that everyone working on the site is aware of the site policy for managing the movement and storage of materials around the site, and the removal of waste from work areas. Ensure adequate supervision is provided and that control measures remain valid for the duration of the work. First Aid qualified person available on site with an appropriate First Aid Kit for the scope of works. Contact details of local Health Authority readily available.	4	2	8
Dust Respiratory disease		✓	✓	4	4	16	Maintain good housekeeping practices. Do not allow waste to accumulate. Use skips and designated waste areas. Area should be cleared as work progresses. Operatives must report poor housekeeping practices.	4	2	8

							Re-usable or surplus materials to be stacked and returned to supplier/stores as soon as possible. Make sure that all corridors, stairways, footpaths or other areas used by pedestrians are kept clear of obstructions at all times. Tie up loose cables, particularly along corridors. Make sure that steps into site cabins are properly constructed. Additional measures: Ensuring that everyone working on the site is aware of the site policy for managing the movement and storage of materials around the site, and the removal of waste from work areas. Ensure adequate supervision is provided and that control measures remain valid for the duration of the work. First Aid qualified person available on site with an appropriate First Aid Kit for the scope of works. Contact details of local Health Authority readily available.			
Contact with hazardous substances (during waste removal) Respiratory disease, skin/eye irritation		✓	✓	3	4	12	Operatives carrying out waste removal to wear adequate PPE to address risk involved (gloves, dust mask, goggles, safety boots, hard hat, etc.) with the substance/item they are removing. **Additional measures:** Operative to be made aware of manual handling assessment findings and any related COSHH assessments.	3	2	6
Fire Death, damage to equipment or buildings.		✓	✓	5	3	15	Flammable materials: - make sure that all flammable waste materials (such as packaging and timber off cuts) are cleared away regularly to reduce fire risks. Work areas - make clearing waste a priority for all trades. Check that everyone is aware of what is required that it is being done. Skips - waste materials need storing safely before their removal from the site so make sure that you allow sufficient space for waste skips and bins etc. Plan where the skips can be positioned and how often they will need to be collected. Waste within buildings - consider waste generated inside the building and whether you need to provide wheeled bins or chutes etc. to enable it to be brought out of the building safely. **Additional measures:** Implement Toolbox Talks to refresh operatives on the importance of good housekeeping. Ensure that appropriate fire fighting equipment is located on site and operatives are trained in it's use.	5	1	5

Storage of materials Collision with plant, equipment or operatives		✓	✓	4	3	12	Storage areas - designate storage areas for plant, materials, waste, flammable substances e.g. foam plastics, flammable liquids and gases such as propane and hazardous substances e.g. pesticides and timber treatment chemicals. Pedestrian routes – do not allow storage to 'spread' in an uncontrolled manner on to footpaths and other walkways. Do not store materials where they obstruct access routes or where they could interfere with emergency escape. Flammable materials - will usually need to be stored away from other materials and protected from accidental ignition. Storage at height - if materials are stored at height e.g. on top of a container, make sure necessary guard rails are in place if people could fall when stacking or collecting materials or equipment. Tidiness - keep all storage areas tidy, whether in the main compound or on the site itself; and deliveries - plan deliveries to keep the amount of materials on site to a minimum. **Additional measures:** Management to include this as part of the Construction Phase Plan (CPP) and update accordingly.	3	1	3
Vibration HAVS, Vibration White Finger		✓		3	3	9	Select tools with lower vibration levels but still suitable for the task. Regular breaks and operatives are encouraged to exercise fingers. Job rotation, Suitable workplace temperature or provision of warm clothing and gloves. Specific equipment assessments have been carried out for all our items of machinery and an equipment register is issued to our operatives with HAV data and controls. Each operative will make a daily record of any equipment they have used which needs registering for HAVS. **Additional measures:** Operatives to be briefed on dangers of HAVS and a programme of health surveillance to be instigated where exposure levels meet daily recommended dosages. Acceleration speed of equipment to be ascertained and daily exposure restricted accordingly. Supervisors will check that specific controls are being implemented.	3	2	6

Hazard:	Persons at Risk			Initial Assessment			Control Measures	Residual Risk		
Fire	**P**	**E**	**S**	**S**	**P**	**S x P + R**		**S**	**P**	**S x P = R**
Hot work-welding cutting Smoking near flammable materials Electrical faults Arson Waste material control	✓	✓	✓	5	5	25	Site planning and safety rules will include fire detection, provisions, supply and maintenance of fire- fighting equipment, control of hot work, emergency procedures in the event of a fire, control of smoking on site as needed, and prevention of the build-up of flammable materials such as waste skips. Adequate means of escape and access for emergency vehicles will be allowed for during all stages of construction. Fire emergency exit routes to be established, adequately signed and kept free of obstruction. Practical security measures to be taken to restrict access to site work areas, especially out of working hours. Smoking restrictions to be enforced, no smoking areas to be signed, where necessary. Hot work and use of naked flame appliances will be controlled as necessary, including the use of permit to work systems, all hot work areas to be inspected 1 hr after completion of the work to check for possible fire hazards. Temporary electrical systems will comply with legal standards and be inspected prior to handover. An emergency fire and evacuation procedure to be produced for every contract, which will be practiced and be continuously reviewed and updated as required. All work areas and site buildings will be inspected on completion of works for any potential fire hazards. Quantities of highly flammable liquids and LPG within work areas will be restricted and suitable storage facilities provided. Records should be maintained of routine fire inspections and the maintenance and testing of fire- fighting equipment. Fire alarm systems to be used Control flammable materials and waste **<u>Additional measures:</u>** All operatives to be trained in fire and evacuation procedures during induction training All contractors and visitors to be informed of the smoking restrictions applicable on site.	4	3	12

Hazard:	Persons at Risk			Initial Assessment			Control Measures	Residual Risk		
Needles & Sharps	**P**	**E**	**S**	**S**	**P**	**S x P + R**		**S**	**P**	**S x P = R**
<u>Exposure to blood-borne viruses (discarded needles/ syringes)</u> Death, serious illness, cuts		✓		5	3	15	Survey workplace to identify any obvious needles & remove using litter picker and plastic container. PPE to include: safety footwear with steel mid-soles, Tyvek overalls, full face RPE & gloves. Face Fit Tests are required for individuals. Ensure any open wounds are covered with waterproof dressings. If needles are located, do not touch or move it and report the matter to a supervisor. Leave a responsible person to safeguard it. If pricked, wash area with thoroughly with soap and water at first opportunity. Obtain medical assistance, if you can do so safely, take the syringe or needle with you. Workers removing sharps, such as needles, from a contaminated area should be trained in how to carry out the work safely. A 'needle picker' should be used to remove them, rather than hands. Needles should be disposed of into a sharps box and the box should not be over-filled. **<u>Additional measures:</u>** Contact local Environmental Health Department for removal of excessive needles. All operatives to be made aware of the risks and hazards associated with the work area and task and to be instructed in the contents of the method statement and safe system work. First Aid qualified person available on site with an appropriate First Aid Kit for the scope of works. Contact details of local Health Authority readily available. In the event of a needlestick injury, after appropriate first aid, the member of staff should consult their occupational health provider or the nearest A and E department, as soon as possible, to be assessed for PEP (post exposure prophylaxis) for HIV and post exposure immunisation for Hepatitis B, if not already vaccinated.	5	1	5

Hazard:	Persons at Risk			Initial Assessment			Control Measures	Residual Risk		
Abrasive wheels	**P**	**E**	**S**	**S**	**P**	**S x P + R**		**S**	**P**	**S x P = R**
<u>Entanglement of clothing in moving parts</u> Cuts, lacerations and bruising		✓	✓	3	3	9	Checks to be made to ensure the correct disc has been selected. No loose clothing or other material shall be worn or in the vicinity of the cutting operation. Operators shall only commence cutting operations when it is safe to do and they shall ensure that they have a firm footing at all times. Ensure guards are properly positioned to minimise the risk of injury should the cutting disc/wheel fail. All operatives using abrasive wheels should be instructed to warn other persons in the area who may be affected by their work and ensure that they remain at a safe distance. All wheels/discs to be inspected prior to use/mounting. Checks to be made to ensure the correct disc has been selected. Equipment is not be used unless guards are fitted." **Additional measures:** Refer to HSG17 Safety In the Use of Abrasive Wheels. First Aid qualified person available on site with an appropriate First Aid Kit for the scope of works. Contact details of local Health Authority readily available.	3	2	6
<u>Electrocution</u> Death, burns		✓		5	3	15	All electrically operated tools are to be PAT tested. All electrical power tools to be 110v or less. All operatives should be instructed in how to inspect and check the equipment prior to using it. All operatives to be trained in the use, selection and storage of the tools they use. Trailing cables shall be managed to reduce the risk of slips, trips and falls. All tools shall be earthed or double insulated. Temporary and impromptu repairs shall not be allowed. All tools and cables shall be inspected before use. Transformers shall be centre tapped to earth. When not in use, all tools shall be disconnected from its electrical supply. All damaged and defective equipment shall immediately be taken out of use, reported to the supervisor and marked as being defective. **Additional measures:** At least one person on site shall have received training in electric shock treatment.	5	2	10

							A planned preventative maintenance system shall be implemented whereby all equipment shall be regularly inspected, tested and maintained in accordance with manufacturers recommendations.			
Flying debris Eye injuries, cuts		✓	✓	4	3	12	Impact resistant goggles to be worn. Staff to ensure that the area adjacent to the cutting operations are either kept clear or that sufficient shielding is provided to guard other operatives/members of the public from flying sparks, dust and other debris. **Additional measures:** First Aid qualified person available on site with an appropriate First Aid Kit for the scope of works. Contact details of local Health Authority readily available.	4	2	8
Noise Hearing loss, tinnitus		✓	✓	4	4	16	Purchasing policy to replace tools with quietest option. Noisy work restricted to 'ear protection zone' to reduce the numbers at risk. Suitable hearing protectors provided for staff and staff trained how to use, check and maintain them according to advice given by supplier. Staff trained in risk of noise exposure. Check manufacturers guidance to ensure the correct SNR of hearing protection is issued. **Additional measures:** Workers to be shown HSE's Noise WebPages (www.hse.gov.uk/noise/index.htm) Seek opinion of OHP whether health checks required.	3	3	9
Abrasive wheel shattering Cuts, abrasions		✓	✓	3	4	12	Only trained persons are permitted to operate equipment. Blade to be used is inspected to ensure that it is of the correct type and in good condition. Correct type of disc to be used. Condition of disc to be monitored and replaced when necessary. Only trained operatives to fit disc. Operators shall not apply excessive pressure to the disc during the cutting operation and shall ensure that the correct speed is used for the disc. **Additional measures:** Acceleration speed of equipment to be ascertained and daily exposure restricted accordingly. Managers to ensure that sufficient supplies of the correct type of cutting disc/wheel are always available.	3	3	9
Hand arm vibration syndrome (HAVS) Vibration white finger		✓		3	4	12	Procurement Policy in place to ensure tools that produce the least possible vibration are purchased. Inspection and maintenance regime in place to ensure vibration levels aren't increased due to faults. Vibration levels assessed.	3	2	6

							Vibration exposure levels set and monitored. Task rotation in place where operators are likely to exceed exposure limits. Operators issued with sufficient clothing to protect them from cold conditions. Sufficient welfare facilities in place where operators can get warm and have access to warm drinks and food. Operators encouraged to quit smoking where applicable. Operators issued with appropriate personal protective equipment and its use enforced. E.g., anti-vibration gloves. Health Surveillance programme in place where applicable. **Additional measures:** Operatives to be briefed on dangers of HAVS and a programme of health surveillance to be instigated where exposure levels meet daily recommended dosages. Acceleration speed of equipment to be ascertained and daily exposure restricted accordingly. Supervisors will check that specific controls are being implemented.			

Hazard/Description	**People at Risk**			**Initial Assessment**			**Control Measures**	**Residual Risk**		
Waste - General	**Pub**	**Emp**	**Sub**	**S**	**P**	**S x P = R**		**S**	**P**	**S x P = R**
Generation of Waste Products / Incorrect disposal of waste	✓	✓	✓	2	3	6	Operatives to ensure that the waste is transferred to the skip at regular intervals. Works areas to be kept as clean as is reasonably practicable. The work activities will create waste, which will need to be disposed of to skip.	2	1	2

COSHH ASSESSMENT SHEET	
Data Sheet-Lafarge Crushed Concrete	
OPERATION / PROCESS: Concrete crushing	**LOCATION: Laystall Street, Manchester**
PRODUCT / SUBSTANCE USED: Crushed concrete	**INGREDIENTS:** Crystalline Silica, Calcium Hydroxide, Portland Cement
EXPOSURE CONTROLS: Use local exhaust or general dilution ventilation or other suppression method to maintain dust levels below exposure limits	
EXPOSED PERSONS: Operatives	
FREQUENCY OF EXPOSURE:	**DURATION OF EXPOSURE:**

HAZARDS:
- Main hazard is airbourne dust which can be harmful to health in inhaled.
- Reacts with moisture, becomes alkaline in contact with water or body fluids e.g. sweat or tears.
- May also cause irritant contact dermatitis or allergic (chromium) dermatitis.
- May cause inflammation of mucus membranes

Very toxic	Irritant / Sensitisor	Corrosive	Highly flammable	Oxidising	Explosive	Serious longer term health hazards	Contains gas under pressure	Dangerous for the environment
	✓	✓				✓		

CONTROL MEASURES:
- Ensure data sheet and COSHH assessment are available for reference by first aiders and employees;
- Suitable respiratory protection (HSE approved standard) should be worn to protect against dust inhalation;
- Overalls and gloves should be worn to prevent skin contact which should also include suitable footwear;
- Eye protection to BS EN 1664-4 should be used to prevent dust entering the eyes;
- Dispose of crushed concrete as per local regulations. NTROL MEASURES TO BE PUT IN PLACE:

Hard hat	Goggles	Steel toe capped boots	Ear defenders	Hand protection	High visibility clothing	Dust mask	Respiratory	Face visor
Mandatory	✓	Mandatory	✓	Mandatory	Mandatory	✓		

EXPOSURE ASSESSMENT: OPERATORS & OTHERS:
Acceptable if the procedures outlined to minimize risk of exposure are adhered to.

ASSESSOR: RYAN HUGHES	**POSITION:** DIRECTOR	**DATE:** January 2022

COSHH ASSESSMENT SHEET	
Data Sheet – ESSO Diesel/ExxonMobil	
OPERATION / PROCESS: Plant & Equipment-fuel	**LOCATION: Laystall Street, Manchester**
PRODUCT / SUBSTANCES USED: Diesel-Hydrocarbons and Additives	**CLASSIFICATION:** Category 3 Carcinogen, harmful, dangerous to the environment
WORKPLACE EXPOSURE LIMIT (WEL): TWA 5mg/m3	
EXPOSED PERSONS: Plant Operatives	
FREQUENCY OF EXPOSURE:	**DURATION OF EXPOSURE:**

HAZARDS:

- Contact with eyes- short term redness and irritation.
- Prolonged/ repeated contact with skin could lead to dermatitis.
- Used Diesel contains harmful materials which my lead to skin cancer.

Very toxic	Irritant / Sensitisor	Corrosive	Highly flammable	Oxidising	Explosive	Serious longer term health hazards	Contains gas under pressure	Dangerous for the environment
✓	✓		✓			✓		✓

CONTROL MEASURES:

- Ensure there is sufficient ventilation of the area
- Where concentrations in air exceed WEL, approved respirators are required
- Chemical resistant gloves required for prolonged or repeated contact
- Safety goggles to be worn
- If contact is likely wear safety goggles, chemical resistant overalls and chemically impervious gloves

Hard hat	Goggles	Steel toe capped boots	Ear defenders	Hand protection	High visibility clothing	Dust mask	Respiratory	Face visor
Mandatory	✓	Mandatory		Mandatory	Mandatory			

EXPOSURE ASSESSMENT: OPERATORS & OTHERS:
Acceptable if the procedures outlined to minimize risk of exposure are adhered to.

ASSESSOR: RYAN HUGHES	**POSITION:** DIRECTOR	**DATE:** January 2022

COSHH ASSESSMENT SHEET	
Data sheet – Tetrosyl Limited	
OPERATION / PROCESS: Plant & equipment	LOCATION: **Laystall Street, Manchester**
PRODUCT / SUBSTANCES USED: Diesel Engine Oil – 20W/50	**HAZARDOUS CONTENT:** Mineral oil
WORKPLACE EXPOSURE LIMIT (WEL): LTEL (8 hour TWA) STEL (15min) No exposure limit defined by EH40/2005	
EXPOSED PERSONS: Plant operatives	
FREQUENCY OF EXPOSURE:	**DURATION OF EXPOSURE:**

HAZARDS:

- Contact with eyes- short term redness and irritation.
- Prolonged/ repeated contact with skin could lead to dermatitis.
- Used engine oils contain harmful materials which my lead to skin cancer.

Very toxic	Irritant / Sensitisor	Corrosive	Highly flammable	Oxidising	Explosive	Serious longer term health hazards	Contains gas under pressure	Dangerous for the environment
	✓					✓		✓

CONTROL MEASURES:

- Ensure data sheets and COSHH assessments available for reference by first aiders and employees.
- Avoid splashes; where splashing is likely, wear chemical splash goggles.
- Wear impervious gloves where prolonged contact is likely.
- Use in a well ventilated area.
- DO NOT enter tanks without breathing apparatus and confined space permit to work.
- DO NOT siphon by mouth.

Hard hat	Goggles	Steel toe capped boots	Ear defenders	Hand protection	High visibility clothing	Dust mask	Respiratory	Face visor
Mandatory	✓	Mandatory		Mandatory	Mandatory			

EXPOSURE ASSESSMENT: OPERATORS & OTHERS:
Acceptable if the procedures outlined to minimize risk of exposure are adhered to.

ASSESSOR: RYAN HUGHES	**POSITION:** DIRECTOR	**DATE:** January 2022

COSHH ASSESSMENT SHEET	
Data Sheet-Pirtek General Grease Range	
OPERATION / PROCESS: Excavator-lubrication	**LOCATION: Laystall Street, Manchester**
PRODUCT / SUBSTANCES USED: Pirtek General Grease Range	**CLASSIFICATION:** Not classed as hazardous
WORKPLACE EXPOSURE LIMITS (WEL): Have not been assigned	
EXPOSED PERSONS: Plant operatives	
FREQUENCY OF EXPOSURE:	**DURATION OF EXPOSURE:**
HAZARDS: • May irritate eyes / skin on contact.	

Very toxic	Irritant / Sensitisor	Corrosive	Highly flammable	Oxidising	Explosive	Serious longer term health hazards	Contains gas under pressure	Dangerous for the environment
	✓							✓

CONTROL MEASURES:

- Respiratory protection is not normally required under normal conditions of use.
- Use barrier cream on hands. Protective gloves. Wash at the end of each working shift and before eating, smoking and using the toilet.
- Wear face visor or protective goggles/safety glasses where eye contact can accidentally occur.
- Personnel should wear regularly laundered overalls

Hard hat	Goggles	Steel toe capped boots	Ear defenders	Hand protection	High visibility clothing	Dust mask	Respiratory	Face visor
Mandatory	✓	Mandatory		Mandatory	Mandatory			

EXPOSURE ASSESSMENT: OPERATORS & OTHERS:
Acceptable if the procedures outlined to minimize risk of exposure are adhered to.

ASSESSOR: RYAN HUGHES	**POSITION:** DIRECTOR	**DATE:** January 2022

COSHH ASSESSMENT SHEET	
Data Sheet-Pirtek Fluid Transfer Solutions	
OPERATION / PROCESS: Excavators lubricant	**LOCATION: Laystall Street, Manchester**
PRODUCT / SUBSTANCES USED: Pirtek Hydraulic Oil 46	**CLASSIFICATION**: Not classified
WORKPLACE EXPOSURE LIMIT (WEL): 8 hour TWA 15min STEL 5mg/m3 10mg/m3	
EXPOSED PERSONS: Plant operatives	
FREQUENCY OF EXPOSURE:	**DURATION OF EXPOSURE:**

HAZARDS:

- No significant hazard. This material is not considered to be hazardous, but should be handled in accordance with good industrial hygiene and safety practices

Very toxic	Irritant / Sensitisor	Corrosive	Highly flammable	Oxidising	Explosive	Serious longer term health hazards	Contains gas under pressure	Dangerous for the environment
	✓							

CONTROL MEASURES:

- Ensure there is sufficient ventilation of the area.
- Respiratory protection is unnecessary, provided the concentration of vapour, mists or fumes are adequately controlled. If operations are such that excessive levels of vapour, mists or fumes are generated, and operators are unavoidably exposed, then suitable respiratory equipment should be provided.
- Protective gloves
- Wear face visor or protective goggles/safety glasses where eye contact can accidentally occur.
- If skin contact is likely wear impervious protective clothing.

Hard hat	Goggles	Steel toe capped boots	Ear defenders	Hand protection	High visibility clothing	Dust mask	Respiratory	Face visor
Mandatory	✓	Mandatory		Mandatory	Mandatory			

EXPOSURE ASSESSMENT: OPERATORS & OTHERS:

Acceptable if the procedures outlined to minimize risk of exposure are adhered to.

ASSESSOR: RYAN HUGHES	**POSITION:** DIRECTOR	**DATE:** January 2022

COSHH ASSESSMENT SHEET	
OPERATION / PROCESS: Fuel	**LOCATION: Laystall Street, Manchester**
PRODUCT / SUBSTANCES USED: Unleaded petrol	**HAZARDOUS CONTENT:** Benzene / n-Hexane / Toluene / Xylene

WORKPLACE EXPOSURE LIMIT (WEL):

LTEL (8 hr TWA)	STEL (15-min)
1 ppm	N/a
20 ppm / 72 mg/m3	N/a
50 ppm / 191 mg/m3	150 ppm 574 mg/m3
5 0ppm / 220 mg/m3	100 ppm / 441 mg/m3

EXPOSED PERSONS: Plant operatives

FREQUENCY OF EXPOSURE:	**DURATION OF EXPOSURE:**

HAZARDS:

- Ingestion of small amounts may cause nausea and diarrhoea; larger amounts may cause irritation, drowsiness and vomiting.
- Prolonged or repeated exposure may lead to short-term irritation, defatting of the skin and dermatitis.
- Exposure to high levels of the vapour can cause irritation to eyes and mucous membranes, and drowsiness leading to loss of consciousness.
- Contact with the eyes is likely to cause short-term irritation with redness and stinging.
- Benzene is a category 2 carcinogenic and may cause cancer.

Very toxic	Irritant / Sensitisor	Corrosive	Highly flammable	Oxidising	Explosive	Serious longer term health hazards	Contains gas under pressure	Dangerous for the environment
✓	✓		✓		✓	✓		✓

CONTROL MEASURES:

- Ensure data sheet and COSHH assessment are available for reference by first aiders and employees.
- Ensure good ventilation. Where exposure is likely to exceed limits, compressed air breathing apparatus to BS EN 137 should be used.
- Wear protective clothing, nitrile gloves to BS EN 374 and goggles to BS EN 166-3 where there is a risk of splashing.
- Dispose of/replace contaminated clothing.

Hard hat	Goggles	Steel toe capped boots	Ear defenders	Hand protection	High visibility clothing	Dust mask	Respiratory	Face visor
Mandatory	✓	Mandatory		Mandatory	Mandatory			

EXPOSURE ASSESSMENT: OPERATORS & OTHERS:

Acceptable if the procedures outlined to minimize risk of exposure are adhered to.

ASSESSOR: RYAN HUGHES	**POSITION:** DIRECTOR	**DATE:** January 2022

Appendix C: Working at Height-Rescue Plan

The creation and maintenance of a safe work environment is the collective responsibility of all employees, employers, and contractors at the jobsite.

Company Policy on Working at Heights Rescues

It is our company policy to provide prompt rescue and medical treatment when a worker is injured on the jobsite. On occasion, our workers may have to rescue a worker who has fallen and is being suspended in a safety harness. This "working at heights" rescue involves lowering a worker to a safe location. This procedure applies to all managers, supervisors, forepersons, employees, and subcontractors at the jobsite.

Purpose of Working at Heights Rescues

When a worker falls and is suspended in a harness, it's important to rescue them as quickly as possible for the following reasons.

- The worker may have suffered injuries during the fall and may need medical attention.
- When workers are suspended in their safety harnesses for long periods, they may suffer from blood pooling in the lower body. This can lead to suspension trauma.
- Suspended workers may panic if they are not rescued quickly.
- The events that led to the fall may create additional risks that need to be addressed.

Emergency Response Plan

If a worker falls and is suspended by a safety harness, implement the emergency response plan by following the steps below. *Note: It's important for everyone to know their role.*

1. The site supervisor takes control of the situation.
2. The site supervisor sounds the emergency alarm—two long blasts from a horn. All workers in the immediate vicinity of the incident stop working. The site supervisor quickly evaluates the situation and identifies any further hazards that could arise.
3. The site supervisor or their designate goes to get help if workers are close by. If no one is close enough, the site supervisor calls for help.
4. The site supervisor calls 911 to notify local police, fire, and ambulance if required.
5. The site supervisor (or a worker assigned to the task) isolates the accident zone and its perimeter to limit further exposure.
6. The site supervisor (or a worker assigned to the task) moves all non-affected personnel to a safe zone or directs them to remain where they are.

7. The site supervisor sends a designated worker to the site gate to meet the response team (police, medical, fire, etc.) and ensure that they have a safe access path to the accident scene.
8. The site supervisor assembles the emergency rescue team at the accident site as quickly as possible to determine the best rescue procedure for the situation.

Rescue Procedures

The following rescue procedures are ordered (A) through (C), with (A) being the preferred method and (C) being the method used when there is no other means of rescue.

A. Mobile Elevating Work Platform Rescue—If a mobile elevating work platform (MEWP) is available on site and the suspended worker can be reached by the platform, follow the procedure below.

- Bring the MEWP to the accident site and use it to reach the suspended worker.
- Ensure that rescue workers are wearing full-body harnesses attached to appropriate anchors in the MEWP.
- Ensure that the MEWP has sufficient load capacity for both the rescuer(s) and the victim.
- If the victim is not conscious, two rescuers will be needed to safely handle the weight of the victim.
- When the worker is safely on the MEWP, reattach the lanyard to an appropriate anchor point on the MEWP, if possible.
- Lower the worker and arrange for treatment of the victim for suspension trauma and any other injuries.
- Arrange for transport to nearest hospital.

B. Ladder Rescue—If an elevating work platform is not available, use ladders to rescue the fallen worker with the procedure outlined below.

- Where possible, use ladder(s) to reach the victim.
- Rig separate lifelines and fall arrest equipment for rescuers to use while assessing the victim from the ladder(s).
- If victim is not conscious or cannot reliably help with their own rescue, at least two rescuers will be needed.
- If victim is suspended from a lifeline, move them to an area that can be safely reached by the ladder(s), where possible.
- If victim is suspended directly from their lanyard or from a lifeline, securely attach a separate lowering line to the victim's harness. Other rescuers will lower the victim while being guided by the rescuer on the ladder.
- In no case should ladders be used to support the weight of more than one worker.
- Once the victim has been brought to a safe location, administer First Aid and treat the person for suspension trauma and any other injuries.
- Arrange for transport to nearest hospital.

C. Rescue from Work Area or Floor Below—If the fallen worker is suspended near a work area and can be safely reached from the area from which they fell or the floor below, use the following procedure:

- Ensure that rescuers are protected against falling.
- If possible, securely attach a second line to the workers' harnesses to assist in pulling them to a safe area. (Note: more than two strong workers will be needed to pull a victim upwards for rescue.)
- Ensure that any slack in the retrieving lines is taken up to avoid slippage.
- Once the victim has been brought to a safe location, administer First Aid and treat the person for suspension trauma and any other injuries.
- Arrange for transport to the nearest hospital.

Post-Rescue Procedure

All non-affected workers should remain in the designated safe gathering zone until the site supervisor notifies them to do otherwise.

The site supervisor and health and safety representative should

- Begin the accident investigation.
- Quarantine all fall-arrest equipment that may have been subjected to fall fatigue effects and/or shock loading for further investigation.
- With a critical injury or fatality, secure the area. (The OHSA requires that an accident scene not be disturbed where a fatal or critical injury has occurred.)
- Determine whether or not the jobsite-specific rescue and evacuation plans were followed as designed. Make corrections to the plan if necessary.
- Record modifications or additions to the plans that the rescue team deems necessary.
- Record all documented communications with fire, police, MOL, and other contractors involved. (When a fall occurs and is arrested, you must notify a Director of the MOL in writing.)
- Record all documented statements from employees, witnesses, and others.
- Save all photographs of the incident.
- Record all key information such as dates, time, weather, general site conditions, and specific accident locales including sketches of the immediate incident area, complete with measurements if applicable.

email:info@dhughesdemolition.co.uk
TEL: 0161 624 3460
D. HUGHES
DEMOLITION & EXCAVATION LTD.

Working at Height Rescue Plan Risk Assessment – Method Statement		
Site address:		
Location/area		
Job task		
Work at height dates	From:	To:
Operators:	1.	4.
	2.	5.
	3.	6.

RESCUE				
Communication (√ as appropriate)	Voice communication		Mobile phone	
	Whistle		Two-way radios	

EMERGENCY CONTACT		
Employee	Next of Kin	Telephone No
Dale Hughes	Gail Hughes	0161 624 3460
Ryan Hughes	Stephanie Hughes	07903802643
Reece Hughes	Gail Hughes	0161 624 3460
Mark Fensome	Nicola Wiseman	07534450994
Mark Greenwood	Louise Greenwood	07805500417
Craig Steele	Alex Watson	07718 069828

EMPLOYEE SIGN UP SHEET

The employees detailed below have signed to confirm that they: -

- Have received a briefing from the Site Manager / Site Supervisor on the hazards involved with their undertaking
- Have read and fully understood this Method Statement including Risk Assessments / COSHH Data
- Confirm acceptance of the method of work and understanding of the Risk Assessments and controls to be applied
- Understand that it is their duty to ensure the safety of themselves and others around them and will bring to the attention of the supervisor any unsafe work practices or conditions which come to their attention.
- Will notify their Site Manager / Site Supervisor should there be any abnormalities or areas of concern regarding the works

Name	Signature	Date

Site Manager or Site Supervisor Signature:		Date:	