

Method Statement

Demolition & Dismantling

Activities

Document Reference:	DTG&T-MS-REV1
Client:	Drum Property Group
Site:	DeTrafford Building
Address:	Ellesmere Road Manchester M15 4JE
Appointed Person:	Michael Hirst
Document Date:	27.06.2024
Activity:	Demolition of Industrial Building
Prepared By:	Michael Love



Metropolitan Demolition
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DOCUMENT REVISION AND REVIEW (AMENDMENTS HIGHLIGHTED IN YELLOW)..... 3

DOCUMENT APPROVAL STATUS 3

PROJECT DIRECTORY 3

SCOPE OF WORKS 4

SEQUENCE AND METHODOLOGY 6

1. SITE SETUP

2. ASBESTOS.....

3. EXCLUSION ZONES

4. PREPARATORY WORKS.....

5. STRUCTURAL INFORMATION

6. MANUAL HANDLING.....

7. SITE SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

8. DISPOSAL OF MATERIALS.....

9. MECHANICAL DEMOLITION

10. CRUSHING OF MATERIALS.....

11. SITE FINISH

12. DEMOBILISATION

KEY SAFETY ISSUES.....

1. ASBESTOS.....

2. RESPIRABLE CRYSTALLINE SILICA (RCS)

3.

Document Revision and Review (amendments highlighted in yellow)

Revision Number	Revised by	Date	Reason for revision
1	Mick Love/Michael Love	27.6.24	Draft Revision for submission
2	Michael Hirst	3.7.24	Excavation of road area client comments
3	Michael Hirst	29.7.24	Planners' comments

Document Approval Status

I can confirm that I have read this document and give my approval that it is suitable to carry out the works required on site;

Name	Signature	Date

Project Directory

Name	Job Title	Contact Number	Email
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Scope of Works

This Method Statement details the Mechanical Demolition Works which will be undertaken (Red area is the main demolition)



The document is to be read in conjunction the site-specific risk assessment and logistic plans.

Additionally, this method statement covers the grubbing up of the ground floor slabs and the crushing of the materials on site to a 6f2 specification and levelling in an agreed area.

All demolition Works are to be carried out in accordance with BS6187:2011 Code of Practice for Full and Partial Demolition.

Reference to the 'Standard' has been made throughout the document and a copy is available from the office on request. The scope is detailed as the following below:

The Contractor shall include for all labour, plant, equipment and resources needed in order to affect a soft strip of the building and the removal of all related structural matters, as identified below.

- Full Demolition of the Industrial building; This includes all waste and soft strip material.

Guidance Notes that Metropolitan Demolition will follow for DeTrafford building



**Safe use of Demolition
Attachments**

**Temporary works for
Demolition**

**Safe use of Mobile
Crushers**



NFDC
Demolition Exclusion Zones

DRG 110:2014

**Exclusion Zone Guidance
Notes**



Asbestos Guidance Notes

Sequence and Methodology

1. Site Setup

Metropolitan Demolition personnel will provide welfare facilities which comply with CDM 2015 regulations.

Example of welfare unit place on site as per the plan below:



A letter drop will be undertaken to all local residents informing them of the works being undertaken on site.

- This letter will contain a non-technical summary of the works, the actions we take to reduce any potential impacts, highlight specific activities that may impact them and provide contact details of the management team for general communication or to make a complain. The primary anticipated receptors of any potential environmental detriments stemming from the works are currently residential residents.
- Following the initial letter drop, the aforementioned residents/ businesses will be updated with an updated letter once every 4 weeks, advising of the completed works to date, upcoming works and reiterating the contact numbers should then need to consult Grahams management team. If there is an item of the works that will significantly impact certain local residents/ businesses then a separate letter detailing this will be issued no later than 2 weeks prior to the commencement of the specific work item.
- The letter drop will invite businesses and residents to attend site at any time during the working hours and talk with a C&R representative should the need arise.
- Metropolitan Demolition will put signs on the boundary stating a contact number should any local residents, businesses or passers-by need to get in contact with the management team.
- Complaints will be responded to by a formal email/ letter no later than 12 hours after the complaint is received. A record of complaints will be kept electronically and in paper format in the site office.

Prior to the start of the demolition of the low-level structures first, all operatives are to attend the site induction, which will cover the vehicle access to and from site the emergency procures, muster points, the reading and signing of the RAMs Including a briefing on the Construction Phase Plan, carried out by Metropolitan Demolition, this will include a site walk around to familiarise the operatives with the works. The Daily Activity Briefings are to be also conducted by the Site Manager.

Key Areas to be covered in the induction:

- Any live services within our site boundary (Client denotes all service disconnections are down to them)
- Access and Egress on to site for demolition plant and vehicles

- Pedestrian walk ways
- Security of the site
- Sequence and method of demolition
- Local residents
- Site working hours
- Strictly non-smoking/vaping allowed, only in designated area(s)

Fencing Erection

Installation of temporary fencing to form external exclusion zone.

Site Managers details to be displayed on the main site entrance on Ellesmere Street

This will be in line with the site plan and erected to the manufacturer's recommendation. No Permit needed as all fencing will be on client owned land.

Internal fencing will be used to form demolition exclusion zones, these will be a heras type fencing allowing it to be moved if needed and be erected by Metropolitan demolition personnel. The location will be shown on the site plan.

Operatives are to commence offloading fencing panels and erect in accordance with the area as agreed with the client and shown on the site plan.

Operatives are to be aware of Manual handling techniques and must have current Manual Handling Training prior to the erection of the panels.

Panels are to be erected by two persons working together.

Demolition warning signage to be positioned, so as to make clear the risks on site on internal and external fencing:



We will use a temporary open fence panel, with block feet and doubled clipped, every third panel with have two panels and the rear (car park side) to act as a counter weight.

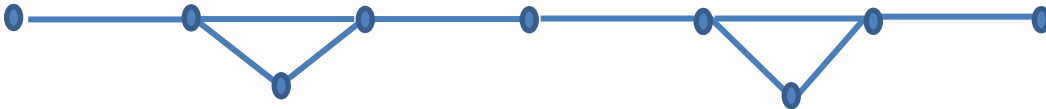


Example of the open panel fence to be used



Pedestrian doors to be used as access into the exclusion zone

Example of configuration of fence support:



Above is an overview of the fence panels, every third panel there will be a triangle formed used fence panel to act as a counterweight for the fence.

Care is to be taken to situate panels and feet, on firm ground avoiding uneven ground and service ducts.

Suitable access around all cabins is to be provided to allow servicing and cleaning operations.

Exclusion Zones

Metropolitan Demolition operatives will erect localised barriers at the ground level to ensure that the area will be fully isolated from other site personnel. We will erect specific warning signage and also exclusion zone signage.



An example of a Demolition warning signs.

Once these localised barriers have been erected, we will ensure that the clips have been fitted to prevent any unauthorised removal of the panels. A toolbox talk will be given to all other operatives and we will inform Metropolitan Demolitions site management that this area will be classed as an exclusion zone and no entry is allowed unless authorised personnel. There will be several exclusion zones enforced on this site, the site manager will make all operatives aware of this.

There will be a banksman manning the exclusion zone with two-way radios at all times.

No operatives are to enter the exclusion zone unless instructed to do so. Metropolitan Demolition operatives will follow the NFDC Code of Practice for Exclusion zones as briefed by the site manager.

Metropolitan Demolition personnel will execute the works sympathetically to the surrounding residential neighbourhood environment.

Jet wash facilities will be used to all vehicles leaving site as required, dust and vibration monitoring will be carried out throughout the works.

During the works a watching brief will be in place to ensure the controls in place to control dust migration are suitable, demolition dust will typically be controlled by applying water spray manually using a water hoses.

All works are carried out with due regard for 'The control of dust and emissions from construction and demolition' Best Practice Guidance.

Metropolitan commit to and adopt the ICE Demolition Protocol and Considerate Contractor Scheme.



An example of a dust boss that will be used to encapsulate dust during the demolition operations.

Noise - Noise levels from these operations are not expected to be significant apart from in the immediate vicinity of rear of excavators undertaking site works. The following control measures will be implemented:

- Modern serviced plant operated with covers closed.
- Super silent generators used located away from off-site receptors and switched off when not required
- Treatment areas selected taking into account off site receptors.

DUST, NOISE AND VIBRATION

Best Practicable Means (BPM) will be used in controlling dust emissions, in accordance with the Best Practice Guidance by the GLA 2006 for The Control of Dust and Emissions from Construction and Demolition. Best Practicable Means (BPM) will be used to minimise noise, including low vibration methods and silenced equipment and machinery, in accordance with the Approved Codes of Practice of BS5228:2009 for noise and vibration control on construction and open sites. All works are carried out with due regard for 'The control of dust and emissions from construction and demolition' Best Practice Guidance.

Metropolitan Demolition understand the importance of minimising or eliminates noise, dust and vibration pollution. The monitoring stations will be in place for 5 working days to give a baseline for noise and dust for general demolition activities The results come in the form of a graph which is easy to read and understand. The site manager and the office will have on line access to the data so we can identify spikes in noise and adjust our working methods accordingly.

Obviously there will be times when the noise will be excessive i.e., breaking out the slab of the buildings, it will therefore be necessary to agree noisy working hours with regular breaks to minimise disruption.

All roads/footpaths to and from the work area will be kept free of dust, mud and debris at all times. Demolition transportation vehicles will have due regard to site conditions.

Processes of removal and reduction within sensitive areas will include machine using varying sized machines and specialist 360 demolition attachments to the machines. Hydraulic concrete pulverising jaws will be utilised to significantly reduce the mass of concrete in situ where applicable.

Hydraulic metal shears will be used to severe steel and frame work. Selector grabs will be used to peel brick, block work infills and lift various elements such as glazing panels from the structures.

Demolition works will be undertaken by plant using hydraulic powered demolition crushing attachments. All plant use on site will be operated in accordance with manufacturer's instructions and best practice and will be fully serviced and maintained in good working order. All plant engine covers will be kept in place at all times with plant that is not in use shut down.

Compressors and generators will be of a super silenced type. All key personnel will be issued with site radios for communication. **The sounding of vehicle horns on site will be strictly forbidden, unless in an emergency capacity.** All site plant will be effectively silenced and located in such areas of the site to minimise noise levels off site to sensitive areas.

The demolition of the buildings will be carried out in such a manner as to minimise vibration. Loading of waste transporters with arising's shall be carried out utilising the smallest 'drop' possible to reduce impact noise, dust and vibration. The noise emissions from each item of plant shall not exceed the noise values each quoted in the relevant EC Directive. Electrical plant is to be used wherever possible i.e., electric compressor, electric gantries. Compressors shall be fitted with properly lined and sealed acoustic covers, which shall be kept and closed whenever the machines are in use. The best practical means shall be employed at all locations to reduce noise, dust and vibration to a minimum.

VIBRATION

Plant and equipment to be utilised for the work operations is selected to keep operative's exposure to vibration to an absolute minimum. Technical data on vibration levels for each item of plant or equipment will be provided where exposure levels exceed 2.5m/s^2 on a regular basis.

NOISE AND ENVIRONMENTAL POLLUTION

The plant and equipment to be utilised for the work has been selected so as to keep the noise levels to an absolute minimum. However, should noise levels exceed 80dB (A) then appropriate hearing protection will be worn by all personnel within the vicinity of the works and the noise levels monitored on a regular basis.

As with the vibration monitoring, Metropolitan will also audit and monitor noise from a mobile handheld monitor. This will be done on a daily basis when demolition plant or tools are being used.

The noise at work regulations require that no person shall be exposed to noise levels which are likely to lead to long term hearing loss.

1. Lower exposure action level 80db(A)
2. Upper exposure action level 85db(A)

All Metropolitan Operatives will wear hard hat mounted ear protectors.

Environmental pollution will be kept to an absolute minimum and damping down will be carried out as required by site conditions. Metropolitan Demolition operatives will only park plant and re-fuel in the designated area which has been agreed as being the site compound area.

Metropolitan aim that all waste materials on site will be either re-cycled or re-processed for further use. Segregated bins will be placed on site for each type of waste. Overall, as per Metropolitan's Environmental policy we aim for 95% recycled waste on each job, however our desire is to achieve closer to 97%.



CONTINUAL LIAISON

It is imperative that the project managers and site managers maintain liaison with the client's representatives and professional team. This is to enable a free two-way flow of information regarding the safe and environmentally sound delivery of the project works, by well-informed personnel using health promoting risk assessed methods.

During all of our projects, Metropolitan Demolition try to be a good considerate neighbour for the life span of the works. Metropolitan Demolition will manage interaction with the public and all parties who could be impacted on by the works courteously and sympathetically.

COSHH

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

Burning equipment if used, will consist of liquefied oxygen & propane gas, supplied in pressurised cylinders. The storage of these will be in designated security fenced areas or purpose designed security cages away from welfare and office facilities.

Fuel oil for plant will be stored in double bunded tanks, their location will take into account features such as drain systems. This will ensure in the event of catastrophic failure released liquids will be contained locally. Spill kits will be maintained in close proximity to fuel storage and refuelling areas. COSHH assessments are regularly checked to ensure they are relevant to the operations being carried out.

This takes place at least once a year on release of the new EH40 standards (reassessed by HSE) or when operating circumstances change Scope: This element of the method statement consists of the removal of the ground bearing floor slabs (ONLY). Suitable material generated from these works will be stockpiled on

site for crushing. The area will then be regraded to the surrounding contours of the site. Any plant and equipment will be removed from site and the site will be handed over to the client.

Bunded Diesel Tank

A locked, bunded diesel tank is to be situated within the compound to provide an independent supply of diesel.

This will avoid the necessity to transport or carry fuel to the plant.

Spill kits are to be located adjacent to any fuel bowser.

Drip trays must be used at all times.

All spillages are to be contained. On no account will spillages be allowed into site drains.

COSHH assessment for Gas Oil to be read prior to start of works

Consultation with the workforce

In accordance with the Health and Safety (Consultation with Employees) Regulations 1996 and as part of their weekly tool box talks, all personnel on site shall be consulted on matters which affect their health and safety. This consultation has been shown to make a significant contribution to creating and maintaining an effective health and safety culture and leads to increased motivation and awareness. This in turn leads to greater efficiency and a reduction in accidents and incidents on site

Exchange of information on the project

Prior to the commencement of works on site the client, designers, Principal Designer, principal contractors, and other contractors shall participate in a pre-start meeting where all design information to include safety method statements, risk and COSHH assessments etc shall be handed over and reviewed. At this point any further information not received with in the original tender documentation shall Be obtained from the designers, clients and/ or Principal Designer and all safety documentation amended accordingly.

Handling Design Changes

Where a member of the project team had identified that a segment of the project design, working practise or site conditions have changed from that which were originally envisaged the weekly progress meetings shall be used to discuss all changes.

Weekly progress meetings shall also be used to resolve any problems arising from the change and used to identify any remedial actions that need to be implemented. The following meeting shall be used to discuss whether the action taken had been successful.

Lifting

All major lifting operations are carried out by an approved sub-contractor under a 'contract lift'. Prior to the commencement of works the safety method statement shall be agreed, all personnel wanting to enter site to carry out the works shall have all necessary training and all lifting equipment and accessories to be used shall be in date.

Control of lifting operations

All major lifting operations are carried out by an approved sub-contractor under a 'contract lift'. Prior to the commencement of works the safety method statement shall be agreed, all personnel wanting to enter site to carry out the works shall have all necessary training and all lifting equipment and accessories to be used shall be in date.

Working with or near fragile materials

When working with or near fragile materials a risk assessment shall be developed to identify all risks and detail all precautionary measures to be taken.

Excavations and poor ground conditions

The site ground conditions consist of concrete and tarmac which are in good condition. Any exposed pits will either be fenced or filled using hardcore generated from site, to prevent any persons falling into them, these areas will be noted in the site inductions.

Work on or near water

There shall be no work on or near water during the course of this project.

Contaminated Land

Details of any ground reports, if any, are to be provided to us by the client. To Metropolitan's knowledge there is no contamination on site.

Exposure to UV radiation

As part of company policy all employees are required to cover their skin with adequate clothing to protect themselves against harmful ultra violet rays emitted from the sun.

Health and Safety File

It is the duty of the Principal Designer under the Construction (Design and Management) Regulations 2015 to provide the client with the health and safety file on completion of the project. The compilation of the file is an ongoing operation both during the pre-tender phase and the construction phase of the project.

To enable the Principal Designer to fulfil this function we will liaise with the Client on a regular basis throughout the duration of the contract and provide him with relevant information as required by the regulations.

Information to be provided may include but not be definitive to:

- A brief description of the work undertaken
- Service disconnection information
- Any residual hazards
- Consignment notes
- Any other surveys, tests or inspections undertaken that may be beneficial.

All documents supplied by Metropolitan shall be kept within the main site office for inspection at all times with hard copies and electronic copies kept in Metropolitan's main office for a period of seven years. Any documents involving asbestos will be kept for forty years.

Managing Director
Managing Director Signature

Site Manager
Site Managers Signature

2. Any Asbestos containing Materials will have been removed by prior to Demolition, Metropolitan has commissioned an R&D survey.

3. Exclusion Zones

The structure which is being demolished is situated within the former DeTrafford site.

There will be an exclusion zone for the demolition set up within the site, this will be formed out of heras fencing with access gates, as shown in the site plan.

The enclosed area offers suitable room to allow the demolition works to be carried out safely.

The diagram below indicates the demolition exclusion zone in red outlined area, full size plan with be included in the site manager file.

Area of Demolition



4. Preparatory Works

Licensed Standpipe will be used to provide water to the site mainly for the use of dust suppression for demolition activities, this will be the nearest located to the site.

The buildings will be sealed and any potential access points removed to ensure that no access can be gained into the buildings.

Checks will be carried out daily prior to resumption of the demolition works to ensure that the properties are empty.

5. Manual Handling

The Company Standard Procedure for all manual handling activities ensures that:

All activities will be assessed in relation to risks from manual handling and where possible automated processes will be used as an avoidance technique.

All employees will have received training in kinetic lifting, our company policy is to ensure all employees are fit for work, that materials and waste removal devices (skips, vans etc.) are positioned as close to works areas as possible. We shall use a variety of equipment such as wheelie bins and turntable trucks/trolleys to reduce the risks from manual handling.

Where it has been assessed that there is a risk of injury from manual handling, the first consideration must be whether the loads need to be handled at all, or whether handling can be minimized. The potential for eliminating the handling of loads on sites is limited but the positioning of storage, delivery and waste handling skips or vehicles can reduce the need for extensive handling.

Where there is no alternative, the use of mechanical handling should be given consideration – this should be done by the Contract or Project Manager at the planning stage.

You should always follow instructions given on how to carry out a manual handling task in accordance with its risk assessment.

Project Specific Manual Handling

The building has limited soft strip and will be demolished remotely, reducing the any manual handling. All heavy lifting and loading will be completed by excavators.

6. Site Specific Personal Protective Equipment

The PPE listed below is compulsory on Metropolitan sites and must comply with the following British Standards:

- Steel toe capped/mid soled boots - EN ISO 20345
- Hard Hat – EN 397:1995
- Hi Visibility Vest – EN471:2003 + A1 2007
- Gloves – Standard/Soft Strip EN 388 2121. Hot Works EN388:2003 4244
Sharps EN388:2003 4544. Anti-Vibration EN388:2003
- Safety Eye Protection – standard CE EN 166 FT Certified. For Hot works EN175 F

The following PPE is to be used as and when necessary:

- Ear Protection Ear Plugs CEN352-2 and Hearing Protectors EN352-1:2002
- PPE associated with hot works and described in the “Hot Works” section of this Method statement
– Gloves EN388:2003 4244 - Fire retardant hi vis overalls EN ISO 11611:2007 A1, EN ISO 11612:2008 A1, B1 C1, GO/RT EN 3279, ISSUE 6, 2008 and Goggles EN175 F
- Overalls for soft stripping – Blue paper overalls, E14325:2004

The following RPE is to be used as and when necessary:

- RPE (respiratory protective equipment) – Half face Sundstrom SR100 EN 140:1998
- RPE (for soft strip or activities generating dust) - P3 Filter Masks EN149:2001

Gloves			Eye Protection		
Standard/Soft Strip	EN 388 2121	x	Standard	CE EN 166 FT	x
Hot Works	EN388:2003 4244	x	Hot works Goggles	EN175 F	x
Sharps	EN388:2003 4544		Ear Protection		
Glass	EN388:2003 4543		Ear Plugs	CEN352-2	x
Anti-Vibration	EN388:2003		Hearing Protectors	EN352-1:2002	x
Overalls			Masks		
Fire retardant hi vis overalls	EN ISO 11611:2007 A1	x	P3 Filter Masks	EN149:2001	
Blue/white paper overalls	E14325:2004	x	Half face masks	SR100 EN 140:1998	x

All PPE used must be suitable for the task being undertaken; it must be in good condition and fit for purpose.

If you find any item of PPE to be faulty or unsuitable for the work activity being undertaken, stop work and notify your supervisor immediately.

7. Disposal of Materials

Materials from the buildings will be loaded and placed into general purpose waste skip by the machine.

Waste skips will be located in a designated area adjacent to the works; this is to be agreed on site, this area is to be securely fenced at all times.

Skip exchange and drop offs will be carried out using roll on/off wagons. A trained and competent banksman will be used to banks and control the vehicle movements at all time when accessing and egressing the site to ensure that they are being carried out safely and in the correct manner.

All deliveries are to be pre booked and agreed by the site supervisor in liaison with the waste management company.

All waste is to be loaded into skips at the end of each shift.

Skip wagons must be sheeted at all times; the sheeting system must be an automatic operation; we will not tolerate drivers climbing onto skips or loads. Any persons found climbing on skips which are lorry mounted will be dismissed from site.

All site vehicles will be escorted on site, and attend a brief induction. At all times, all delivery drivers will wear their PPE as detailed in the induction.

8. Demolition

Hazardous substance removal – If needed

Removal / Disposal of Hazardous Substances All unidentified cylinders / drums / containers will be collected and stored in a fenced off area in the site. All COSHH substances will then be catalogued and appropriately disposed offsite by one of our specialist subcontractors. Hazardous waste consignment notes will be provided documenting the type, quantity and disposal address of the COSHH items removed offsite.

Asbestos Removal – If needed

Removal of asbestos containing materials (ACMs) There are three categorises of asbestos work - notifiable licensed, notifiable non-licensed and non-licensed. All Metropolitan operatives have received training to recognise ACMs. Should any additional ACMs (other than those in the asbestos survey) be located within the buildings during demolition, work will cease and the Site Manager notified, and an asbestos surveyor will be called to site and a sample taken for testing to confirm, prior to works in that area continuing.

Soft Strip

Soft strip works will be carried out to the former industrial premises site and there is limited soft strip. Exclusion areas for removal zones will be denoted by using heras panels as required for the exit of materials from the buildings. Waste skips will be positioned adjacent to the work area and will be loaded by the means of a manual handling.

Demolition work will be carried out using the techniques from BS 6187-2011 Code of Practice for Demolition.

An internal soft strip of the former DeTrafford Site will be carried out by Metropolitans CCDO demolition operatives to remove as much of the waste materials from the building ahead of the demolition works. Materials that are to be removed by the internal soft strip are doors, door frames, fixed and non-fixed furniture, carpets and floor coverings and other materials. Operatives will strip out all doors, frames, timber of any description, (not appertaining to roof or main structure) toilets, pipe work, ducting, electrical items and any debris. Any clean, unpainted constructional timber will be segregated from the general waste. Where this material is free of nails, screws, hinges etc it will be segregated for recycling by Metropolitan Demolition and taken to the appropriate re-processing plant as per Metropolitans Environmental policy.

Any materials deemed as not suitable for recycling will be removed from site in skips as controlled waste to an appropriately licensed landfill site. Where possible the materials will be loaded by hand into skips and removed from the site. At no times shall operatives gain access to partially demolished or unsafe buildings to recover soft stripped materials, these materials will be removed by mechanical means and when safe to do so by hand method. All soft stripped materials will be processed and segregated into individual waste/recycling streams. All materials deemed suitable for recycling will be loaded into suitable skips and transferred from the site to a suitable recycling venue. All waste materials unsuitable for recycling will be transported from the site where it will be taken to landfill facilities.

Metropolitan Demolition will use the following tools during the soft strip: Mattock, genie bars and hammers.



An example of a Mattock to be used by Metropolitans operatives.

Metropolitan Demolition will segregate all waste materials into different skips. Glass, wood and gypsum board will be placed into different skips that will be clearly de-marketed and taken off to their relevant re-processing plants.



40-yard cubic skips will be on site for loading of demolition materials

Demolition Works

Once the first section of phase one is completed, the operator shall lower the boom and maneuver the excavator into position to begin the demolition of the first section

On completion, the operator shall begin the same process on the second section of phase 1. Then down to the second section of phase 2. This method will be continued systematically until the building is down to ground level. During these phases, excavators will be utilized in the site area to remove excess hardcore & waste and level the areas.

Demolition shall continue until all buildings has been demolished down to ground level

All materials will fall into the drop zone; this will then be moved and processed at a later date. **A dust suppressant unit will be deployed to dampen the dust as materials reach the floor.**

All other waste materials from the demolition shall be separated by the excavators fitted with a grab attachment.

Small pieces of waste material will be removed by the excavator fitted with a grab this will prevent any operative entering the exclusion zone during remote demolition.

All floors within the buildings will need to be visually checked and any ducts or voids will be collapsed and filled as the excavators proceed through the buildings.

Slab and Footing will be taken up in a safe manner with a banksman and all hardcore will be stockpiled until crushed.

A number of further control measures were advised by Metropolitan.

- 1- All parties to be in radio communication.
- 2- After each section of the demolition, it was agreed that a hold point would be put in place. This would ensure that a review of the demolition was undertaken and the next section of demolition would be discussed prior to commencement.
- 3- It was agreed on first day of demolition that the high reach operator would offer the machine to the building to see if it was capable of demolition.

Internal exclusion zone

Within the exclusion zone we will create a further internal exclusion zone which will ensure that all materials are removed from the base of the building. This will ensure when the materials fall from the block that they hit the ground and do not slap or slide away. A common fault which was identified in the NFDC high reach documentation was that materials sometimes hit the ground or a pile of hard-core which creates a slope and materials can exit the site over some distance.



NFDC

Demolition Exclusion Zones

Exclusion Zone Security

Metropolitan Demolition will put in place a number on banksman with two-way radio communication to ensure the exclusion zone is not breached. In addition, we will place an experienced banksman at the gate of the exclusion zone and only authorised personnel will be allowed on site.

Hold Point

To ensure the safe process throughout the demolition, we will ensure that the work is constantly reviewed by all parties. Therefore, we propose a series of hold point where a section of demolition will be carried out and the operation will be formally stopped and reviewed to ensure the stability of the building is maintained and we are not exposing the local area to excessive dust and noise. Stability of high reach excavator.

Prior to commencement of Demolition, the area beneath the high reach was broken out and heavily compacted this is to ensure that no area of basement or slab was left in and could probably affect the stability of high reach.

Mechanical Demolition

Structures and elements of structures will be demolished using a demolition machine operated from a protected cab.

Any plant and equipment used will be:

- A. Of a type and condition appropriate to the location and type of work involved;
- B. in the control of a competent operator, who holds a valid certificate of training achievement where appropriate; and
- C. Maintained in good working condition at all times and have current certificates (e.g., Certificate of Conformity or Certificates of Thorough Examination).

Any attachments should be properly fitted to machines of adequate power and stability for the intended use.

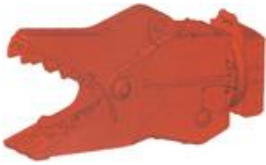
The following attachments will be used during demolition work.

1. Impact hammer.
2. Hydraulic shears.
3. Pulveriser.
4. Grapple.
5. Multi-purpose hydraulic attachments, e.g., interchangeable jaws.

Typical demolition specification excavator for this demolition:



All the following excavator attachments will be used to demolish the building, break slabs or load skips:

Hydraulic Shears	Hydraulic Grab	Bucket	Breaker
			

Plant –
 1 x 360’ Demolition Excavator

Attachments –
 360 Rotating Pulveriser
 Bucket
 Demolition Grab

Equipment –
 Dust Suppression Units

Dust –
 A number of dust suppression units shall be utilised throughout the demolition to create a fine mist over the building.

A water hose shall also be affixed up the high reach excavator's boom into the jaws of the pulveriser to combat dust produced when demolishing.



Above is an example of a dust boss.

Monitoring

Background air monitoring shall be undertaken via monitoring station to ensure no dust is reaching outside the site's boundary.

Added dust suppressant units will be deployed with a Dust Buster situated at the end where the wind is in direction of the building jetting a mist into the air adjacent to the building to form a micro dust suppressant to prevent dust leaving the site in that area. The Dust buster has a reach of 50 meters.

Added dust suppressant units will be deployed with a Dust Buster situated at the end where the wind is in direction of the building jetting a mist into the air adjacent to the building to form a micro dust suppressant to prevent dust leaving the site in that area. The Dust buster has a reach of 50 meters.

Dust monitoring will be undertaken at the site boundary.

All personnel who are to partake in these works shall be inducted onto the site by the Site Manager. They shall adhere to all site rules, systems and procedures at all times whilst on site. Before demolition starts the Site, Manager will check the building and the boundary of the works for unauthorized entry.

All dust suppression methods as specified above shall be set up prior to works commencing.

- All ground conditions should be checked prior to remote demolition.
- It is important that the machine is in the correct position to the work face.

The correct position should be maintained so the angle of the boom is limited in accordance with manufacturer's instructions to ensure safe operation and stability of excavator.

All works will be controlled using 2-way radios and banksman employed around the works beyond the exclusion zone.

A number of further control measures were advised by Metropolitan.

- 4- All parties to be in radio communication.
- 5- After each section of the demolition, it was agreed that a hold point would be put in place. This would ensure that a review of the demolition was undertaken and the next section of demolition would be discussed prior to commencement.
- 6- It was agreed on first day of demolition that the high reach operator would offer the machine to the building to see if it was capable of demolition.

Internal exclusion zone

Within the exclusion zone we will create a further internal exclusion zone which will ensure that all materials are removed from the base of the building. This will ensure when the materials fall from the block that they hit the ground and do not slap or slide away. A common fault which was identified in the NFDC high reach documentation was that materials sometimes hit the ground or a pile of hard-core which creates a slope and materials can exit the site over some distance.



NFDC

Demolition Exclusion Zones

Exclusion Zone Security

Metropolitan Demolition will put in place a number on banksman with two-way radio communication to ensure the exclusion zone is not breached. In addition, we will place an experienced banksman at the gate of the exclusion zone and only authorised personnel will be allowed on site.

Hold Point

To ensure the safe process throughout the demolition, we will ensure that the work is constantly reviewed by all parties. Therefore, we propose a series of hold point where a section of demolition will be carried out and the operation will be formally stopped and reviewed to ensure the stability of the building is maintained and we are not exposing the local area to excessive dust and noise.
Stability of high reach excavator.

Images/Detail of Contract



Site Access Drawing, showing route access for site traffic:



A safe digging practice should then be utilised to expose the services. It is necessary to dig sufficient trial holes to confirm both the route and the depth of services. It also needs to be remembered that many services not only vary in depth but also are often not set out in straight lines. A typical example would be a heavy-duty power cable turning into a substation. Some services also have valve gear or other parts of the plant such as joint boxes which stand proud of the service itself and therefore need to be considered. Where a service is found to be embedded in concrete for example detailed consideration of the break out procedure is required.

Marking

Having identified and exposed potentially live services, adequate precautions are then required to avoid damage to these services. Initially, spray paint on the surface of the site can be useful in identifying the route of the services but on demolition sites this is frequently insufficient. It is therefore the Metropolitan policy to provide physical barriers in order to ensure that a safe clearance is maintained. The form of these barriers will vary dependent on-site conditions but could take the form of wooden, marker spray paint to be conspicuous, crowd barriers or heras type fencing panels. Metal pins should not be used as markers due to the risk of penetrating a live service.

Where a machine is working in close proximity to identified services the banksman must not only be in a safe position but continuously within the sight of the machine driver such that communications can be maintained.

Permits

Prior to any works below ground floor level a thorough CAT scan of the area must take place, all services drawings provided.

When the permit is being issued, all personnel involved in the below ground excavation works i.e., Site supervisor, banksmen, and machine operator will attend the permit briefing to identifying the live cables, and will all sign the permit.

All known services as detailed on the client issued drawings, and must be located by CAT scan and visually marked on site using wooden stakes, or heras type fencing.

The excavator will then carefully begin to grub up footings and slabs using a toothed bucket attachment.

If slab/footings prove to be more substantial than first thought, a hydraulic hammer will be attached to the excavator and will be used to break up and pre-weaken concrete.

All materials arising will be loaded onto 8-wheel tipper wagons and sent for recycling to a local recycling company or crusher area.

The area will be handed back to the client in a clean and tidy condition with no trip hazards present.

9. Crushing of Materials

Scope

To crush the arising hard-core and concrete from the demolition works, to the 6F2 specification at the agreed stockpile location and for re-use on site as backfill material to the basement.

Safety Issues

As outlined in the Provision of Use of Work Equipment Regulations 1998. We will provide regular checks on the equipment we provide to ensure that it is;

- Suitable for the intended use
- Safe for use, maintained in a safe condition and, in certain circumstances, inspected to ensure this remains the case.
- Used only by people who have received adequate information, instruction and training.
- Accompanied by suitable safety measures, e.g., protective devices, markings, and warnings.

Please see Mobile Crusher section of our Risk Assessment for all safety controls in place.

Setting up of the Crusher

Prior to delivery of the Crusher, we will send the Crusher Permit and notification to the relevant local authority to NPS.

The site manager/supervisor will ensure that all operatives have required certification for the work they are carrying out and plant they are operating.

When on/off loading crusher, boards are to be placed on the floor to prevent surface damage. Four banks' men are to be used, two to warn members of the public and control pedestrians, two to act as banks men. Cones are to be used when necessary. The area must be cleared of all obstacles, vehicles and checked for any overhead obstructions: cables etc.

Crusher to be moved with remote making sure a clear level route is available and ensuring operatives on site are aware of movement.

Crusher to be sited as level as possible with clear access all round.

Running of the Crusher

A thorough inspection of crusher to be carried out at the start of every working day e.g., fuel, oils, grease and visual inspection of all mechanical parts and safety devices, and recorded in the crusher log by the operator.

The water suppression system is to be used as and when required to control dust. Metropolitan will obtain a licensed stand pipe to provide water for this purpose. The suppression unit is located beneath the control panel and is supplied via a hosepipe.

Crusher then to run up to working speed and crushing jaws set to size.

Crusher then to be loaded with 360 excavators, using toothed bucket attachment, materials to be carefully tipped into crushing jaws to prevent spillage over the sides and for dust prevention.

Crusher operator will access and egress working platform, which is located on the side of the crusher between the crusher feeder and crusher jaws, by use of the access ladder, affixed to the crusher for this purpose, three points of contact are to be maintained at all times. Having gained access to the platform the safety bar is to be securely latched. The operator will then remove debris and control feeder speed to optimize crusher performance.

Conveyor off load area should be kept clear throughout the crushing operation, a hose pipe is to be aimed at the resulting material in a bid to suppress the dust

If crusher is to be moved on site, hopper sides are to be lowered, belts to be raised and folded. Four banks' men are to be used when travelling. Two at each end to make others aware of travelling machine and to act as banks men for the operator.



Side Conveyor

Side conveyor can be used to remove a quantity of fines if needed. Side conveyor off load area must be kept clear at all times throughout crushing operation.

10. Site Finish

The site will be left clean and tidy with no trip hazards present.

11. Demobilisation

In the reverse manner to site establishment.

Key Safety Issues

1. Asbestos

We ensure our demolition operatives undertake 'Removal of Non-Licensable Asbestos' training on an annual basis.

A Demolition / Refurbishment Asbestos Survey must be undertaken by law, prior to the carrying out of any Demolition or Major Refurbishment works. **Please ensure that you have witnessed, read and understood the Demolition / Refurbishment Asbestos Survey report before works commence. A copy of this report should be available on site at all times.**

All Notifiable Asbestos products detailed within the Demolition / Refurbishment Asbestos Survey will be removed prior to any Demolition works by Grade 3 Ltd, an HSE Licensed Asbestos Removal Contractor. **This will have already been completed and clearance certificates will be issued and included in the Site File.**

Operatives are to be aware of the potential dangers of hidden Asbestos within the working environment, which may not have been picked up during the Demolition / Refurbishment Asbestos Survey.

Should any potential Asbestos Containing Materials, other than obvious Asbestos Cement Products, be discovered during the work, please stop work within the immediate area, and notify The Site Supervisor or a Senior Member of The Site team.

2. Respirable Crystalline Silica (RCS)

Stone, brick, tile and concrete contain silica and produce silica dust known as RCS. Many activities undertaken during the demolition works process produce silica dust into the atmosphere, these activities are listed within our risk assessment. Inhaling silica dust can lead to silicosis, a serious and irreversible lung disease that causes permanent disablement and early death. The dust is invisibly fine and gets deep into the lungs.

Crystalline silica concentrations in common materials

plastic composites	up to 90%
sandstone, gritstone, quartzite, flint	more than 70%
concrete, mortar	25% to 70%
shale	40% to 60%
China stone	up to 50%
tile	30 to 45%
slate	up to 40%
granite	up to 30%
brick	up to 30%
ironstone	up to 15%
basalt, dolerite	up to 5%

The amount of silica dust breathed in by all site operatives will to be minimised by reducing as far as possible the amount of airborne dust. Please see the risk assessment for control measures suitable to the specific demolition task or activity. By following these controls, the amount of airborne dust will normally be below the workplace exposure limit (WEL) of 0.1 mg/m³ expressed as a time weighted average (TWA).

Method Statement Briefing Record

By signing this document, I am declaring that I have read and understood the contents of the Method Statement, and that I will not undertake any activity on site which deviates from the information and guidance contained in this document.

[illegible]

CONFIRMATION OF SERVICE ISOLATION/DISCONNECTION

If written confirmation of service disconnections is not present in the site file, the client should produce written confirmation on site.

If, however no written confirmation is present, you can proceed with due care if the client signs this document to confirm services have been isolated/disconnected.

If no one is present on site, advise the office immediately who will email this to the client for confirmation prior to demolition works commencing.

I confirm that all necessary services have been isolated/disconnected in order for the demolition work to take place.

Signed:

Print Name:.....

Date:

Name of Organisation:

If any services are to remain live throughout the project they must be clearly identified to the site Supervisor: -

Services that are still live are:

.....

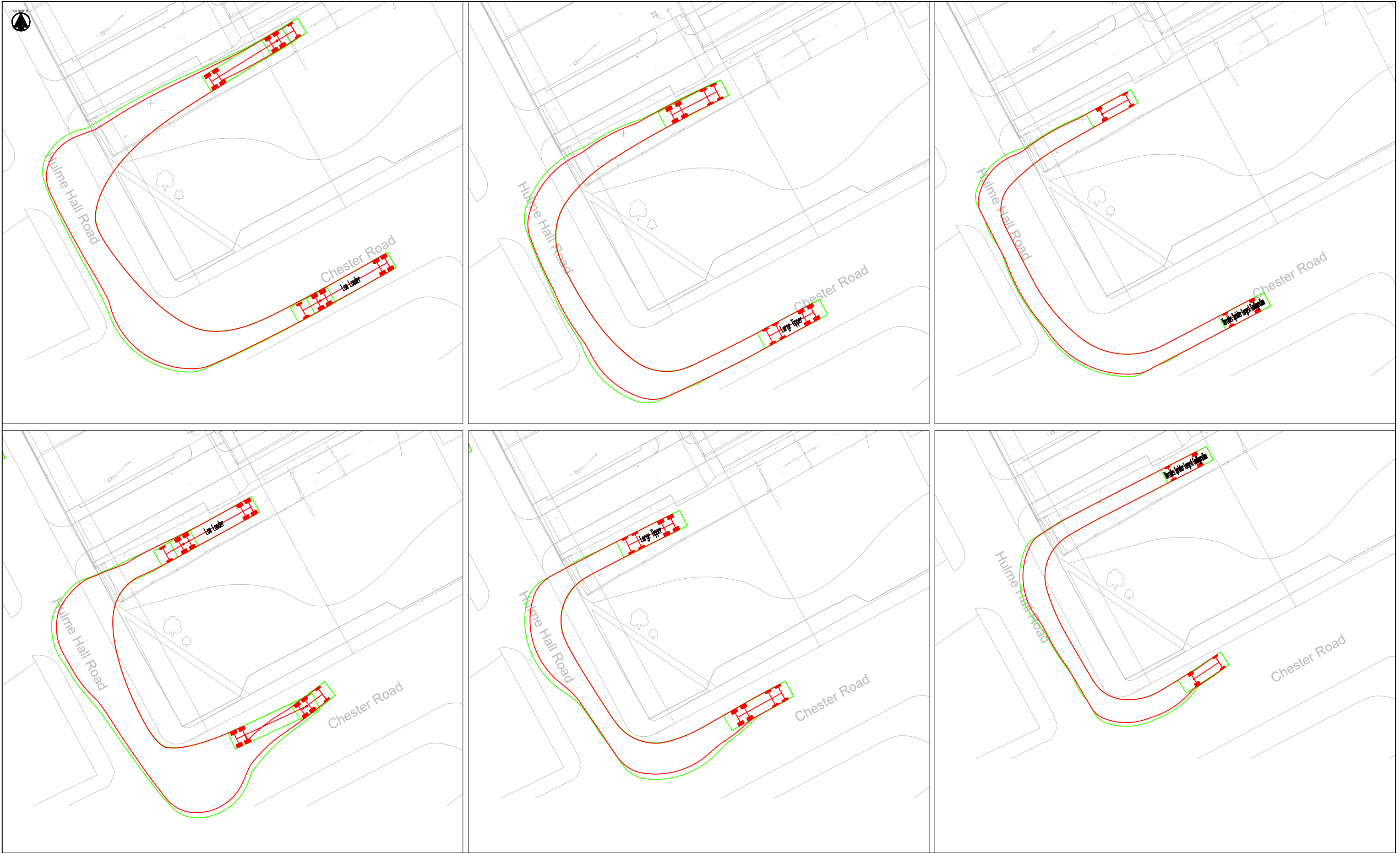
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Signed by the Client:

Signed by Metropolitan Supervisor.....

This document must be kept on site and returned to the office at the end of the project with other relevant paperwork.



KEY PLAN

VEHICLE MODELS USED IN SWEEP PATH ANALYSIS

Low Loader
Overall Length 16.154m
Overall Width 2.520m
Overall Body Height 3.393m
Min Body Ground Clearance 0.318m
Max Track Width 2.500m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 6.990m

Large Tipper
Overall Length 10.201m
Overall Width 2.495m
Overall Body Height 2.890m
Min Body Ground Clearance 0.341m
Track Width 2.471m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 11.550m

Mercedes Sprinter Largest Configuration
Overall Length 7.367m
Overall Width 2.175m
Overall Body Height 2.588m
Min Body Ground Clearance 0.371m
Track Width 2.175m
Lock to lock time 4.00s
Wall to Wall Turning Radius 7.600m

NOTES

REVISIONS

NO	DESCRIPTION	DATE	BY
P01	FIRST ISSUE	29/07/24	S.DENBY

MERCHANTS' HOUSE NORTH
WAPPING ROAD
BRISTOL
BS1 4RW
t: (0117) 9459 225
e: bristol@hydrock.com

CLIENT

PROJECT
GALLERY GARDENS

SWEPT PATH ANALYSIS OF CONSTRUCTION ACCESS ONTO HULME HALL ROAD

HYDROCK PROJECT NO.
35601

SCALE @ A3
1:500

STATUS DESCRIPTION
INFORMATION

DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER)
35601-HYD-XX-XX-DR-TP-0001

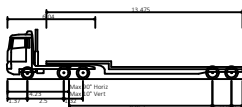
STATUS
S2

REVISION
P01

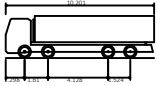


KEY PLAN

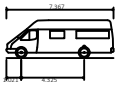
VEHICLE MODELS USED IN SWEEP PATH ANALYSIS



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Mercedes Sprinter Largest Configuration
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Min Body Ground Clearance 0.371m
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NOTES

REVISIONS

NO.	ISSUED BY	DATE	REVISION BY	DATE	REVISION BY	DATE
P01	R.OSBORNE	29/07/24	S.DENBY	29/07/24	S.DENBY	29/07/24



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CLIENT

PROJECT
GALLERY GARDENS

SWEEP PATH ANALYSIS OF CONSTRUCTION
ACCESS ONTO ELLESMERE STREET

HYDROCK PROJECT NO. 35601	SCALE @ A3 1:500	STATUS S2
INFORMATION DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 35601-HYD-XX-XX-DR-TP-0002		REVISION P01