CONSTRUCTION MANAGEMENT PLAN

Project:

1 Stanhope Gardens Highgate London N6 5TT



Prepared By**: Andy Gunbie**…….

Date:……February 2016…….

Construction Management Plan

Introduction

Under CDM 2015 and Approved Code of Practice, Heydon & Carr is required to develop a Construction Phase Health & Safety Plan for the construction phase of the project. This plan collates information from various sources into a single document and should not be read in isolation and reference should also be made to the Pre-construction Information Pack prepared by the Principal Designer. The main document has been kept to a manageable size and reference must be made to appendices for risk assessments, method statements and further project information. This plan remains a live document throughout the time of the project.

Heydon & Carr intends to carry out the project in such a way that risks to the Health and Safety of all persons affected by our activities are eliminated or reduced to a level acceptable under current Health and Safety Legislation. All those involved in these work phases have a statutory duty to comply with the Health and Safety Plan, and to provide Heydon & Carr with any information needed to keep the plan current and relevant. Anyone seeking advice on compliance should contact the Heydon & Carr SHE Director Anthony Carr.

Heydon & Carr will comply with the provisions set out within the following;

- The Control of Pollution Act 1974 Part IV
- The Health & Safety at Work Act 1974
- CDM 2015
- The Clean Air Act 1993
- The Environmental Protection Act 1990

Heydon & Carr will also adhere to the guidelines set out in the Councils Control of Pollution & Noise from demolition and Construction Sites Code of Practice March 2004.

Appendices attached to this management plan;

A Fire Plan

B Environmental Plan

C Site Waste Management Plan

D Traffic Management Plan

E Organisational Chart

Project Brief

Description of Project

Subdivision of existing dwelling to create two self-contained family dwellings including two storey side and single storey rear extension, basement with associated landscaping and parking

Works associated with this project will include (but will not necessarily be limited to):

- Trial Holes and site investigation
- Hoarding to site perimeter
- Demolition of existing Building
- Cap/Disconnect Existing Services
- Construct basement, ground, first & second floors slab and walls/vertical elements
- Erect Falsework
- Erection of scaffold
- Construct floors
- Install external cladding including brickwork and composite elements
- Install Roof
- M&E works
- Fit out works
- External hard & soft landscaping
- Site Works

Project Resources

Statutory Appointments and Emergency Contacts

A complete project directory is provided within the appendices.

Contractor Requirements

All Contractors appointed will be selected from Heydon & Carr list of approved contractors. All method statements must be issued in sufficient time to obtain the relevant approval and status before works are allowed to proceed.

Selection and Assessment of Contractors and Designers

Details of any contractors involved in the project are located in the Project Directory.

Subcontractors have been selected on past-demonstrated ability to meet both contractual and health and safety requirements. Where required, subcontractors will be interviewed to determine their level of competence to undertake specific work tasks.
Heydon & Carr carries out periodic checks to ensure all persons employed have been trained and hold certificates of competence in accordance with the prescribed CITB standards.
Completed questionnaires, assessment notes and minutes of any qualification meetings for contractors are held at Head Office at Entrance C, Lower Ground Floor, Rembrandt House,
Whippendell Road, Watford, WD18 7PG

Notifications to HSE

A copy of the F10, H&S Law Poster, insurances and policies will be displayed on site in the main site office.

Health and Safety Objectives

Throughout the project, health and safety will be planned and implemented to the highest standards. In particular the Principal Contractor will: -

- Provide and maintain tools, plant and equipment that are fit for purpose and without risks to health and safety.
- Ensure a safe place of work at all times with safe means of getting to and away from the place of work.
- Ensure safe handling, transporting and storage of articles and substances that will be incorporated into the works, or used on the project.
- Only utilise competent employees and subcontractors who are trained in the safe working practices for the work they undertake. Appropriate levels of supervision will also be maintained.
- Provide adequate resources to ensure the health and safety objectives for the project are met in full.
- Provide all persons on the project with information on the risks to health and safety and the safe working practices to be implemented and to eliminate or reduce those risks to acceptable levels.
- Ensure the health and safety of operatives, members of the public and others who come onto site or come into contact with the Principal Contractors work activities.
- Carry out all works without undue inconvenience and nuisance to members of the public and residents.
- Ensure adequate welfare facilities are available throughout the project.
- Monitor work activities to ensure health and safety standards are being achieved and maintained.
- Co-operate with the Client and Principal Designer to ensure the highest standards of health and safety are achieved.
- Comply fully with our duties under CDM 2015 and other relevant health and safety legislation.
- Maintain key point indicators for the following areas:
    - Man Hours
    - Accident frequency rates
    - Number of accidents
    - RIDDOR reportable accidents
    - Environmental incidents and complaints
    - Lost time incidents
    - Site inspection trends

Existing Services

Information on possible buried services and underground structures in the vicinity of the site is presented in the Pre Construction Information Pack. All available information on buried services and underground structures will be provided to Heydon & Carr through the *principal designers pre commencement information* prior to commencement of the site works. It should be noted that this is for information only and may not be complete.

Heydon & Carr will liaise with local and statutory authorities and undertake their own check for buried services prior to the commencement of the work onsite and prepare an Out of Services Decommissioning Report. The information obtained from these searches will be submitted to the Clients Representative for approval prior to the start of site works. If exploratory works are required to confirm existing services then hand excavated inspection pits will be required at all exploratory works locations. CAT and 'genny' scans are required before commencing the inspection pit and at 0.3m depth increments during Inspection pitting all excavation works will be controlled under a permit to work.

A number of public utility services are located within close proximity to the proposed works these include:

- EDF Energy
- Thames Water
- British Gas

- Various telecommunications providers

Utilities/Mains Services

Information regarding existing services will be provided by the Pre Construction Information Pack.

A further utility search will be carried out for the site to identify and confirm locations of the principal utilities such as water and gas mains, storm and foul sewers, telecom and power lines. These will be recorded.

All service isolations will be achieved before works are undertaken within the footprint of the building and below ground.

Electrical

Heydon & Carr will liaise with UKPN to isolate, decommission and remove existing plant and equipment from site.

For our part we will employ a competent electrical services contractor to install temporary electrical services for our needs, this will include the following:

- The installation of an MDU to distribute all of our supplies
- Low voltage distribution for power tools and equipment
- Temporary and emergency lighting within the building
- Hoarding lights to be fitted on the public highways
- Lighting and power for our proposed office and welfare arrangements

Electrics, temporary lighting and power supplies shall comply with the following regulations:

- Electricity at work Regulations
- HSE HS(G) No 141 Electrical safety on sites
- HSE guidance notes PM(32)
- Safe use of portable electrical apparatus
- Current edition of Electrical Installations Regulation as published by IEE
- HSG (38) lighting at work

Gas

We will not require any temporary gas supplies for our works.

LPG will be used in the later stages of the construction, these works will be carried out under the control of a hot works permit.

Water

Although the existing water supply is likely to remain live, Heydon & Carr will apply for and arrange a temporary builder's supply.

Existing Site Records

No existing information is available therefore pre commencement surveys will be required

Design Information

Existing Health and Safety File

There is no existing safety file for these premises.

Temporary Works

All temporary works will be designed by a Heydon & Carr appointed temp works Engineer. These designs will then be independently checked by an external agency. All temporary works designs will be submitted to the Clients Representative in advance of planned date of installation. Once all checks have been carried out and approved, method statements will be completed and the temporary works carried out in accordance with the programme.

Hazardous Materials Survey

A list of hazardous materials will be provided in the attached appendix F once the hazardous survey has been completed. Any use of hazardous materials, not on this list, is to be cleared first through Heydon & Carr Site Manager. Risk & COSHH assessments will be raised for these hazardous materials.

Works Information

Demolition Phase

The only demolition works associated with this project would be site clearance of existing garage and elements of hard standing together with formation of new openings

Site Management

A competent Site Manager will hold full responsibility for Health and Safety on site at all times and carry out daily inspections whilst the construction work is being carried out. Daily task briefings will be carried out by the allocated site supervisor/s. Management organisation is provided for in the attached appendix A

Arrangements for Passing Information to/from Heydon & Carr and Supply Chain

Sub-Contractors are required to provide Heydon & Carr with specific written risk/work method statements. The method will have been discussed beforehand to ensure that both Heydon & Carr and the Sub-Contractor are agreed on the work method to be used throughout the operation and that each is fully aware of the dangers involved and the safe working practices which are to be followed.

During the construction period, information is passed to the contractor and his operatives via induction briefings, tool box talks and co-ordination meetings.

Site Meetings

Meetings will take place regularly and will be attended by the Client, Principal Designer and Heydon & Carr as required. Minutes will be taken and distributed. See list below:

- Start up - once
- Site progress – Weekly
- Commercial – Bi weekly
- Change control - Bi weekly alternating with commercial
- Clients Representative progress – 4 weekly
- Site inspection – Weekly
- Risk meeting – 4 Weekly

Control and Monitoring of Risk Assessments and Method Statements

Heydon & Carr and/or its supply chain must provide risk assessments & method statements for each construction activity and for any activity involving the use of highly flammable materials, or hot work, inside the site. These documents will be forwarded to both the Site Manager and Safety Managers to allow checks to be made as to their accuracy regarding technical, practical and safety content; where satisfactory, work will be allowed to commence. Unsatisfactory documents (insufficient/inaccurate information) will be returned for further content to be added. Accepted documents will be entered into the Risk Assessment/Method Statement Log. Work will then be allowed to commence as agreed. Any deviation from the approved plan of work must be documented and approved.

The Site Manager will keep all risk assessments and method statements in the site office (hard/electronic copy) and will be incorporated into the live construction phase health and safety plan.

The Site Manager will not allow any works to commence until all relevant information is in position. All personnel involved in the work practice are to be briefed on their method statements/risk assessments before starting work. Risk assessments and method statements are to be updated to incorporate changes of design and any relevant information identified by any party during the Construction Stage.

COSHH Data Sheets and COSHH Assessments are required for the use of all hazardous substances.

All manual handling operations will be assessed for risk of injury; where there are significant risks, the assessment will be in writing. (This will be attached to the method statement).

Arrangements for Controlling Significant Site Risks

Temporary Electrical Distribution/Management, And Portable Electrical Equipment

All electrical equipment on Heydon & Carr sites or other workplaces will be supplied, installed, maintained or used in accordance with the approved standards.

The Heydon & Carr Contracts Manager, in conjunction with the Site Manager will plan the temporary electricity supply and distribution on site in accordance with the standards. All temporary supplies are to be installed by competent electricians and tested in accordance with the statutory regulations.

The Site Manager will ensure that the temporary electrical supply is installed and tested as planned - records will be kept on site.

Site Supervisors will ensure that all power cables installed in their work areas are, where reasonably practicable, clear of passageways and preferably above head height.

Both Contract Manager and Site Supervisors will ensure that all power tools provided for use on site or other workplace are in accordance with the relevant British Standards.

No power tools or electrical equipment of greater voltage than 110 volt (CTE) shall be used on site unless special arrangements are made and discussed with management. Lower voltage tools, lighting etc. may be required in damp, potentially flammable or confined situations. All sub-contractors will be informed of the Company Policy on the use of electricity on site and will be expected to comply with these requirements.

Site Supervisors will ensure that sub-contractors' equipment is in good condition and in accordance with the relevant British Standards before permitted for use on site.

Immediate action will be taken against any person or sub-contractor abusing or incorrectly using electrical equipment on site.

Festoon lighting equipment will be securely above head height. Where festoon lighting equipment is installed, it must not be of the screw-on-pin contact type. Only properly constructed sets with moulded-on fittings will be used. All bulb sockets are live. Steps are therefore to be taken to protect open sockets when bulb is not fitted. As well as the fragments of glass of broken bulbs being a hazard it must be remembered that the protruding filament wires would still be live.

The Site Supervisor will ensure that any portable generator or other electrical equipment fitted with an earth rod has the earth rod and connection maintained in good condition.

Only authorised persons are permitted to repair or alter electrical equipment. Any defects noted in electrical equipment must be reported to the Site Supervisor so those immediate steps can be taken to have defects remedied by a qualified site electrician or appointed hirje company.

All cable connections must be properly used. Under no circumstances is insulation tape to be used for any repair or joint in extension cables.

Power tools must be maintained in good condition with casing intact and label fitted showing voltage and other information.

Working at Height

All working platforms and loading areas, where there is a risk of a fall, will be fitted with double guardrails, guards and toe boards. This includes MEWPs and tower scaffolds.

Any operative using a MEWP will provide proof of training/competence (IPAF/CPCS). MEWPs will be inspected prior to first use and at regular intervals thereafter (weekly) and recorded on the inspection tag attached to the work platform.

Any operative erecting a tower scaffold must produce proof of competence (PASMA) to the Site Manager before work commences. The risk assessment/method statement is to reflect these arrangements.

All scaffolds must be designed and design checked/approved by an independent competent person/s.

Scaffolds will be inspected upon first use and every seven days thereafter. A further inspection must be carried out after scaffold has been subject to high winds. The inspection report is to be completed by the scaffold sub-contractor's authorised signatory.

Prior to use of and erection/dismantle of a Crane, all methologies for installation of same will be issued to the principal contractor in a timely manner to approve.

Electrical

Electrical tools, equipment or appliances will not be used until proof of inspection during the first 3 months is obtained (visual or otherwise). This includes hired equipment and cabin appliances, etc. Documentation is to be provided to the Site Manager upon arrival on site.

No power tools or electrical equipment of greater voltage than 110 volt shall be used on site unless special arrangements are made and discussed with management. Lower voltage tools, lighting etc. may be required in damp, potentially flammable or confined situations. All sub-contractors will be informed of the Company Policy on the use of electricity on site and will be expected to comply with these requirements.

Access to areas where there are live installations will be strictly controlled. Access will be locked off and signs indicating the danger will be displayed.

Immediate disciplinary action will be taken against any person or sub-contractor abusing or incorrectly using electrical equipment on site.

Plant and Work Equipment

All plant and work equipment must be assessed for risks before use. Information should be on site (noise levels, data sheets, electrical information, operator's handbooks etc.). All relevant risk assessments for the use of plant are to be submitted by the contractor wishing to use the equipment.

Test and thorough examination reports and operators' certification for all plant and equipment are to be produced for the Site Manager's inspection on arrival on site and kept on site. Weekly inspection reports are to be recorded before lifting commences, thereafter every 7 days. These reports are to be made available for inspection on site.

Fire Prevention

A fire risk assessment will be conducted just prior to commencement on site.

Smoking is strictly forbidden on site.

All hot works will be strictly controlled by our hot work permit system for any process which generates spark or flame.

Weekly inspections of the fire points will be carried out and recorded. All records of inspections are readily accessible in the site office for inspection.

Fire extinguishers will be positioned at each fire point and available to hand at all hot work locations. The Site Manager must make sure that supplies of these extinguishers are available.

Fire extinguishers located at fire points are not to be used by fire watchman or others for general use.

Fire Assembly point is to be clearly signed posted prior to works commencing.

A thorough fire prevention plan for the project will be formulated and communicated to the workforce during the pre-start induction. It will include details of fire warning system, the provision and maintenance of the means of escape, the provision of the fire extinguishers and the evacuation procedures including assembly points.

Waste

The Site Manager will control the removal of waste. A Site Waste Management Plan (SWMP) will be developed to identify the waste processes, control measures and action levels required.

Sub-contractors are to inform the Site Manager of the nature of their waste. A registered waste carrier will remove waste. Waste transfer notes will be kept on site. Random checks on end use will be made by the Site Manager.

Health and Environment

Any spillages of hazardous substances are to be recovered in accordance with the COSHH safety data sheets. If there is any risk of contaminants getting into the watercourse or drains, the Site Manager is to be informed immediately.

Care will be taken to minimise dust, noise and fumes that may affect the surrounding properties. Sub-contractors will be required to identify any dust hazards created by their use of equipment and processes. Water fed equipment or dust extraction systems will be required under such circumstances. All such control measures must be identified in the risk assessment/method statement process.

Manual Handling

Movement of materials through the site should be addressed in the risk assessments.

The Site Manager will ensure that materials are handled, as far as possible, by machine. Where the use of a machine is impracticable, sufficient labor must be available to handle any heavy or awkward loads and instructions must be issued to site on the handling of these loads.

Assessments should be prepared for all tasks that involve manual handling. Consideration should be given to eliminate the need for manual handling.

Personal Protective Equipment (PPE)

All operatives are to wear the following:

- Head protection
- Safety footwear – preferably with ankle protection & mid sole plate, i.e. no riggers
- Hi-viz clothing
- Safety eyewear applicable for tasks being carried out
- Hand protection relevant to tasks being carried out
- Hearing protection relevant to tasks being carried out

Other PPE is to be worn as indicated in risk assessments and method statements. PPE should be suitable for the task. Respiratory protection must be capable of protecting the operative against exposure to the substance.

Site Welfare Facilities

Expected Numbers of People on Site:-	Peak	-	15
	Minimum	-	3

The site welfare arrangements will be maintained throughout the project these will include a suitable number of toilets, showers, rest rooms, offices and drying room.

All facilities will be provided for the use of all contractors and visitors.

A means of heating food and utensils for eating will be provided. An electric kettle/urn will be provided for making hot drinks, all seating will have backs to the chaits

A minimum of 3 water flushing toilets (for both male & female) and 3 wash-basins will be provided along with hot and cold water and wall mounted wash stations. The basins will be large enough to enable decontamination of arms, hands and face. Waste from this facility will flow directly into the main drainage system for the development.

The accommodation will comprise the following:-

- Site office and first aid
- Changing room/drying room
- Rest room/tea room
- Wash room and toilets

The accommodation will be connected to mains drainage where possible. Main line British Telecom phone and email facilities will be established at the earliest possible time, within the short term. Mobile phones will be available at all times, in case of emergency.

Site Access, Pedestrians and Vehicles

Site Access will be provided and follow the information within the Site Works Information Documents provided during the site induction process. Any pedestrian access within the works/delivery area will be segregated from vehicle movements. Traffic Marshalls will direct and manage all vehicles arriving and leaving site during normal working hours. The site will be secured at the end of every working day.

It is anticipated that various measures to adequately safeguard the public and occupiers of adjoining properties from the risks associated with this work will be implemented by Heydon & Carr

Access agreements to adjoining properties if needed must be arranged through the Clients Representative.

Security/Public Danger

Security and Trespass

The works will be kept secure at all times. The HSEW guidance 151 will be used to assess the risk of trespass and protection of the public;

Entrance to the site will be controlled by security guards who will ensure that all site operatives use the Heydon & Carr ID card system and that all visitors will be directed to the site office where they must sign the visitors book.

All visiting or working on site will be subject to a pre srart induction.

Access Hours

Monday to Friday	08.00 hrs to 18.00 hrs	Normal working hours
Saturdays	08.00 to 13.00hrs	Only if permitted by Client/ Special cases
Saturdays Afternoons	No works	
Sundays	Non Working Day	

Competent supervision to be on site at all work times. Lone working will not be permitted.

Traffic Management and Site Access

A separate Traffic Management Plan will be produced and can be found at Appendix D of this plan. All movements of traffic will be controlled by fully trained competent Heydon & Carr employees.

Deliveries and Storage

Materials and equipment will be delivered to site using our own or suppliers vehicles and be arranged to reduce any problems with local traffic conditions. Materials will then be offloaded by forklift and moved to the area of work. All materials will be stored in a designated storage area. We will endeavour to apply “just-in-time” for all deliveries.

Training

Induction Training

The Site Manager is responsible for ensuring that all personnel are inducted on site safety information. Method statement briefings will also be carried out to ensure all personnel are fully conversant with their work processes.

Training Certificates

Copies of training certificates etc. for all plant operators, abrasive wheel operators, scaffold erectors, etc. must be attached to risk assessments/method statements. All site personnel will be required to possess a suitable and current CSCS or skills card pertaining to their designated role. Machine operators will be required to have a CPCS card for the category of plant for which they are operating. Scaffolders will be required to possess a current competence card issued by Construction Industry Scaffolders Record Scheme.

Training records will be held on site

Tool Box Talks

Tool box talks will be held weekly or as determined by changing site conditions. Talks will be arranged by the Site Manager and details of attendance kept in the tool box talk register.

Information and Signs

A Health and Safety information board will be displayed in the canteen area. It contains information on the evacuation plan, site risks, details on first aid and resuscitation, the Health and Safety Law Poster, etc.

All signs are to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996. All signs relating to fire and means of escape will be illuminated with lighting that is on an emergency circuit.

Site Rules

All operatives are to follow any site rules imposed by Heydon & Carr .

All personnel are to complete the attendance register on a daily basis.

All visitors are to complete the visitor's book whenever they attend.

Permits to Work

Permits to work will be used where identified in the site-specific risk assessment/method statement. At this stage the following permits are expected on this site;-

- Hot works - Grinding, Burning equipment
- Excavations
- Electrical work - All service isolation arrangements are detailed under existing services section

Unless noted otherwise, the permit to work system will be operated and maintained by the Site Manager.

Emergencies

Emergency Procedures

The following emergency procedures have been considered:

Hazard	Control Measure
Explosion	In the event of an explosion, the temporary site fire alarm (air horn/ bell) will be sounded and operatives will evacuate the work place in accordance with the fire evacuation plan.
UXB/ IED	In the event of finding a UXB (unexploded bomb) / IED (improvised explosive device) during the course of the works, the temporary site fire alarm (air horn/bell) will be sounded and operatives will evacuate the work place in accordance with the fire evacuation plan.
Gas Release	In the event of a release of gas, the temporary site fire alarm (air horn/bell) will be sounded and operatives will evacuate the work place in accordance with the fire evacuation plan.
Collapse	In the event of a collapse of an element of the building, works will cease immediately and the area will be cordoned off. A role call will commence to determine if any personnel are missing and the necessary emergency services will be called out immediately. If applicable the incident will be notified in accordance with RIDDOR.
Chemicals -	In the event of a release of chemicals, the site fire alarm (air horn/bell) will be sounded and all operatives will evacuate the work place in accordance with the fire evacuation plan.

Emergency Services

The Site Manager will liaise with the emergency services and, if deemed necessary by the visiting Safety Consultant, will invite a fire services representative to visit the site to comment on the fire precautions in place if and when required. A list of all emergency service contact numbers and addresses can be found in appendix A. All emergency contact details will be placed on the site notice boards.

Accidents

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) require the reporting of specified accidents, ill health and dangerous occurrences to the enforcing authorities. The events all arise out of or in connection with work activities covered by the HSW Act. They include death, major injury and over seven-day lost-time accidents. Schedules to the Regulations specify the details of cases of ill health and dangerous occurrences. All accidents/incidents will be recorded and details forwarded to Heydon & Carr safety advisor. and the client by the quickest method practicable.

The Site Manager is responsible for ensuring that all reportable incidents are correctly investigated and reported to the interested parties and authorities.

Incidents can be reported directly to the RIDDOR Incident Centre as follows;-

BY POST:	Incident Contact Centre, Caerphilly Business Park, Caerphilly CF83 3GG
By Internet:	www.riddor.gov.uk
By Telephone:	0845 300 9923
By Fax:	0845 300 9924
By Email:	riddor@natbrit.com

Confidential Reporting: A confidential incident reporting and analysis is in operation and all operatives wishing to report incidents in total confidence can call the number below

FREE PHONE 0800 0850499

First Aid

A list of trained first aiders will be displayed in the site office and at various points around the site. Contractors are to notify names of first aiders to the Site Manager. Fully stocked and maintained first aid kits will be available on site.

Liaison

The PC Site Manager/Public Relations Manager will carry out liaison with the following;-

- Emergency services (Including Fire Services Advisory Officer, where necessary)
- Representatives of adjacent properties
- Local authorities/ councils

Documentation Monitoring

The Site Manager will ensure that a suitable representative of the scaffold company is responsible for inspecting any scaffolds erected. They will ensure that inspections have been carried out before use, upon modification and at least every 7 days thereafter.

Formal S.H.E inspections are carried out Bi-weekly by our safety team. The report will be made available on site which will then alert the relevant parties within Heydon & Carr to action, designated observations. Inspections will occur more frequently where a need is identified.

Workforce/Management Communication

The Heydon & Carr operates an 'Open Door' policy. The entire workforce should be encouraged to communicate daily to any supervisory staff of any hazard they have seen, or to make any suggestion that will make conditions safer. Any such contribution must be recorded in the site diary and raised at the next safety meeting, or earlier if appropriate.

All contractors are reminded of their statutory duty to contribute, where appropriate, to the Health and Safety File, any relevant information should be given to the Site Manager for inclusion within the Health and Safety file prior to forwarding on to the Principal Designer. Information for the file will be held on behalf of the Principal Designer at the Principal Contractor's offices.

APPENDICE A

FIRE PLAN



1 Stanhope Gardens

Fire Plan

The Fire plan & precautions documented in this manual must be briefed to all persons either operating or visiting this site to ensure that the correct evacuation procedures are followed in the event of a fire.

Fire Plan Contents

1. Introduction
2. Organisation
3. Fire Risk Assessment – The 5 Key Steps
4. Fire Prevention
5. Fire Risk Assessments
6. General Fire Precautions
7. Fire Safety Coordinators and Fire Marshal responsibilities
8. References
9. Appendices;
    a) Fire Plan Drawing
    b) Fire Equipment Register
    c) Weekly Workplace/Fire Inspection checklist
    d) Emergency inspection/observation checklist
    e) Evacuation & Fire Service liaison record
    f) Emergency Fire Action Plan
    g) Fire emergency procedure
    h) First Aiders
    i) Know your fire extinguisher code

1. Introduction

On all sites where a temporary site office establishment is required and where we are appointed as Principal Contractor, a fire plan will be developed and implemented to comply with the new HSE guidance notes for “Fire Safety in Construction”.

The fire plan will either form part of the site Health and Safety Plan, an appendix to the Health and Safety Plan or held outside the Health and Safety Plan depending on the size or complexity of the document.

The Site Manager will ensure that a suitably trained and competent Fire Safety Co-ordinator is appointed for the project with trained and competent fire marshals where applicable. Their appointments are to be recorded in the H&S Plan.

The purpose of the Fire Plan is to set down the format for recording the arrangements for the fire prevention, action and control including the means of escape to be in place during the construction works of a project.

The development of this plan is to be based upon an assessment of the potential risk of fire arising from the methods employed, the surrounding environment and the scope of the project. (See Workplace Fire Risk Assessments for recording the assessment). The assessment must be reviewed and updated as necessary to accommodate any changes in the risks.

The responsibility for compiling and updating the Fire Plan rests with the “Fire Safety Co-ordinator” who can call upon assistance from the allocated Safety Manager and others as may be appropriate.

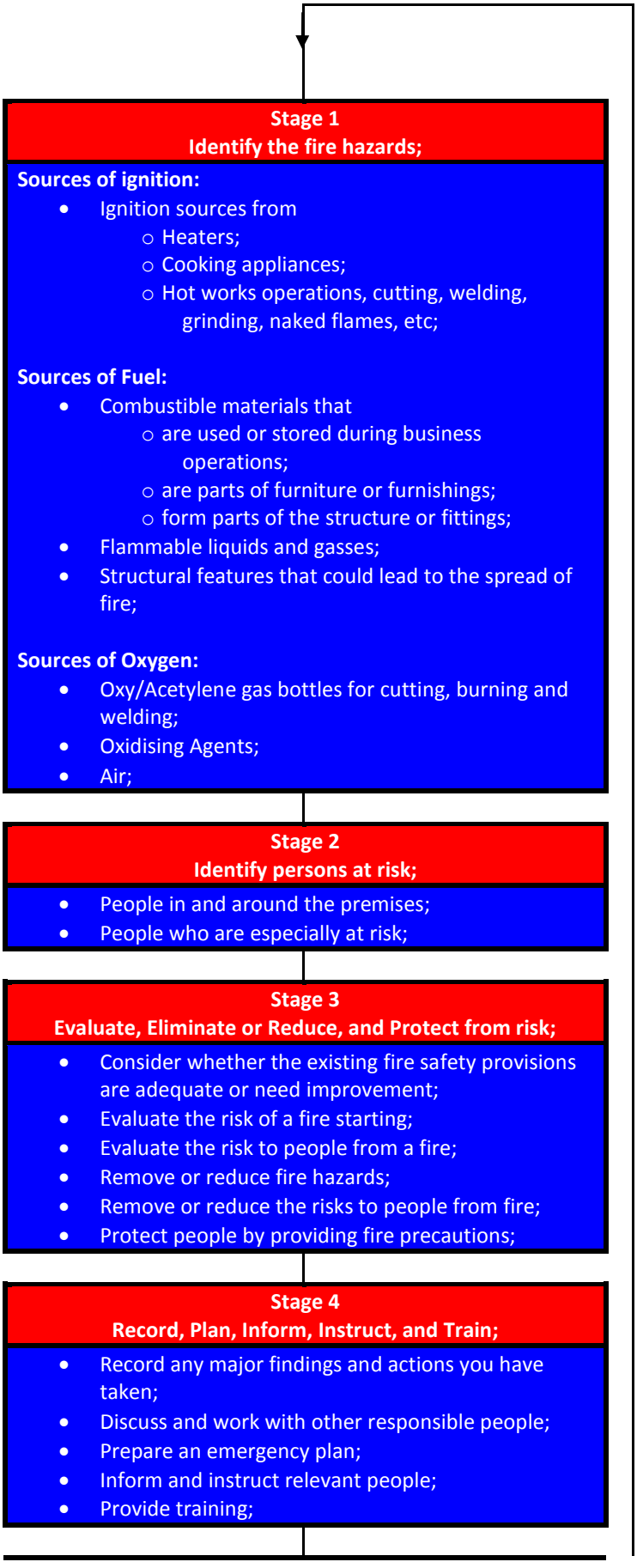
The Site Manager is Responsible for ensuring that a current copy of the Fire Plan is displayed and that relevant sections are communicated and distributed to all site personnel.

2. Organisation

Appointments:

Fire Safety Coordinator:	TBA
Deputy Fire Safety Coordinator:	TBA
Fire Marshall:	TBA

3. Fire Risk Assessment – The 5 Key Steps



Stage 5
Review;

- Carry out a periodic review of your fire risk assessments;
- Make changes to the fire risk assessments;
- Review and change your emergency plan where necessary and implement;

4. Fire Prevention

Information related to Fire Prevention is abstracted from the Principal Designers Pre-Construction Information and Fire Risk Assessments carried out for the site which are dealt with in this section of the Plan with additional control measures in the Risk Assessments.

Combustible Materials

Most premises will contain combustible materials. The amount of combustible materials will be kept to a minimum where reasonably practicable. Care must be taken with regards to the storage of combustible materials and consideration given as to whether combustible materials can be removed, significantly reduced or replaced with safer alternatives.

Combustible materials include:-

- Large quantities of paper;
- Plastic materials especially foamed plastics;
- Packaging materials;
- Timber, hardwood, chipboard and similar products;
- Chemicals which may be combustible or react with other chemicals to produce heat;
- Displays/notice boards and exhibition materials;
- Furniture and fittings;
- Parts of the structure such as combustible wall and ceiling linings etc;

Displays and notice boards

- The mounting of site notice boards etc will be avoided near to, or along escape routes. Where these exist within escape routes, they should not carry large amounts of paper. Two or more smaller notice boards mounted two metres apart would be preferable.

Combustible Waste

- Waste generated from the site will be stored in designated skips in accordance with the TDL Environmental Management System to segregate waste wherever possible for recycling eg. Non-hazardous waste, metals, timber, hazardous, paper etc.
- The skips will be collected when full and not overfilled. Skips will be covered to prevent waste from being blown across the site, to prevent any potential risk of malicious fire and any potential spread of fire from an adjacent structure/building.
- Good Housekeeping practices will be maintained at all times to prevent the build up of any combustible waste on the site.

Flammable Liquids and Gases

Flammable liquids and gases include petroleum products, oils, solvents, thinners, flammable adhesives, white spirit, oil based paints, degreasing agents, propane, butane, acetylene, and other flammable gases in cylinders.

- Gases in cylinders are often stored at very high pressures and their uncontrolled release can be physically dangerous and when heated by fire are liable to explode even if the contents are non-combustible. A small amount of released gas can fill a large area with a potentially explosive mixture. This is particularly true of liquefied gasses such as LPG.
- Flammable liquids and gasses are to be kept in a separate secure storage area, or in a purpose built bin or cupboard with good ventilation to prevent ignitable vapour/air mixtures, and no sources of ignition (spark free electrics if using containers). Suitable fire extinguishers and signs eg. 'Flammable liquid', 'Flammable Gas', 'no smoking', 'no naked lights' etc are to be provided at the location.
- Gas cylinders when not in use, must be stored in a secure compound away from buildings and offices. They will be stored and kept in the upright position at all times. Stored cylinders are to be suitably restrained and their valves protected from impact damage. Examine hoses regularly and replace them if they show signs of damage or wear that could give rise to a leak.
- Storage areas for flammable liquids and gasses should be a minimum of 10m away from offices, buildings or any other flammable material storage area.
- Flammable liquid containers are to be kept closed when not in use. If possible use safety containers which have self closing lids.
- Liquids are to be dispensed over a tray and some non-flammable absorbent material kept handy to mop up any possible spills. Dispose of contaminated materials safely or call in disposal experts.
- Highly flammable liquids shall only be removed from the storage in quantities that will be used in 1 day.

Petrol

- Petrol is to be stored in 5 litre specially designed plastic containers or steel Jerry cans up to 20 litres.
- All containers to be used will be marked with the contents and signed 'Highly Flammable' and stored in locked, ventilated steel container or COSHH box.
- Quantities are to be kept to an absolute minimum where reasonably practicable.

2 Stroke Petrol

- Where 2 stroke petrol is to be used the container will be clearly marked and stored in small quantities of 5 litres.

Diesel Storage

- Where large quantities of fuel are stored on site, bowsers with secondary containment systems will be used, or where drums or tanks are to be used, man made bunds large enough to hold the contents of the liquids plus 10% will be provided.

Flammable Dusts

Finely divided flammable dusts dispersed in the workplace atmosphere can, if ignited, explode violently and cause a lot of damage. Flammable dust risks will be managed as follows:-

- Keep plant dust-tight;
- Keep the working area dust free by regular cleaning using industrial vacuum cleaners and by vacuuming spillages as and when spillages occur;
- If dust-handling plant is used, many have special safety features built in. The purpose of these needs to be properly understood, and plant maintained in good working order.

Flammable Solids

Some types of plastic foam, packaging materials, polyester wadding and textiles will ignite easily and burn fiercely, giving off a lot of dense black smoke.

- Flammable materials will not be stored close to heaters or electrical equipment which could run hot and act as a local ignition source;
- Flammable solids will be stored in an adequate storage area maintaining good housekeeping allowing clear escape routes from the storage areas;
- Gangways and exits from storage and working areas will be kept clear at all times and inspected regularly.

Oxygen

Although oxygen is necessary for life and is an essential ingredient in controlled burning, such as in a gas fire or oxy-fuel gas welding and cutting, its misuse can lead to serious consequences. Materials that ordinarily will burn only slowly will burn very vigorously in an oxygen-enriched atmosphere. Others such as greases and oils may burst into flames in this kind of atmosphere. As well as the precautions outlined above for flammable gases, the following points are to be followed:

- Never use oxygen instead of compressed air;
- Never use oxygen to sweeten the air in a working area or confined space;
- Never use grease or oil on equipment containing oxygen;
- Oxygen to be used by trained personnel in the use of burning or cutting with safe systems of work and hot work permits in operation;

Reactive Chemicals

Some products contain chemicals, such as organic peroxides, which can explode if they are not stored and handled correctly. Other substances can react vigorously with incompatible materials or contaminants. For example oxidising chemicals can cause flammable materials to ignite, and some substances, such as sodium, react violently with water and can ignite. The following points are to be considered and followed:

- Storage and process temperatures to be carefully controlled to prevent dangerous decomposition or reaction;
- Safety data sheets and product labels to be checked for physical properties and incompatibility with other materials.

COSHH

Whenever you work with flammable substances or substances that are hazardous to health, there is the potential for something to go wrong. You need to think about possible problems and make sure everyone knows what to do in an emergency. Instructing staff in emergency procedures is an important part of their job training, and should be ongoing. Examples of things to think about are:

- Know where to find important COSHH and health & safety data/information sheets;
- Ensure workers know enough to prevent the mixing of incompatible chemicals;
- Have procedures in place to deal with the cleaning up and disposal of contaminated materials following a leak or spill;
- If special first-aid facilities or equipment is required then staff will need to be briefed/trained in their use;

Ignition Sources

- Rubbish will not be burnt on bonfires but disposed of correctly. Burning on site is prohibited.
- Temporary electrical supplies into offices, containers, toilets, mess rooms and drying rooms etc will be tested every 3 months.
- Fixed permanent electrical installation within buildings must be subject to inspection and testing by a competent qualified person at 5 yearly intervals.
- All electrical equipment, leads and plugs are to undergo regular visual inspection for signs of damaged wiring or electrical equipment and must undergo PAT testing on a regular basis.

Hot Works Procedures

- A 'Hot Works Permit' system will be operated where the use of any naked flame, cutting, welding, grinding etc. is carried out where there is deemed to be a significant fire risk
- Hot works permit systems will be used for hot works eg grinding, cutting, burning, welding etc where there is a risk of ignition of combustible or flammable materials etc in the area. Hot works permits and associated safe systems of work are to include contingency plans stating the provision and use of fire protection equipment and the associated safety arrangements in case of a fire. Personnel carrying out the work are to be given adequate information and briefed on the safe system of work so that they know and understand the safe arrangements.

Portable Heaters

- Portable heaters will not normally be used except when it is necessary to supplement fixed heating installation during periods of cold weather or breakdown.
- Convector or fan heaters must be used in preference to radiant heaters because they present a lower risk.
- Heaters fuelled by flammable liquids will not be allowed and those fuelled by gas cylinders shall only be permitted when absolutely necessary where no other alternative exists. Heating appliances must be placed at a safe distance from combustible materials, must not be covered and fitted with a fireguard where necessary.

Signs

- All fire safety signs shall comply with the requirements of the Health and Safety (Safety signs and signals) Regulations. Signs that provide information on escape routes and emergency exits must have white lettering on a green background, incorporating a running man symbol and where necessary a direction arrow. It is not necessary to have location signs above extinguishers unless the extinguisher is hidden.

Arrangements for Smokers

- A small designated and demarcated safe smoking area will be made available for staff/operatives who smoke and information included in the site rules during induction and displayed on notice boards.
- Containment receptacles for cigarette ends and other smoking materials to be provided eg. steel pale filled with sand for cigarette ends separate from other litter bins/receptacles.
- Smoking in the offices, on the main site and in any other location not designated is prohibited.
- Any person found contravening this site rule will be subject to disciplinary action, which may include removal from the project

Cooking Facilities

- Appliances must never be left switched on whilst unattended;
- Staff must be properly trained in the use of appliances and actions taken in the event of a fire.
- Where cooking appliances are provided eg. Mini cookers, hobs etc. Fire blankets will be provided locally in case of fire.

5. Fire Risk Assessments

See Attached Fire Risk Assessments.

6. General Fire Precautions

Staff

All staff working within the site office **MUST** sign in / out each time they enter or leave the building, irrespective of the amount of times in / out of the building.

The reason for the visitors sign in System being used is to enable the appointed Fire Wardens and management to ensure that at any given time there is an accurate account of each member of staff, should there be a need to evacuate the building.

Visitors/Visiting Staff

All visitors and visiting staff must sign in / out by entering their details in to the site visitor's book, located at the main reception area each time they enter or leave the building.

Trainees

All trainees permanently operating from this site must tick in / out each time they enter or leave the building, If visiting they must enter their details in to the site visitors book, located at the main reception area.

Young Persons

Young persons operating or visiting these premises must adhere to the above procedures and receive additional supervision whenever on site.

Wheel Chair Users & Disabled Visitors

Staff / visiting staff or visitors who are disabled or confined to a wheel chair must be identified and risk assessed during the site induction to ensure that when on site they will be able to escape during an emergency evacuation safely as they may not be allowed to visit all or parts of the construction site.

Safety Notice

Staff / visitors are strongly advised not to stop to collect any personal belongings, and are not to re-enter the building unless advised to do so by the Fire Marshall, Fire Co-ordinator or Fire Brigade.

Helpful Tips on Fire Prevention

- Switch off all electrical appliances when not in use.
- All fire doors, exits, fire equipment and fire notices must be kept unobstructed.
- Care must be taken to ensure that combustible materials are not left on heaters or other ignition sources.
- Portable heaters are to be securely guarded and placed where they cannot be knocked over which can result in combustible materials igniting.
- Ensure that all electrical equipment is fit for purpose and is tested in line with the company policy and current legislation.
- Waste paper bins are to be emptied at the end of each day.
- A **No Smoking policy** is to be operated within the office environment / buildings.
- Electric heaters are not to be covered
- Remember to always face the fire and ensure that your back is facing the nearest emergency exit.
- The location of any fire is noted on the attached sheet at the end of this fire precautions manual and is made known to the Fire Co-ordinator / Fire Marshal / Fire Brigade.
- Should any member of staff / visitor be found whilst carrying out a check of the working area, who is unable to leave the area unaided due to incapacitating injury / illness, the Fire Wardens should quickly inform the Senior Warden who in turn must notify the Fire Brigade on their arrival to site.
- If a rescue attempt has to be made, then a minimum of two persons are required, and only if it is safe to do so, providing that the individual concerned will not be subject to further risk or injury.
- The location of any casualties must be made known to the Fire Co-ordinator / Fire Marshal.
- Report to the Fire Co-ordinator / Fire Marshal and provide the following information:
    - A complete search of the building has been undertaken.
    - Were any staff or visitors discovered?
    - The location of any casualties.
    - The location of the fire if established.

Fire Points

- Fire points are installed during site establishment and are only removed when the site is complete and all the work is done or when there is a review of the fire risk assessments and emergency procedures.
- Fire points are located mainly in the offices, the mess room, toilets and storage container but can be located anywhere where there maybe a significant risk of fire.
- Fire equipment must be suitably located, clearly visible, suitably located, readily available for use and accessible at all times.
- Extinguishers provided for a particular hazard will be located near to the hazard. Other extinguishers should be located:-
    - Adjacent to exit doorways.
    - On escape routes
    - At the same location on each floor in uniform buildings (if applicable).
    - Where possible in groups forming “fire points”
    - Away from extremes of temperature
- Fire points may contain one or multiple fire extinguishers being either water, carbon dioxide, powder or foam fire extinguishers and fire blankets in areas such as cooking areas. Fire Equipment supplied will have been assessed and adequate for the type of fire risk and it is important that when tackling a small fire that the correct fire extinguisher/equipment is used. (See attached ‘know your fire extinguisher code’ chart in appendix I).
- Fire fighting equipment is provided to enable your escape in the event that a fire blocks your escape route. It is not there for you to fight fire. Only when the fire is small (about the size of a small waste paper bin) should you tackle a fire and providing you have received suitable and sufficient information, instruction and training in the use of fire extinguishers.
- Fire extinguishers will be inspected every 12 months by contacting either the Arlesey Plant Hire Office or a nominated external service contractor. Fire points will also be inspected during the weekly fire/workplace inspection.
- Contractors must be provided with fire evacuation procedure information before they start work on site by means of site induction.
- See attached registers of fire equipment and plan for the locations of fire points

Inspection & Maintenance of Fire Fighting Equipment

- The fire alarm is installed during site establishment and is only removed when the site is complete and all the work is done or there has been a review of the Fire Plan/Risk Assessments and Emergency Plan
- The fire equipment register (appendix B) will be kept up to date at all times stating the identification number of fire equipment, location of equipment, type of equipment, and next inspection date where applicable.
- The fire/workplace Inspection register (appendix C) will be maintained and carried out weekly.
- The means of raising the alarm will be by use a claxon horn, a bell with handle in accordance with BS5839 or shouting "Fire Fire Fire".
- A check on the fire alarm system will be carried out monthly.
- Emergency action notices (appendix F) are to be prominently displayed at all exit points

Emergency lighting

- Not required for site offices occupied by less than 20 people.

Escape Routes

- All escape routes are marked with "Fire Exit". These are situated at the ends of corridors at ground floor level and at fire exits. See Plan contained in Appendix A.
- Signs are provided to indicate the nearest escape route.
- Fire escape routes are checked weekly and a fire drill conducted every 6 months

Site Rules

- Site rules relating to fire safety can be found in the Construction Phase ct Health & Safety Plan

7. Duties of the Fire Safety Coordinator and Fire Marshals

Duties of the Office / Establishment Fire Co-ordinator

- To ensure the Fire/Emergency Plan is kept available and up to date
- To ensure that the requirements of the plan are implemented
- To ensure that all fire fighting equipment is checked and serviced and that Fire Exits, Escape Routes are checked to ensure they are kept clear at all times
- To ensure that nominated fire personnel are adequately trained and details recorded
- To ensure emergency procedures are displayed and fire exit routes clearly marked
- To arrange an establishment fire drill at least every 6 months
- In the event of a fire or other emergency evacuation, to assume overall control of an evacuation of the establishment, with Fire Marshalls reporting to them at the assembly point.
- To liaise with the local fire brigade, reviewing the status of the fire certificates and the requirement for carrying out mandatory Fire Risk Assessments.

Duties of the Fire Marshals

- To assist the Fire Safety Co-ordinator in fire drills
- On discovering a fire, ensure the fire alarm is sounded, and to ensure the emergency services are called.
- On hearing a fire alarm, ensure that the temporary buildings are completely evacuated (including checking toilets, storage containers and any other areas within the site establishment) and that employees and visitors proceed in an orderly manner to the assembly/muster point.
- Only if it is safe to do so, tackle the fire using the appropriate extinguisher but DO NOT take any personal risk. The evacuation of the building/structure is of paramount importance.
- Only if it is safe to do so, check and ensure all windows and doors are closed to limit fire spread.
- Once outside at the assembly/muster point, remind all personnel not to re-enter the site or buildings and carry out a role call check to ensure all personnel have been accounted for using the site visitors signing in book. Contact the establishment Fire Co-ordinator to advise that all occupants have been evacuated and give any further relevant information on the status of the fire.
- Obey all instructions given by the establishment Fire Co-ordinator

Equipment Register

Site Name:

Contract No.:

Fire Equipment ID No.	Type of Equipment	Location:	Next Inspection Date:

Weekly Workplace/Fire Inspection Checklist			
Site/Area:			
Date/time of Inspection:		**Conducted by:**	

Item No.	Hazard identification	✓ Satisfactory ✗ Action Required	Comments/Actions
1	Is all fire equipment on the register present and accounted for?		
2	Fire Extinguishers not mounted on walls or fixed in trays?		
3	Extinguisher seals broken or missing?		
4	Extinguishers not serviced in last 12 months?		
5	Obstructed passageways, escape routes or doors?		
6	Fire doors not closing to give protection from smoke?		
7	Fire doors wedged open?		
8	Uncontrolled flammable or explosive material?		
9	Flammable or combustible materials on escape routes?		
10	Flammable or combustible materials stored beside a source of ignition ie hot surface or electrical element?		
11	Any electrical equipment over one year old that does not carry an electrical testing (PAT) label?		
12	Any electrical item brought from home not carrying an electrical testing (PAT) label?		
13	Any unoccupied area without a smoke detector where fire may go undetected?		
14	Doors on escape routes that do not open in the direction of the escape route?		
15	Doors on the escape route that do not open easily and immediately from the inside without the use of a key?		
16	Are there staff in your department who have not been informed about how to respond in the event of a fire or a fire alarm including how to raise the alarm, location and use of escape routes, location of nominated assembly point, how to summon the fire brigade?		
17	Are there people with disabilities who could be at additional risk in the event of a fire for whom current arrangements are not adequate?		
18	Is the alarm difficult to hear in any area?		
19	Is the route to the emergency exit clear of machinery and other items?		
20	Assembly Points Identified and Clear?		
21	6 Monthly Fire Drill / Evacuation carried out?		

Emergency Inspection / Observation Check Sheet				
12.	**Areas Checked**	**Are All Persons Accounted for**	**Was Fire/Smoked Observed**	**Have Any Casualties Been Reported**
.	Main Site Office	YES / NO	YES / NO	YES / NO
.	Canteen	YES / NO	YES / NO	YES / NO
.	Drying Room	YES / NO	YES / NO	YES / NO
.	Onsite Office	YES / NO	YES / NO	YES / NO
.	Storage Container	YES / NO	YES / NO	YES / NO
.		YES / NO	YES / NO	YES / NO
.		YES / NO	YES / NO	YES / NO
.		YES / NO	YES / NO	YES / NO
.		YES / NO	YES / NO	YES / NO
.		YES / NO	YES / NO	YES / NO
.		YES / NO	YES / NO	YES / NO
.		YES / NO	YES / NO	YES / NO
.		YES / NO	YES / NO	YES / NO
Observations / Comments				

Appendix B

EVACUATION PRACTICE & FIRE SERVICE LIAISON RECORD

Fire Evacuation Practice		
Date :	**Evacuation Time :**	**Signature :**

Fire Service Liaison		
Date :	**Signature :**	**Comments :**

1 Stanhope Gardens N6 5TT
Fire Action
ON DISCOVERING A FIRE

1. Raise the Alarm by Shouting 'Fire Fire Fire', ringing the Fire Bell, or Horn 

2. Call the Fire Brigade by dialling 999/112 or if using a mobile dial 999 only 

3. Tackle the fire with the appliances provided but only if you are trained and its safe to do so. 

4. Leave the building by the nearest available fire exit and proceed to the designated fire assembly/muster point, where the fire marshal will carryout a role call 

ON HEARING THE ALARM ('Fire Fire Fire', Fire Alarm or Fire Horn)

1. Switch of all electrical equipment if safe to do so. Close all Windows and Close all doors behind you. 

2. Leave your working area by the nearest available escape route / emergency exit. 

3. Make your way to the fire assembly/muster point and report to the Fire Marshal. Your assembly/muster point is located at:- King Charles Road 

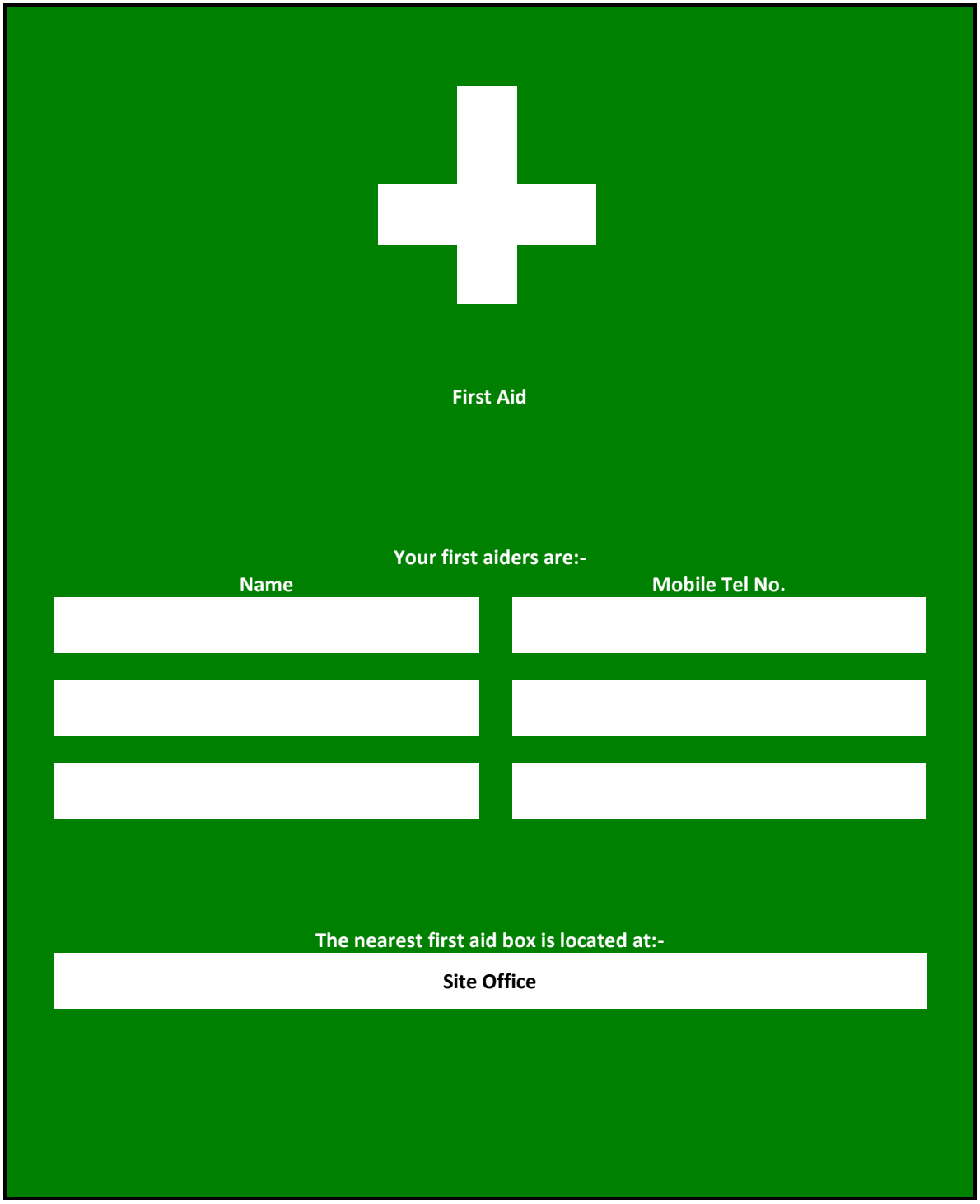


Do not take Risks

Do not run

Do not collect personal belongings.

Do not re-enter the building until directed to do so by the Project Manager, Fire Officer or Fire Brigade


First Aid
Your first aiders are:-
Name
Mobile Tel No.
The nearest first aid box is located at:-
Site Office


KNOW YOUR FIRE EXTINGUISHER CODE
CO2
B FOR USE ON: Flammable Liquids
FOR USE ON: Live Electrical Equipment
DO NOT USE ON: Wood, Paper and Textiles
DO NOT Use in a confined space
DRY POWDER
A FOR USE ON: Wood, Paper and Textiles
B FOR USE ON: Flammable Liquids
C FOR USE ON: Gaseous Fires
FOR USE ON: Live Electrical Equipment
AFFF FOAM
A FOR USE ON: Wood, Paper and Textiles
B FOR USE ON: Flammable Liquids
DO NOT USE ON: Live Electrical Equipment
DO NOT USE ON: Flammable Metal Fires
WATER
A FOR USE ON: Wood, Paper and Textiles
DO NOT USE ON: Live Electrical Equipment
DO NOT USE ON: Flammable Liquids
DO NOT USE ON: Flammable Metal Fires
VAPOURISING LIQUIDS
A FOR USE ON: Wood, Paper and Textiles
B FOR USE ON: Flammable Liquids
C FOR USE ON: Gaseous Fires
FOR USE ON: Live Electrical Equipment

APPENDICE B

ENVIRONMENTAL PLAN

PROJECT ENVIRONMENTAL MANAGEMENT PLAN

Project: 1 Stanhope Gardens Highgate London N6 5TT



INTRODUCTION

This environmental plan documents the significant environmental aspects of the project of enabling works and construction works to and describes how these aspects are to be managed.

As a minimum this plan will be reviewed bi-annually or more frequently as required.

The plan describes the procedures in place to ensure compliance with relevant legislation and regulations. The plan has been prepared in accordance with Heydon & Carr's Environmental Policy and Objectives.

This document forms part of the project documentation and should be read in conjunction with the Health and Safety Plan and the Quality Plan.

1. SCOPE OF WORKS

The scope of works as described within the project contract are as follows:

Subdivision of existing dwelling to create two self-contained family dwellings including two storey side and single storey rear extension, basement with associated landscaping and parking

2. LEGAL AND OTHER REQUIREMENTS

Heydon & Carr Management Procedure **: Environmental Aspects** sets out the procedure for identifying legal requirements applicable to the works as well as other requirements (i.e. contractual). Compliance is periodically evaluated during audits in accordance with **: Internal audit** and the audit schedule.

The register of environmental legislation applicable to Heydon & Carr operations is updated regularly and forms part of Heydon & Carr environmental management system.

Heydon & Carr use the following sources to ensure that management is aware of the legal and other environmental obligations:

- Croners Environmental Management
- Industry bodies and/or websites
- Specialists publications
- Specialists waste disposal contractors
- The Environmental Agency
- Local Authorities

3. ENVIRONMENTAL MANAGEMENT SYSTEM

3.1 GENERAL REQUIREMENTS

Heydon & Carr operates an Integrated Quality and Environmental Management System that mirrors BS EN ISO 14001:2004.

3.2 ENVIRONMENTAL POLICY STATEMENT

The companies environmental objectives have been drawn up in line with the Quality and Environmental Policy and are monitored to ensure continuous improvement.

Heydon & Carr environmental policies and company environmental objectives are communicated to all personnel through induction procedures, specific designated workshops and tool box talks. Relevant policy documents are available to view internally on the Google Drive system, on the company website and posted on site notice boards.

3.3 PLANNING

Heydon & Carr Management Procedure **: Environmental Aspects** sets out the procedure to identify significant environmental aspects related to our works and outline mitigation measures that are required to reduce the risk of environmental impact arising from that aspect. One of the factors used to assess the significance of each aspect is associated legislation of contractual requirements.

As a result of the assessment of environmental aspects, all significant ones have been identified and measurable objectives set against them to reduce the impact of Heydon & Carr operation and service provision.

3.4 IMPLEMENTATION AND OPERATION

3.4.1 ROLES AND RESPONSIBILITIES

The responsibilities for the implementation of the integrated management system are set out in the Q&E Manual. The key project-specific roles that have been outlined to implement, maintain and improve the environmental management system are:

Contracts Manager:

He has overall responsibility for the safe and proper execution of the contract works. He will ensure the availability of all goods and services.

Director of Safety Health and Environment (SHE):

The SHE director will visit the site with total responsibility for the implementation of safe systems of work. He will direct and advise staff and site personnel in respect of safety and environmental legal requirements.

Project Manager:

The project manager will be resident on site. He will be responsible for ensuring the works are completed in accordance with this plan and all applicable legislation.

3.4.2 COMPETENCE, TRAINING AND AWARENESS

All staff, sub-contractors and operatives will attend a site induction that will provide an overview of the significant environmental aspects of the project and their controls.

Training records for Heydon & Carr personnel will be maintained by the HR Department. Training needs will be reviewed periodically as part of the individual performance review process conducted annually. Personnel are evaluated according to job role (description), responsibilities, competencies and level of training. The project team will be established following assessment of individual training records, or through the competency matrix for operational level personnel, in conjunction with the HR Manager to ensure appropriate skill sets are designated to conduct the works effectively.

Evaluation of sub-contractors will be conducted initially through assessment of the approved supplier / sub-contractor questionnaire prior to appointment to conduct any sub-contracted works. This evaluation includes review of quality and environmental credentials with an in house requirement for authorisation from a senior member of the procurement management team. Sub-contractors utilised on project works shall also be assessed on site through the sub-contractor assessment audit as applicable.

Competency requirements for specific activities will be described in relevant Method Statements. All staff and operatives involved will be briefed on the method statement before each activity commences. A record of staff being briefed is attached to each method statement for reference.

Toolbox talks will be carried out on a regular basis which will address environmental issues as well as those relating to health and safety. Special attention will be given to issues relating dust, noise, vibration, nuisance to neighbours and pollution prevention.

All personnel on site including sub-contractors shall be briefed on the requirements of this plan on their site induction or tool box talks.

3.4.3 INTERNAL COMMUNICATION

Environmental issues will be communicated to the client via progress reports and progress meetings, including results of monitoring, incidents, complaints, progress and status of consent and other licences applications.

Key business information, performance against targets and effectiveness of the MS is communicated to the Management Team at periodic meetings.

The process for internal communication of environmental requirements and the management of external environmental communications is documented in **Environmental, Legal & Communication Aspects Procedure.**

Environmental considerations are incorporated into method statements and risk assessments. All team members that are involved in carrying out an activity covered by a method statement will receive and brief in its contents including environmental requirements.

3.4.4 DOCUMENTATION

The following documents comprise the integrated management system documentation:

- Quality and environmental policy, objectives and targets.
- Q&E Manual (Including definition of the scope and the main elements of the system)
- Records as required
- Set of Management Procedures
- Set of Standard Operating Procedures
- Project-specific quality and environmental plans
- Records of site inspections

3.4.5 CONTROL OF DOCUMENTS

The majority of the company's documents are stored in an electronic format.

All controlled documents are approved, reviewed, updated and controlled in accordance with **Control of Documents.** Only the latest issue of any document is maintained. If it is necessary to hold superseded documents, these will be identified accordingly.

A register is kept for all controlled documents and hard copies of the Manual and associated procedures / process documents are maintained as reference controlled copies.

Where process documents are widely distributed as controlled copies (e.g. Site Instructions), these are logged and updated in a controlled manner. Documents of external origin, determined by Heydon & Carr to be necessary for the planning and operation of the quality management system are up-loaded (scanned where necessary) and appropriately distributed / controlled by the project quality manager.

OPERATIONAL CONTROL

All activities that may have an impact on the environment will be controlled by the implementation of procedures and method statements. Each procedure and method statement will be reviewed by a competent person within Heydon & Carr and the Environmental will ensure that method statements are in line with this plan as well as other applicable environmental requirements.

In addition to risk assessments, method statements include a description of the method and sequence of works including all applicable controls. The method statements can be prepared by the project engineer, the health and safety advisor or any other competent member of staff and will be reviewed and approved by the project manager. Once they have been approved internally, they are submitted to the client for review and then any comments are incorporated. The works covered by the method statement will not take place until the method statement has been approved by the client.

Within the management system documentation various standard operating procedures have been documented. This EMP forms an integral part of the management system and includes environmental aspects assessment and their corresponding mitigation measures.

The management procedures relating to environmental management that will be applicable to the works are:

- **Environmental Aspects**
- **Emergency Preparedness and Response**
- **Control of Equipment (sections applicable to environmental monitoring equipment)**
- **Internal Audit**
- **Monitoring, Measurement and Improvement**

3.4.6 EMERGENCY PREPAREDENESS AND RESPONSE

Emergency Preparedness and Response Procedure describes the processes to identify potential emergency situations and potential accidents that can have an impact on the environment, and how Heydon & Carr responds to such events.

This procedure should be read in conjunction with **'Service Provision and Operations Procedure'**, which also gives an overview of how Heydon & Carr responds to client-originated emergency situations.

Procedures for responding to project-specific emergencies documented in the project's construction health and safety plan include: fire, explosion, gas release, structural collapse and release of chemicals. The emphasis of the H&S Plan is on protection of staff and members of the public. The environmental emergency preparedeness and response procedure focuses on the protection of the environment that is required in some of these emergency situations, particularly fire and release of chemicals.

Section 4.5.4 refers to the procedure for dealing with non-conformances and environmental incidents.

3.5 CHECKING

3.5.1 MONITORING AND MEASUREMENT

Compliance with the environmental management system requirements, policy and objectives as well as compliance with the project environmental plan will be evaluated through periodic first party audits. Similarly, compliance with relevant environmental legislation and contractual requirements will be the responsibility of the project manager who will maintain a register of legislation and other requirements applicable to the works.

During the course of the project the programme of monitoring will be reviewed and developed to maintain the most appropriate level of monitoring. Monitoring requirements will be incorporated into relevant procedures and method statements.

The principal monitoring requirements will be:

- Routine site inspections
- Physical monitoring
- Watching brief activities (ecology, contamination and archaeology)
- Physical monitoring (noise, vibration and air pollution) if required.
- Waste Records
- Records of timber procurement
- Internal audits

All testing/monitoring systems shall be managed in accordance with the following system documentation**:**

- **Inspection, Test and Control of Non-conforming Product Procedure**
- **Monitoring, Measurement and Improvement Procedure.**

3.5.2 EVALUATION OF COMPLIANCE

'Monitoring, Measuring and Improvement Procedure' states that the evaluation of compliance with applicable legal requirements is included in the internal auditing activity and Management Review. This also includes other requirements to which Heydon & Carr subscribes, including project-specific requirements and schemes.

In addition to this, the project environmental manager will carry out a bimonthly site inspection and raise non-conformance reports or corrective / preventive actions when necessary. The requirements covered in the inspection include:

- Compliance with the requirements of waste duty of care.
- Complaints, disruption and working hours.

- Results from physical monitoring (noise, vibration, dust) if applicable.

3.5.3 KEY PERFORMANCE INDICATORS

Environmental KPIs applicable to the works will be measured and included in the progress reports to the client. The parameters measured are to be agreed with the client but in general terms will cover energy / fuel consumption, resource consumption, waste and emissions.

3.5.4 NONCONFORMITY, CORRECTIVE AND PREVENTIVE ACTIONS

Non-conformances can arise from failure to comply with a system document, including this plan, as well as from failure of the actual method of work to prevent or reduce an environmental impact caused by the works.

The following procedures form part of Heydon & Carr environmental management system and will be implemented to the works as required:

- **Emergency Preparedness and Response**
- **Inspection, Test and Control of Non-conformances**

The second type of non-conformance covers the following incidents:

- Environmental incident: an inadequately controlled emission to water, land or air that has the potential to cause environmental harm; damage to an environmental resource or receptor including archaeology, heritage or ecology; a situation where a major incident was narrowly avoided (a near miss); a substantiated complaint regarding actual or potential environmental impact.
- Major environmental incident: an event (or series of events) causing environmental harm or damage,; a breach of environmental legislation; a breach or potential breach of environmental consent requirements, including conditions; receipt of a statutory enforcement notice.
- Environmental emergency: an event (or series of events) that is not under control and requires the assistance of external agencies to minimise the potential harm to the environment.

Specific plans for dealing with this type of incidents are described below:

NOISY INCIDENT RESPONSE	
Responsibilities: Site manager, Site foremen, Environment manager	
Item	High levels of noise recorded
Source	Construction works and/or ambient noise
Action	- Stop noisy work until approval by the site manager. - Reference to the site dairy to find a possible cause for exceeded noise levels, either related to the works or external. - Inspection of equipment if a fault is suspected. - Notification to the relevant local authority if required. - Issuing of an explanatory report to affected residents if required.
Target	To identify the source of higher than expected noise levels, take corrective action when necessary and prevent re-occurrence.
Monitoring and observation	Record daily in the site diary: Weather Site activities including major deliveries and unplanned works Emergency situations Traffic incidents and presence of emergency vehicles.
Further action required	If it is found that the construction works are causing noise levels higher than expected, a review of the construction methods will be carried out to establish modifications that would reduce noise emissions to acceptable levels.

OIL AND FUEL SPILLAGES	
Responsibilities: Site manager, Site foremen, Environment manager	
Item	Leaks, spills or releases of chemicals or oils during delivery, storage and use of fuels and oils.
Source	Storage and movement of fuels and oils on site Accidental spills during refuelling of plant and equipment Leaking plant and equipment. Infiltration of spilled oils and fuels into the ground and groundwater Discharge of effluent from cleaning procedures

OIL AND FUEL SPILLAGES	
Action	Refuelling and tank filling should only be carried out in designated areas suitably protected. When the designated refuelling area cannot be used due to the nature of the equipment, remote filling bowsers should be suitably protected. There should be an emergency spill kit ready in case of spillage in the main fuel storage / refuelling area and one in every bowser. The kit should be stored in a marked bag or wheelie bin and should be clearly signposted. If any component from the spill kit is used, it should be replaced immediately and the used materials should be disposed in accordance with waste regulations. Bowsers should be equipped with automatic cut-out mechanism. All refuelling operations must be supervised by trained personnel. Valves and taps will not be left open unattended and will be locked when not in use. Funnels must be used when refuelling small plant and equipment. All minor spillages must be cleaned up immediately. All spare fuels and oils should be returned to designated storage areas immediately. Personnel carrying out refuelling will be made aware of this protocol and trained in the use of spill kits and emergency procedures.
Target	Prevent accidental contamination Respond to accidental spillages
Monitoring and observation	Site personnel to monitor oil and fuel storage and movement to detect spillages and leaks. Should a spill occur the environment manager will prepare a report including the following information: Date, time and location of spillage, substance spilled, action taken to contain it.
Further action required	In the event of a spill incident the following actions will be taken: Inform the site manager immediately Stop work where required to manage spill adequately and prevent further spilling. Eliminate sources of ignition (engines, tools, etc.) Remove the cause of spillage Contain the spillage using the emergency spill kit. Block pathways to drains. Bund drains and manholes to stop migration of contaminants. Clear up the spillage. Request a specialist spill contactor if required. If the incident is a major spill and cannot be contained the Environment Agency will be notified
Reference to further information	Control of Pollution (Oil Storage) (England) Regulations 2001 Control of Substances Hazardous to Health Regulations 2002 (COSHH). Environment Agency Emergency Hotline: 0800 80 70 60

BATS
Responsibilities: Site manager, Environment manager, Ecologist

BATS	
Item	Bats or bat roosts
Source	Present at site
Action	Notify the workforce that it is an offence for anyone intentionally to kill, injure or take any wild bat, or sell, offer or expose for sale any live or dead bat. It is also an offence to damage, destroy or obstruct access to any place used by bats for shelter or as a breeding site, whether they are present or not. If a bat is found in any crack of a structure being demolished, works will stop immediately. If the bat(s) does not fly out voluntarily, then the aperture will be carefully covered to protect it leaving a gap for escape. Covering will be free from grease or other contaminants and will be a non-fibreglass base material. If any bats fall out of structures or are injured, they will be gently placed in a secure ventilated box and left in a cool dark place. The licence holder or the bat conservation trust helpline will be contacted immediately for advice. If possible, contain the bat in a closed room and restrict access to this area. If the bat is dead, keep it pending advice by Natural England. If for any reason the bat needs to be moved, wear gloves and use a tool to avoid direct contact with it.
Target	To protect an endangered species.
Monitoring and observation	Demolition will be monitored by the foremen to detect any unexpected finds.
Further action required	In the event of discovery of bats or bat roosts Notify the environment manager and site manager. Stop works that might disturb bats or their roosts. Further action will only be taken following advice given by Natural England. Only when Natural England and DEFRA (if the work is licensable) are satisfied that the risk to bats is acceptably controlled should works recommence. Obtain licence from DEFRA if appropriate.
Reference to further information	Wildlife and Countryside Act 1981 Bat Conservation Trust Helpline - 0845 1300 228 Natural England Bat Advice (London) contact : 0207 932 2211

WATER POLLUTION	
Responsibilities: Site manager, Environment manager	
Item	Water pollution incidents
Source	Oils and fuels. Organic and inorganic pollutants. Hazardous substances

WATER POLLUTION	
Action	All foul water and surface water drains downstream of the site works as well as the relevant water authority will be identified. Underground services will be investigated and identified to avoid damage to them. All containers and tanks will have clear notices of their contents and how to handle them. Stockpiled material will be protected to reduce rainwater infiltration. In the event of a spillage causing pollution to water (i.e. discharged into drains) or land, the source will be contained and the Environment Agency will be notified.
Target	To protect receiving water bodies from accidental pollution.
Monitoring and observation	Water consumption for site facilities, water used for damping down as well as other water supply sources will be monitored by the environmental manager. Unusually high consumption of water will be investigated to prevent undiscovered leaks.
Further action required	Prevention of spills during refuelling on site (See fuel and oils spills)
Reference to further information	Water Act 2003 Water Industry Act 1991 Environment Agency Pollution Prevention Guideline PPG6: Working at construction and demolition sites. Environment Agency Emergency Hotline: 0800 80 70 60 Thames water utilities Ltd.: 0845 9200 800

3.5.5 CONTROL OF RECORDS

The control of records and data that provide evidence of conformance to requirements of the supplied products and services and the effective operation of the quality system is documented in

- **Control of Records Procedure**.

All documents referenced are stored in either hard copy or electronic form for the retention time specified. This retention time is based on business, regulatory and customer requirements.

All key records required by this plan are listed below. For records that are required to be kept for legal reasons, the time for which they should be retained is also noted.

- Waste Transfer Notes – 2 years
- Hazardous Waste Consignment Notes – 3 years
- Waste carriage licenses of waste disposal contractors
- Waste licenses of waste disposal sites
- Weekly Site inspection forms
- Any correspondence with environmental enforcement agencies
- Results of internal and external audits
- Minutes of meetings including environmental management performance.
- Dust monitoring records

- Noise and vibration monitoring records
- Environmental incidents
- Discharge consents / licences
- Complaints & enquiries
- KPI Records.

3.5.6 INTERNAL AUDIT

The procedure for carrying out internal audits is documented in **'Internal Audit Procedure'**. This includes management system audits as well as project environmental plan implementation audits which will be carried out at least quarterly to ensure that each key activity is audited at least once during the execution of the works

Internal audits will be carried out by a Heydon & Carr environmental manager or qualified auditor that is independent from the project management team and reports to Heydon & Carr Director. The project team will facilitate second and third party audits carried out on behalf of the client.

3.6 MANAGEMENT REVIEW

A management review meeting will be scheduled at least every six months to review performance against KPIs, staffing, training and analysis of site inspections, audits and non-conformances and any issues that require discussion by the top management and key personnel.

4. ENVIRONMENTAL ASPECTS

The following environmental issues have been identified as significant for the works:

- Subcontractors
- Noise and vibration
- Dust
- Waste
- Water
- Archaeology
- Energy

In the following section, each aspect will be assessed and a set of control and mitigation measures will be devised to serve as a guide to the personnel involved in each of them

PROCUREMENT

4.1.1 SUPPLIERS AND SUBCONTRACTORS

All suppliers and sub-contractors are selected form Heydon & Carr approved suppliers list and submitted for approval by the client.

The procedure to evaluate and assess each supplier is documented in **'Purchasing Procedure'** and takes into account quality, environmental, safety and sustainability criteria in addition to technical criteria.

Subcontractors will be required to sign up to Heydon & Carr and the client´s environmental objectives and control procedures.

Heydon & Carr keeps a register of the type of wood products used in each project and the use they have been given.

4.2 NOISE AND VIBRATION

Noise and vibration will be assessed regularly to ensure disturbance is kept to a minimum at all times. Best practical means as defined in the Control of Pollution Act shall be applied at all times.

4.2.1 ACTIONS

All plant used on site will comply with the noise limits quoted in the directive 2000/14/EC/United Kingdom Statutory Instruments (S) 2001/1701.

Adopt recommendation of BS 5228 (Annex B of Part 1 and sections 7.3 and 9.2 of Part 4).

As far as reasonably practicable, plant or equipment liable to create noise and /or vibration will be located away from sensitive receptors. Barriers will be used whenever possible.

Plant and equipment will be maintained in good working order, including noise control measures.

Electrically powered plant, equipments and tools will be preferred over diesel of petrol driven.

When reasonably practicable, effective exhaust silencers will be fitted and maintained in good working order.

Machines not in use will be shut down or throttled down to a minimum.

Notifications will be given to receptors in advance of works with high levels of noise and / or vibration giving details of duration and likely impacts.

Toolbox talks will be carried out to make staff aware of the sensitivity of the site location.

Adequate lubrication to all plant including cranes and working platforms will be provided to control unnecessary noise.

Materials will be carefully handled to minimise noise and vibration.

Assessment of noise and vibration will be carried out prior to commencement of the works and residents eligible for noise insulation or re-housing will be identified.

4.2.1 VEHICLE AND PLANT MANAGEMENT

Heydon & Carr management review annually suitability of plant and equipment.

The site manager will periodically review the plant on site against the requirements of this environmental plan.

Heydon & Carr optimises the selection of routes and disposal facilities as reduction in travel distances lead to cost reductions..

All vehicles hold current MOT certificates, except when not required due to vehicle’s age.

Use whenever possible mains electricity rather than diesel or petrol generators.

Wheels are washed before leaving site when muddy. Normally in dry weather no wheel washing takes place to maintain the site roads.

Weigh load indicators fitted to all lorries (HGV) to prevent overloading. Fuel tankers and roll on-off bins cannot operate when overloaded. Vehicles such as flat bed trucks, trailers or low loaders cannot be fitted with weight loaders.

4.3 **DUST**

Air Quality & Dust Controls:

Dust control is a big issue in the successful management of all construction and development sites. Dust is mainly a problem during the summer months, however it can take as little as a couple of dry days for it to create a nuisance. Best practicable means will be used to control dust generated from works activities. Where possible, the dust controls contained in the following literature will be implemented:

The Mayor of London Best Practice Guidance – The control of dust and emissions from construction and demolition

To manage this, standard dust suppression techniques will be employed:

General Activities:

Erect plywood hoardings around the site boundaries to reduce wind blown dust affecting nearby residences and vegetation. Hoarding should be erected prior to ground clearance (suitable re-used materials will be considered in preference to new materials).

Regular inspection of potential sources of dust, such as stockpiles, will be undertaken to ensure dust is not being generated.

Provide dust screens to shield residential and other sensitive areas

Implement controls on site traffic to ensure that construction vehicles are, inter alia, operated efficiently, well maintained, not left running whilst they are not operating, keep to site speed limits and do not queue at the site entrances.

Ensure grout is mixed in enclosed / shielded area.

Ensure, when possible, that all vapour and odour generating processes are kept away from receptors.

Make sure exhausts do not discharge directly at the ground

Keep drop heights into hoppers and lorries to a minimum

Protect very fine or dry material from the wind.

Site and shape stockpiles to minimise potential for dust generation.

No burning on site

To control dust generation during materials storage, stockpiles will be regularly dampened down using water as a dust suppressant

All operatives will receive regular toolbox talks on dust minimization and prevention. Regular site inspections will be carried out by the project manager to ensure that dust is within acceptable limits.

Haul Roads & Traffic:

Enforce site speed limits

Sheet vehicles carrying spoil to prevent dust nuisance and cross contamination.

Provide wheel wash facilities at site entrance to remove mud from haulage vehicles and to ensure mud is not transferred onto the surrounding road network.

Ensure wheel washes do not use detergents and incorporate appropriate containment, water treatment and conservation systems.

Check site accesses and local roads daily for mud and arrange for it to be cleaned up immediately.

Plant, Equipment, Vehicles:

Turn off engines when not in use. If any plant or equipment is emitting black / heavy smoke, cease use and send for servicing.

4.3 **WASTE**

Arising from soft strip and demolition of the buildings shall be managed in accordance with the national waste hierarchy and cost restraints. Similarly construction waste will be minimized by managing procurement, encouraging reuse and recycling and prevention of contamination.

The site waste manager has been appointed to prepare and maintain a site waste management plan in accordance with the SWMP regulations. The plan will estimate the amounts of each waste type to be produced by the works and establish opportunities to dispose of the wastes in compliance with the environmental objectives.

Heydon & Carr record waste movement (i.e. transfer and consignment notes) using an electronic spreadsheet which provides data input to the SWM Plan.

Hazardous waste will be removed and disposed of by licensed contractors and non-hazardous waste will be preferably re-used or recycled.

Heydon & Carr shall ensure that all carriers removing waste from the site will be licensed as well as transfer stations and waste management facilities.

4.4 WATER

Compromise to all water bodies and facilities are to be minimised as far as reasonably practicable. Adapted working methods are to be established to ensure protection of surface and groundwater from pollution arising from project activities.

There are no river crossings, associated floodplains or surface water abstractions and discharges within or in the vicinity of the site. However, existing surface water drains in the vicinity of the site that need to be protected from accidental discharge of site surface runoff and site drainage.

4.4.1 ACTIONS

Protective measures will be in place to prevent pollution of surface and ground water. Some of the actions to be implemented are:

Trade effluent will be discharged to sewers once permission has been obtained from Thames Water.

Containers of contaminating substances will be leak proof and kept secure to prevent spills and vandalism. The containers and areas for transfer will be protected by temporary impermeable bunds with a capacity of 110% of maximum stored volume.

All re fuelling, oiling and greasing will take place above drip trays or on an impermeable surface which provides protection to ground and away from drains. Vehicles will not be left unattended during re fuelling.

Only vehicles and construction equipment free of leaks will be permitted on site. Drip trays will be placed below static mechanical plant.

All wash down of vehicles and equipment will take place in designated areas and wash water will be prevented from passing untreated into watercourses and will comply with EA PPG13.

4.5 ARCHAEOLOGY

All works are to take into consideration archaeological concerns throughout the life time of this project. Advice and planning is to be put into place to ensure items are handled appropriately and sympathetically, although there are no schedule ancient monuments located within the immediate vicinity of the site.

Heydon & Carr shall provide access to contractors to enable the project manager's archaeological works in accordance with the written scheme of investigation if necessary

4.6 ENERGY

Heydon & Carr environmental objectives include a reduction of energy consumption as well as emissions of CO_2. In line with this goal, Heydon & Carr will sign up to energy saving initiatives championed by the client.

APPENDICE C

SITE WASTE MANAGEMENT PLAN

SITE WASTE MANAGEMENT PLAN

Project: 1 Stanhope Gardens Highgate London N6 5TT



Introduction

This Site Waste Management Plan has been prepared for this specific operation. However, as it is only part of the overall management plan, it should be recognised that activities on the site covered by other Plans may have a bearing on this operation and it should therefore be read in conjunction with.

Heydon & Carr will adhere to the waste hierarchy and minimise its impact on the environment. As much waste as practicable will be segregated on site for recycling. Waste generation will be monitored to obtain a baseline so targets can be set.

Good waste management ensures that any potential value in the waste is realised whilst taking care of the environment. Good waste practice should follow the waste hierarchy. The hierarchy has five levels, providing a framework for decision making and reflecting the environmental and cost issues surrounding waste:

- **Prevention** – not creating waste in the first place
- **Minimise** – reducing the amount of waste created
- **Reuse** – reusing materials for the same purpose (either on or off site)
- **Recycling/recovery** – reprocess or recycle waste into new products e.g. timber into chipboard
- **Disposal** – dispose to landfill, least desirable option.

1. Minimum standards to be adopted on all Heydon & Carr Sites

On all Heydon & Carr Projects a high quality controlled waste management system encompassing a controlled waste recycling scheme is set up. It is hoped that these systems will be both cost effective and progressively more sustainable in environmental terms.

- All Projects will be audited at design stage to assess the potential for waste prevention, reduction, re-use and recycling during demolition and construction phases.
- Waste Management will be planned at the earliest stage of the Project design (e.g. where to site mini skips, skips and roll on roll offs where applicable and at which stages of construction they will be required).
- Waste Re-use and recycling schemes will be considered. As a minimum timber and inert hardcore (concrete, sand, rubble, masonry and bricks) should be recycled on all sites.
- Waste will only be removed by registered carriers, in accordance with waste transfer notes and disposed of at a licensed transfer station for sorting and recycling. Mixed waste will only be disposed of at a licensed landfill.

2. Project Aim

On all Projects Heydon & Carr are committed to implementing this SWMP so that it is effective, accurate and economical, we will ensure that the procedures put into place are working and are maintained.

Responsibilities

Director / Manager	1. Considering effective waste elimination and reduction through design and specification (Refer to SWMP Checklist – Appendix A). 2. Producing the first draft of the SWMP
Commercial Manager	1. Considering effective waste management through contractual arrangements with sub-contractors and procurement (Refer to SWMP Checklist – Appendix A) 2. Updating the SWMP
Construction Manager / Project Manager	1. Considering effective waste management through segregation and recycling (Refer to SWMP Checklist – Appendix A). 2. Updating and managing the SWMP
Heydon & Carr HS&E Advisor	Monitoring the SWMP
All	Adhering to the SWMP

3. Waste Management – Planning, Design and Procurement

In order for a waste management scheme to be effective it is important to minimise waste arisings at all stages of a project from design through demolition, construction and future maintenance.

1. A demolition audit of relevant buildings was undertaken and demolition techniques for maximum re-use / recycling of materials were selected.
2. Demolition bricks, rubble and concrete will be recycled by using them for the piling mat.
3. Use prefabricated materials where possible
4. Where unforeseen controlled waste is to be produced there shall be an initial assessment of the type, volume and classification of the material.
5. An indication of the period during which the waste is to be produced may be taken from the master / stage programs.
6. The material volumes and chemical analysis report details shall then be offered to various, appropriate, tips, together with all available supporting documentation / analysis in order to confirm the classification and ensure the appropriate license arrangements are in place.
7. Upon confirmation of the above, and issue of the tip / haulier registration details, material removal shall commence.
8. All material disposal operations shall be recorded on the Heydon & Carr standard log sheets, which describe the date, material, classification, haulier, vehicle registration and tip details.
9. Copies of all disposal logs shall be retained on site for the purposes of inspection, verification and measurement of the classified material quantities and will be produced on demand by Regulatory bodies such as the Environment Agency.

10. During the course of the works, further material testing shall be conducted as befits the site conditions or specific instructions received.

4. Waste Minimisation

Waste minimisation means reducing the amount and environmental impact of waste generated. The following will be undertaken:

1. Identify unknown wastes by location, description, sampling and chemical analysis.
2. Bricks, rubble and concrete will be crushed for use as hardcore for the piling mat
3. Classify waste before disposal
4. Allocate responsibility for waste on site
5. Provide waste training and raise awareness on site
6. Ensure waste transfer notes are completed , as required under "duty of care"
7. Order the correct amounts of materials
8. Prevent damage of materials during delivery
9. Dispose of different waste in the correct containers

5. Identified Waste Streams

The following waste streams have been identified as arising from this project:

Piling	Inert bricks and rubble, concrete, soils
Ground works	Concrete, metal, packaging, glass, timber, soils
Superstructure	Blocks, hazardous materials, paint, plaster, packaging, timber, bricks, mortar
Externals / Drainage	Plastic, soils, inert bricks and rubble, timber, packaging, metal manhole covers
Refurbishment,	Trees, shrubs, light fittings, electrical waste, timber, metal

6. Waste Management Options

Waste Type	**Re-Use / Recycle / Dispose**	**Waste Facilities Required**
Inert - masonry, brick, rubble, hardcore, hardened concrete,	Recycle – Segregate and crush on site or off	Skip, Crusher *

paving slabs, ceramic tiles	site	
Soils (Uncontaminated)	Dispose	Muck Away lorry
Soils (Contaminated)	Dispose	Muck away lorry
Ferrous metals	Recycle - Segregate	Bin / Skip
Non ferrous metals	Recycle - Segregate	Bin / Skip
Casing off cuts / Sheet Pile off cuts	Recycle - Segregate	Bin / Skip
Shuttering	Re-use on each false deck floor then recycled Offcuts re-used for boarding riser holes (openings in slabs)	Skip
Insulation	Dispose	Compactor
Cement Board	Dispose	Compactor
Timber	Recycle	Bin / Skip
Stone	Recycle	Bin / Skip
Glazing	Return to supplier or recycle	Bin / Skip
Plastic / Packaging	Recycle	Bin / Skip, Compactor
Hazardous wastes (asbestos, electrical and smoke detectors)	Dispose	Skip / Store area
Materials	Dispose	
Paper	Recycle	Bin
Printer Cartridges	Recycle	Bin
Aluminium cans	Recycle	Bin
Food waste	Dispose	
Trees, shrubs, hedges etc	Shredded and re-used in landscaping	

*** Note**

Permits or licences are required for certain waste recovery activities such as the operation of mobile crushing plant or the temporary storage or treatment of waste on site

7. Waste Management on Site

All skips provided will:

1. Prevent spillages or leakages;
2. Be corrosive resistant (to the weather elements);
3. Prevent materials from being blown away and
4. Will prevent savaging from animals.

The segregation of wastes will be of the following types:

- Timber
- Inert: block work, bricks, rubble and concrete
- Ferrous Metals
- Non ferrous metals
- Plastics, packaging
- Cardboard, Paper
- Aluminium cans
- Mixed/General Waste (for all other wastes)
- Redundant concrete foundations, paving etc will be crushed on site. This fill will be re-used for the piling matt.

Subcontractor operatives will still be responsible for putting segregated waste into the

Skips/bins provided. All bins will be labelled as necessary. Where appropriate, the storage of

Materials on site for potential reuse will be at locations agreed by Heydon & Carr. Materials likely to be stored including waste timbers, pallets, bricks and metals.

The waste contractor will collect all of the skips. The segregated skips for metals, inert and

Timber will be recycled. The waste contractor will aim to recycle a large proportion of the

Mixed and plastic skips.

All hazardous waste will be removed by a Licensed Sub contractor. Enclosed locked drums or skips will be used for the collection of hazardous wastes. An accredited hazardous waste licensed carrier will collect the hazardous wastes to ensure legal disposal. Any subcontractor caught contaminating any non-hazardous waste skips with hazardous material will be contra-charged appropriately.

This SWMP will be communicated through project meetings and tool box talks

8. Environmental Management

Environmental noise levels will be maintained within the agreed levels, with work ceasing during any “quiet periods.” Where generated dust proved to be an environmental nuisance will be suitably suppressed.

Where reasonably practicable, any arisings will be re-used/recycled rather than transporting away to landfill. Any landfill sites used will be as near to site as possible so as to reduce vehicle emissions and excessive use of fuel. Please refer to our Site Waste Management Plan.

All static liquid-fuel driven plant will be provided with drip trays. Fuels and liquids stored on site will be kept within secure, and where appropriate, lockable facilities. We intend to remove the need for site-stored fuels by providing a visiting fuel supply bowser where practicable. Adequate provisions will be made to prevent fuel spillage. Any spills will be cleared away using appropriate spill kits.

Our works may create noise and vibration, nuisance, dust, and spoil deposits on public thoroughfares. We will endeavour to eliminate and reduce at the very least our impact upon the local environment and our neighbours. We will adhere to all noise restrictions imposed by the local authority. Any dusts generated will be cleared away where reasonably practicable, otherwise

suppressed using water.

A road sweeper vehicle will be employed to clear public highways affected by our site activities if becomes necessary. There will be wheel wash facilities set upon site on the access/egress road.

Neighbourhood liaison will be carried out by our Liaison manager who will keep neighbours informed of site activities, including major activities involving large numbers of truck movement, extended working hours etc. Heydon & Carr proposes using personal visits, notices posted on the hoarding and newsletters.

A duty of care/waste transfer note will be completed and issued to each vehicle leaving the site with special waste. The note will contain the following required information;-

- Vehicle registration number
- Driver's name
- Time of entering and leaving the site
- description of waste
- Disposal facility

Copies of the waste/transfer notes will be retained on site and may be inspected by the Client or his appointed representative at any time.

9. Compliance & Monitoring

Site management and supervision, visiting managers and safety managers (as named previously) will monitor compliance with the safety method statement.

They will assess compliance against safety legislation, contract conditions, site rules and document contents. Therefore, our works will be monitored to ensure that the planned sequence of operations is not deviated from in any way.

It is important that all method statements are followed explicitly. Unauthorised variations will not be permitted. Any amendments will require documenting, and a further method statement briefing to be carried out to the workforce.

This SWMP will be reviewed and updated as necessary.

APPENDICE D

TRAFFIC MANAGEMENT PLAN

Traffic Management Plan

PROJECT: 1 Stanhope Gardens Highgate London N6 5TT



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1.0 Introduction
Purpose
References

2.0 Outline Considerations
Surrounding Environment
Requirements to achieve proposed arrangements

3.0 Traffic Routes
Proposed Delivery Schedule

4.0 Rules for Drivers

1.0 Introduction

The following information provides guidance for the management of site traffic to be attributed to the proposed construction works at the site at 1 Stanhope Gardens Highgate London N6 5TT

Further reference to the management of traffic management arrangements will be made within the Construction Phase Health and Safety Plan prior to works commencing at the site and will be updated every month to coincide with any changes to the development construction phase and site personnel.

1.1 Purpose

The purpose of this document is to assist with the planning of traffic management arrangements and preparation for proposed construction works at the site at 1 Stanhope Gardens Highgate London N6 5TT
The document will assist with communication of proposed arrangements to neighbouring property occupiers and other persons affected by the works.

1.2 References

This Traffic Management Plan is prepared with reference to the following documents:

HS(G)136	Workplace Transport Safety
HS(G)144	The Safe Use of Vehicles on Construction Sites
HS(G)150	Health and Safety in Construction
HS(G)151	Protecting the Public – Your Next Move
L144	Managing Health and Safety in Construction

The following legislation is applicable to the management of traffic during the undertaking of construction works:

New Roads and Street Works Acts 1991
To ensure any temporary traffic arrangements meet with required standards.

Health and Safety at Work Etc Act 1974
To ensure Employers provide and maintain workplaces, equipment and systems of work so that they are, as reasonably practicable, safe to workers and others who may be affected by their operations.

CDM 2015
To ensure risks are identified and addressed at the design stages and relevant risk information is communicated to all parties and to ensure the effective management of health and safety throughout the whole project.

Management of Health and Safety at Work Regulations 1999
To identify risks and institute safety management systems through provision of information and training.

Control of Substances Hazardous to Health Regulations 2002
To identify, reduce and monitor risks from potentially hazardous substances and materials.

2.0 Outline Considerations

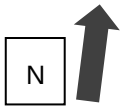
2.1 Surrounding Environment

The site is bounded by 1 Stanhope Gardensto the South and Alice street to the West. The surrounding environment is quiet with significantly medium volumes of traffic movement along Tower Bridge Road, however the management of traffic movement to the vicinity of the site, approaching to, entering and subsequently departing the site will require detailed consideration to ensure the project is conducted and completed without increased risks to persons who may be affected by the works, either by passing through the area or working/educated within the local neighbourhood.

The development site is highlighted in yellow and the surrounding environment is detailed as such:

North	East
The north of the site is bounded by Residential property	The site is bounded by Residential property





West	South
The site is bounded by Residential property	The site is bounded by the main road and Residential property

2.2 Surrounding Environment Key Considerations

Protection of Pedestrians within Surrounding Streets

The traffic route has been devised and will be adhered to in order to prevent traffic approaching from various routes and to provide familiarisation to repeat drivers. The proposal is to approach the site in the sequence detailed within Section 3.0.

A traffic marshall will be employed and present at the access gate in 1 Stanhope Gardens at all times to guide vehicles in and around the site in a controlled manner without risk to pedestrians and other road users.

A separate pedestrian access to the site will be established prior to the commencement of the works as part of the alterations to the vehicle entrance, to ensure segregation of vehicles and site operatives occurs. Pedestrian access to the site will be security controlled via Heydon & Carr ID card system.

Pedestrians will still have access along the footway into the site, though care and consideration is paramount for the safety of others during Construction works. Heydon & Carr will maintain and sweep the footpath along King Charles Road. In the event of vehicles accessing the site a traffic marshall will be in attendance to assist pedestrians. Signage will also be in place warning pedestrians of vehicle access and movements.

Protection of Other Road Users along 1 Stanhope Gardens

Vehicles leaving the site will enter 1 Stanhope Gardens Vehicles will be restricted to a sufficient timescale for offloading of materials as not to disrupt other vehicle movements.

A traffic marshall will be present at all times to guide vehicles around the delivery vehicles.

Limitations of Vehicle Use

Due to the limited space along Stanhope Gardens, vehicles attending site will be limited to rigid type transportation only.

2.2 Surrounding Environment Key Considerations cont.

Removal of controlled waste from site

The following documentation will be checked, copied and retained on site before allowing anyone to remove 'controlled waste' from site.

1. The person or company carrying the waste offsite must be registered with the local Waste Regulatory Authority and be able to produce a copy of the registration document.

2. Confirmations that the waste is being transferred to an authorised person, tip or transfer station.

3. Details of the waste material have been passed onto the carrier via a Waste Transfer Note with a covering order.

4. All vehicles must be covered by the licensed carrier with netting or sheeting prior to removal from site.

Access for Emergency Vehicles

The main site entrance will be kept clear and free of any obstructions, such as delivery vehicles to ensure that access can be gained to the site areas and along 1 Stanhope Gardens at all times.

2.3 Requirements to achieve proposed arrangements

Vehicles can 'Pull in' for offloading of materials so that other vehicles can pass. Traffic cones can be placed so as to make aware others of the off loading to site.

Provision of a suitably competent Banksmen. The banks man will wear full PPE including hard hat, hi- visibility vest or jacket and protective footwear. The banks man will maintain visual contact with the driver at all times giving clear instructions by hand signals or vocal commanded.

3.0 Traffic Routes

1. Vehicle drivers/suppliers will call the Site Supervisor 30 minutes prior to arrival at site. The scheduling of vehicles will be arranged to minimise the attendees at site at any one time. Delivery timetable will be placed in the security office and updated on a daily/ad hoc basis.

2. Access will be provided along Stanhope Gardens into site

3. Delivery vehicles must be off loaded immediately and manouvere away from site
4. Upon completion, the vehicle will leave the site in forward gear, under the control of the site traffic marshall who will temporarily halt pedestrian traffic to allow for safe exit.

3.1 Proposed Delivery Schedule and Vehicle Sizes

Spoil removal Lorries
Concrete Supplies, 6 wheeled vehicles
Flat bed lorries
Misc Material deliveries, 7t lorry
Rigid delivery lorries for materials
Reinforcement deliveries, rigid flat bed
Piling Rig-Special delivery Out of Hours

- Suppliers should note that all deliveries to site will be scheduled and time allocated against each. Any supplier and vehicle not complying with the agreed slot for delivery will be turned away and the delivery re scheduled
- Heydon & Carr will take all reasonable measures and care to ensure that deliveries to the site and collection of materials/plant from the site are carried out in a controlled manner and avoid the need for vehicles to wait on the surrounding roads.
- Delivery suppliers/vehicles not complying with this will be banned from returning to site

4.0 Rules for Drivers

All drivers on site are required to comply with relevant site worker rules and the following site safety rules:

- All drivers must use the specific access route to the site,
- All drivers must comply with the “Traffic Management Controls” in place.
- All drivers must report to the holding area and wait for instructions before proceeding.
- Drivers are required to wear high visibility clothing when not in their cab.
- Drivers who have not attended the project health & safety induction must remain with their vehicles unless escorted.
- The speed limit, one way systems, prohibited areas and reversing procedures must be strictly adhered to.
- The instructions of relevant traffic marshalls must be followed.
- All vehicle/plant lights, warning lights and other warning devices must be fully operational.

Arrangements for ensuring the safety of visitors including pedestrians

Where visitors have not attended the site induction, the following arrangements to ensure their safety:

- Visitors must be directed to the site offices via a safe route.
- Visitors to the site must not be allowed to enter the designated construction areas of the site without being escorted at all times by a person who has attended the site induction.
- Relevant safety instructions must be given by the escort.
- The visitors escort must provide relevant personal protective equipment such as hard hat, hi-vis vest and steel protective toe cap boots.

Safety signage

Safety signage must be used to inform all pedestrians of the desired route which is to be taken to avoid interaction with delivery and collection vehicles the site Manager will ensure that this is completed.

Visual and Audible Alarms

All site vehicles such as excavators, forklifts, mobile cranes, dumpers, rollers must have a flashing beacon so that they are visible to others on site. These beacons must be in use whilst the machine is in use.

Any reversing vehicles must have audible alarms to warn others on site of the intent to reverse.

Defining material routes

Footpaths must be kept clear and free of all obstructions and construction activities.
Barriers or pedestrian fencing must be erected complete with warning and mandatory signage to prevent unauthorised access. Clear visible barriers in place to define material route.

Site Management & Staff
There will be no on site parking for our staff on the development, they will be required to attend via local public transport.

APPENDICE E

ORGANISATIONAL CHART

HEYDON & CARR MANAGEMENT STRUCTURE

The Company operates from its Head Office Heydon & Carr ltd.
Lower Ground Floor
Entrance C, Rembrandt House, Whippendell Road, Watford, Hertfordshire
WD18 7PG

PRINCIPAL AREAS OF BUSINESS

Heydon & Carr is a Main Contractor delivering New Build, Refurbishment and Fit-out projects. Heydon & Carr operate in all areas of London and the South East.

Undertaking projects from £100,000 to £10m under Traditional and Design and Build contracts, we have an experienced management team with a proven track record in delivering quality buildings that exceed client's expectations. Utilising innovative and ecological construction methods we have exceeded difficult planning targets for sustainability using renewable energy.

As part of national and local plans to create more sustainable homes, Heydon & Carr has achieved BREEAM Eco homes "Excellent" rating and "Code for sustainable homes" as well as "Secure by design" on several projects

Heydon & Carr provides management expertise, experience, capability and reliability in order to consistently achieve the high quality of standards demanded by our clients. We will be responsible for the management of both the design and construction process from inception to project handover, thus ensuring that the client needs are interpreted by the design and construction teams including the specialist sub-contractors to allow the construction process to proceed in a cohesive and efficient manner.

The management structure is organised to provide a single point contact through the managing director. Additional management and technical support will be provided by the directors, contract manager and project administration team.

