



# CONSTRUCTION PHASE HEALTH & SAFETY PLAN



## Construction of 52Nr New Dwellings at Land at Chapel Hill, Longridge

Status:	1 <sup>st</sup> Issue
Date Revised:	

## Construction Phase Plan

### DOCUMENT CONTROL SHEET

#### Issue Detail

Issue No.	Prepared By:	Signed:	Checked By:	Signed By:	Date:
0	James Dean		Adrian Dale		
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#### Revision History

Revision	Description
0	First issue
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This Health and Safety Plan is prepared in accordance with the Construction (Design and Management) Regulations 2015 'Managing Health & Safety in Construction (L153). It is a working document which will evolve during the course of the construction phase. The Company Health and Safety Policy forms part of the plan and all construction work will take account of its contents. It is the Principal Contractors intention that the project is constructed in such a way that the hazards to the health and safety of all persons either during the construction phase or during the use of the building are eliminated or reduced as far as reasonably practical. All those involved in the project have a duty to comply with the Health and Safety Plan.

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### 1.0 Project Overview & Scope of Works

This plan covers the access, landscaping and the erection of 52 new build residential properties.

The works are to consist of –

- Site Set-up including necessary Corporate and CDM 2015 related signage
- The provision of welfare facilities including site office & toilet and a laydown area
- Identification and marking of services
- Groundwork and drainage
- Blockwork and floor construction
- Roof construction and coverings
- Mechanical and Electrical 1<sup>st</sup> & 2<sup>nd</sup> fix
- Plastering
- Joinery 1<sup>st</sup> & 2<sup>nd</sup> fix
- Decoration
- Floor finishes
- Access roads
- Landscaping
- Site Clearance, waste disposal and handover

### 1.1 Location of the Site

The site is situated on the edge of an established built up area, approximately 0.5 miles from the centre of Longridge. The site is located off Chapel Hill (B6243) and Chapel Brow. The surroundings of the site consist of St Cecilia's RC High School, an existing industrial unit, a recycling centre and residential properties. Alston Reservoir is to the south of the site, this remains in UU's ownership as an operational asset. The site also partly falls within the St Lawrence's Conservation Area.





## Construction Phase Plan



***Existing site entrance***

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### 1.2 Names of Parties

**The Client is:**

**Blackmore Group**

2 Mount Street  
Manchester  
M2 5WQ

Contact:

Tel: 0161 302 6510

Email: [contact@theblackmoregroup.com](mailto:contact@theblackmoregroup.com)

**The Principal Designer is:**

**Chrome Services Ltd**

Office 5  
Stanley House  
15-17 Ladybridge Road  
Cheadle Hulme  
SK8 5BL

Contact: Adrian Dale

Tel: 0161 486 9231

Email: [adrian@chromeservices.co.uk](mailto:adrian@chromeservices.co.uk)

**The Architect is:**

**Survey by Design Ltd**

Contact: Ossie Belshaw

Tel: 07753477105

Email:

**The Structural Engineer is:**

Atkinson Peck  
Watson House  
45 Waterloo Road  
Stockport  
Cheshire  
SK1 3BJ

Contact: Adrian Peck

Tel: 0161 480 2833

Email: [apce@atkinsonpeck.co.uk](mailto:apce@atkinsonpeck.co.uk)

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### **The Principal Contractor is:**

#### **Chrome Services Ltd**

Office 5  
Stanley House  
15-17 Ladybridge Road  
Cheadle Hulme  
SK8 5BL

Contact: Adrian Dale

Tel: 0161 486 9231

Email: [adrian@chromeservices.co.uk](mailto:adrian@chromeservices.co.uk)

### **1.3 Duration**

Proposed Construction Phase: 4 Phases of 9 months overlapping

Proposed Date of Possession: 30.05.2017

Proposed Completion Date: June 2019

### **1.4 Purpose of the CPHSP**

This plan is prepared to assist in compliance with the requirements of The Construction (Design and Management) Regulations 2015. It is intended that this will be achieved by providing information on:-

- Health and Safety legislation in the construction industry
- Identified Hazards that may be encountered during the project
- Assessments made to quantify the risk
- Control measures that require being introduced to minimize the risks

The Construction Phase Plan is a dynamic document that will change and develop throughout the project. The Plan will be reviewed monthly to ensure that the content reflects the needs of the project. Additionally, the Plan will be reviewed in the light of any unforeseen occurrence. When the Plan has been updated a copy will be submitted to the Client.

## **2.0 Statement of Health and Safety Principles and Objectives for the Project**

### **2.1 Policy**

It is the policy of Chrome Services Ltd that all operations will be carried out paying due regard to all the statutory requirements imposed on them to enable the contract to be undertaken with the provision of appropriate safeguards to prevent members of the public, employees or sub-contractors being exposed to risks to their health and safety.

Procedures will be in place to identify principal health and safety hazards likely to be encountered during the construction work and where appropriate measures to be taken against hazards noted. Risk assessments will be prepared by Chrome Services Ltd under the Management of Health and Safety at Work Regulations 1999.



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Chrome Services Ltd will take responsibility for the plans, the design and changes due to unforeseeable circumstances and review the plan during the execution of the project.

### 2.2 Objectives

In accordance with this policy, Chrome Services Ltd has set the following objectives:

- a) To have zero enforcement action taken over the duration of the project.
- b) To eliminate all accidents and potential sources of ill health that could occur within the project.
- c) To have no occupational ill health arising from the project.
- d) To ensure that no environmental damage occurs.
- e) To establish safe working practices for all employees and sub-contractors working on this contract.
- f) To develop a high degree of awareness in health, safety and environmental issues.
- g) To provide information and training on health and safety and to encourage employees and sub-contractors to participate in meeting the requirements of the legislation to enable the contract to be completed safely.
- h) To ensure the least disruption to local businesses and members of the public as a result of the project
- i) To exclude unauthorised persons from the work site.
- j) To provide safe access to and egress from working places
- k) To ensure that no injury or harm to any members of the public.
- l) To ensure that manual handling tasks are reduced to the lowest level reasonably practicable.
- m) To provide operating conditions so that the lowest reasonably practicable noise levels are maintained.
- n) To ensure that odour nuisance does not occur, so far, as is reasonably practicable.

### 2.3 Responsibility

These aims will be achieved within the company's organization and arrangements for the promotion of safety, health, and welfare.

As with all operational functions, the company carries out its responsibilities for safety through the Owner and Site Supervisors for whom safety continues to be a vital and ongoing part of their responsibilities. Overall responsibility for the site and its management will be the Principal Contractor.

The Site Project Manager will conduct regular briefings on the site progress and key issues.

On the first arrival at site allowance must be made for:

- Site induction for individuals, which will include "Site Safety Rules".
- Mandatory Booking in and out of site (includes lunch and breaks).
- Registering workers with appropriate training and competency certificates where necessary (i.e. CSCS/CISRS/CPCS/JIB/PASMA/IPAF etc). Operatives are to note: a random selection of cards will be confirmed against the issuing organisation.
- Providing inspection and other certificates for equipment and machinery to be used safely

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- on site.
- Daily / weekly site briefing.
- Demonstrating how contractors will monitor safety and its duration and issuing copies of these reports to the Site Project Manager.
- Pre-existing health issues.

### 3.0 Existing Site Information, Security & Restrictions

#### 3.1 Existing Site Information

The site is located in an existing residential area and opposite an existing high school. It is not considered that the proposed construction work will create any additional risks to the safety and welfare of the general public's use of Chapel Hill. Heras screen fencing/hoarding will protect the public from access to the site. However, Chrome Services Ltd shall endeavour to minimise all foreseeable risks when operating in the vicinity of the adjacent public highways, through careful control of site traffic, site deliveries, and physical segregation through the use of signage and road traffic barriers as necessary.

Careful planning, implementation, monitoring, and co-operation will minimise the anticipated risks to the public and particularly children to an acceptable level. Chrome Services Ltd will ensure that provisions are in place to protect children and the general public at large from hazards evolving from the construction operations. There are no notified planning restrictions, which might affect health and safety.

Access to the site will be from Chapel Hill (B6243). Careful consideration will be given regarding deliveries and waste collection. Vehicles must not be too large for the local road network. Deliveries and collection will be scheduled to avoid peak travel times including drop off and collection times at the nearby school.

#### **Local Schools**

There is a high school located directly opposite to the development:

St Cecilia's Rc High School  
Chapel Hill  
Longridge  
Preston  
Lancashire  
PR3 2XA

Email: [info@st-ceciliass.lancs.sch.uk](mailto:info@st-ceciliass.lancs.sch.uk)  
Phone: 01772 783074

Another high school is located nearby:

Longridge High School  
Preston Road  
Longridge

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Preston  
PR3 3AR

Headteacher: Mrs J Green

Telephone: 01772 782316  
Email: admin@lhs.lancs.sch.uk

### **Existing Services**

The existing plot is currently rough grassland and there are no known services within the plot.

Chrome Services Ltd will take all reasonable precautions including carrying out cable detection to avoid contact with live services. This will only be undertaken by competent persons.

Safe digging practices including CAT scanning and hand dug trial pits will be undertaken in line with Cambrian Homes Ltd procedure, should any possible services be identified on site.

Care must be taken when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights are able to operate without coming into contact with retained trees. Any contact has the potential to cause life-limiting damage. It is, therefore, essential that any activities in close contact with retained trees are carried out under the supervision of a banksman to maintain sufficient clearances. Any tree damage must be reported to the Arboricultural Consultant or Local Authority Tree Officer as unreported damage could lead to the structural instability.

### **Tree Protection**

Temporary protective fencing will be installed in the positions indicated on the Tree Protection Plan.

Care will be taken when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights are able to operate without coming into contact with retained trees. Any contact has the potential to cause life-limiting damage. It is, therefore, essential that any activities in close contact with retained trees is carried out under the supervision of a banksman to maintain sufficient clearances.

Any tree damage will be reported to the Arboricultural Consultant or Local Authority Tree Officer as unreported damage could lead to the structural instability.

### Excavation in the Root Protection Area

Any necessary excavation must be carried out using hand tools to avoid direct damage to the protective bark of tree roots. It may be possible in some instances to use specialised equipment such as high air pressure machinery to excavate the soil with minimal disturbance to roots.

Exposed roots will be wrapped in dry, clean Hessian sacking to prevent desiccation and to protect from rapid temperature changes. In warmer weather, the sacking should be kept moist by regular watering. Sacking should be removed before backfilling.

Roots less than 25mm diameter may be pruned back, preferably to a growing point. A sharp cutting tool such as bypass secateurs or a handsaw should be used to leave the smallest wound possible. Roots greater than 25mm in diameter should be retained wherever possible.

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Root pruning should be carried out under the supervision of the Arboricultural Consultant or the Local Authority Tree Officer to ensure that only roots necessary to facilitate the development will be removed and the long-term well-being of retained trees is maintained.

Backfilling of any excavation should be carried out by hand to avoid direct root damage by excessive compaction and should include, where possible, the replacement of inert granular material mixed with sharp sand (not builder's sand) around retained roots.

### **Ground Conditions**

A Site investigation has been completed and will be available in the site safety folder.

#### *Potential Risks to Construction Workers during Development*

The concentrations of contaminants at the site are low and are unlikely to require measures beyond that required for health and safety purposes on a construction site.

The depleted oxygen concentrations should be noted and appropriate health and safety measures for work in excavations and confined spaces below ground put in place.

### **Made Ground**

Given the limited extent of made ground at the site, it is anticipated that where this is present as a thin surface layer, such as at TP8 it will be removed by necessity in order that foundations are sufficiently deep to avoid the near surface frost susceptible zone and is not considered further as foundations will be taken down to the underlying natural clay.

Close to the derelict farm house, an underground septic tank is suspected and there may be old buried foundations associated with former structures in this area. A general overdig of soils in this area should be carried out to identify and, if necessary, remove old foundations and identify and remove the septic tank and associated backfill, and the generated voids brought up to level with suitably compacted appropriate backfill, depending on the needs of any intended construction in this part of the site.

During excavations for foundations, the base of the excavations should be inspected and any soft or loose soils, including broken and weathered sandstone, should be removed.

The use of a toothless trenching bucket should minimise disturbance of the base of the excavation.

Generally, water ingress into shallow excavations is not anticipated, other than slow seepages from sandier horizons and from water held in topsoil above the underlying clay. No significant water ingress was noted during the excavation of trial pits, which remained stable.

Excavations should not be left open and exposed to inclement weather and significant rainfall due to the potential softening of exposed clay soils.

### **Environmental Recommendations**

- It is considered that, for a residential end use, soil and groundwater contamination is not present in sufficient quantity or concentration to require specific remedial action prior to development, i.e. pollutant linkages are not complete;
- It is concluded that the site is not acting as a source of contamination which has the potential to be detrimental to groundwater i.e. pollutant linkages are not complete;

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- During development, a watching brief should be maintained for contaminated soils, particularly made ground, which might contain localised occurrences of visible or odorous contamination, which could not be identified during the investigation. This includes for the potential presence of asbestos containing materials associated with former structures near the derelict farmhouse;
- It is recommended that made ground is stockpiled separately from other excavated soils and is analysed, as required by the receiving landfill site if the soils are destined for off-site disposal or as recommended in this report, where it is to be re-used on-site;
- No specific measures are required for protection of construction and service infrastructure materials from contaminated soil;
- Ground gas, in the form of varying concentrations of carbon dioxide and methane is present, however, to date no gas flow has been recorded. Currently, this suggests that the likely mitigation requirements would be under floor venting as a precautionary measure only. This comment is preliminary based on results obtained to date and is subject to continued monitoring of the ground gas monitoring regime; and
- Low concentrations of oxygen have been recorded in wells and this should be taken into account for health and safety reasons where confined spaces work is envisaged as part of the works.

### 3.2 Security Arrangements

Site security will be maintained during the construction phase. Chrome Services Ltd will erect Heras fencing to form a secure construction site to prevent entry by children, members of the public, trespassers and vandals. Site perimeter to consist of minimum 2 meters high Heras fencing panels clipped together at high and low level using fence clips with the nut on the inside so it cannot be unbolted from the outside. When the fencing meets the building, other fencing, site cabins etc., it must be suitably fixed in order that easy access is prevented.

Warning signage to be placed at strategic points on the perimeter fencing. Information signage to be placed at the site entrance. Information signage – reporting procedure, PPE requirements, etc.

The Site Manager will ensure that the site perimeter fencing is in good condition and fully clipped to help prevent unauthorised access to the site. The site entrance must be locked using a chain and padlock as a minimum. Ladders will be removed/made unusable, materials locked away, plant secured, openings/excavations covered and/or protected with barriers. The perimeter check will be made twice per working shift, once at the beginning of the shift and once at the end of the shift.

### 3.3 Site Restrictions & Access

Chrome Services Ltd will liaise with the local residents and businesses prior to any works being undertaken to make them aware of works taking place and address any concerns by these affected parties. Access to the plot is off Chapel Hill. A secure gate will prevent entry to unauthorised persons.

Working hours will be generally 0800-1700 on weekdays, 0900-1400 on Saturdays. No works will be permitted on Sunday's or Bank Holidays.

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Priority will be given to maintaining continuous safe access with particular attention to the following;

- Preventing the general public, schoolchildren and visitors from wandering into designated construction work areas;
- Keeping all areas outside of the work area free from deposits of mud and site debris by regular sweeping as necessary;
- Avoiding pollution of the atmosphere

### **3.4 Traffic & Delivery Management**

Deliveries of materials will be organised to maximise the safety of all personnel. The emergency services, e.g. fire appliances, ambulances, etc. will use the same access routes to the working areas. These routes, particularly the main access road, site operatives parking, and the main entrance to the site will be kept free from obstructions throughout the construction phase.

Chrome Services Ltd will adhere to site rules as follows:

Traffic rules apply (No illegal parking, speed limit of 5 mph)", and store materials as close to the working area as possible. However, Chrome Services Ltd will not at any time present a hazard to pedestrian traffic by obstructing established foot routes. Where work on any footpath is necessary as part of the construction works, pedestrians will be diverted onto alternative safe routes.

Materials will be ordered on a 'just in time' basis to minimise the amount of space needed on-site.

Deliveries and collections will avoid peak times and therefore will be restricted to the hours of 1000-1500.

### **3.5 Protection of Surfaces**

It is not anticipated that our activities will adversely affect the public highway; this will continue to be monitored and reviewed as necessary.



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### 4.0 Management of the Project

**Contract Director:**

**Adrian Dale**

**Mobile No: 07921 393599**

**Site Manager:**

**TBC**

**Mobile No:**

**Health & Safety Advisor:**

**JAD Consulting (Cheshire) Ltd**

**Mobile No: 07800 521 476**

### 4.1 Responsibilities

Overall responsibility for works on the site lies with the Principal Contractor. Day to day control lies with the appointed site supervisor, or his designated staff, who will oversee and ensure safe working, control access with the facility manager and where necessary give instructions to subcontractors to avoid possible conflicts between work activities. However, the Project Manager will have overall control of the project activities.

The project manager will organise and coordinate meetings as necessary with the contractors. These meetings will include, but are not limited to:

- Pre-Start Meetings
- Weekly site safety and progress meetings
- Formal and Informal Inspections
- Safety Improvement notices
- Two week look ahead programme
- Tool Box Talks
- Formal and informal consultation with the workforce on safety related topics
- The discussion and handling of design related issues with project members
- Liaison with local building control

All operatives are to ensure they use the booking/out procedure and that they ensure the Site Project Manager is aware they have left the site at the end of the day to allow the manager to secure the project.

### 4.2 Arrangements for Directing and Coordinating Work

All contractors are to read the site copy of this safety plan and confirm that they have seen and will comply with it. They will be notified of any amendments to the plan will be highlighted to operative's management via the site notice board or a tool box talk session subcontractors working on the site must nominate a 'person in charge' who will liaise with the Site Project Manager in all safety and other management matters. These individuals are responsible for ensuring that their workforces operate in accordance with the safety standards set in this plan

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and in keeping with their own safe methods of work and Risk Assessments (in addition to health and safety legislation and HSE guidance).

Where safety is threatened or compromised by the failure of any workers or others to adhere to this plan, the Site Project Manager is empowered to stop works and/or exclude workers or equipment from the site until a safe system of work can be agreed.

The Site Project Manager will conduct regular briefings on the site progress and key issues. On the first arrival at site allowance must be made for:

- Site induction for individuals, which will include “Site Safety Rules”
- Mandatory Booking in and out of site (includes lunch and breaks)
- Registering workers with appropriate training and competency certificates where necessary (i.e. CSCS/CISRS/CPCS/JIB/PASMA/IPAF etc). Operatives are to note: a random selection of cards will be confirmed against the issuing organisation
- Providing inspection and other certificates for equipment and machinery to be used safely on site.
- Daily / weekly site briefing
- Demonstrating how contractors will monitor safety and its duration and issuing copies of these reports to the Site Project Manager
- Pre-existing health issues

### 4.3 Sub-Contractor Selection Process

All sub-contractors involved in this project will be agreed with the Client project management team prior to the commencement of the works.

To ensure that a contractor is competent to be appointed to the project they will be required to complete our pre-qualification questionnaire and prior to appointment must provide the following information:

- Health & Safety Policy
- Insurance details
- Management Structure
- Risk, COSHH and site-specific assessments
- Confirmation that they will comply with the Construction Phase Plan
- Confirmation any plant and equipment to be used is properly selected and maintained
- Confirmation that the operators of plant and equipment are properly trained
- Evidence of CSCS accreditation
- Training details
- Accident / Enforcement details

Where works are to be sub-contracted to other companies, it is the duty of the sub-contracting company to ensure that the company they are intending to the contract has met the required standards for safety and training as expected by the Client and Principal Contractor.

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Each company must have completed the sub-contractor questionnaire and have had this document and any supporting evidence checked and approved by the Site Safety Advisers.

All staff brought on to the site shall be expected to have suitable and sufficient training for the tasks they are performing and should have read and signed up to an approved method statement. Where necessary this should include the provision of translations of documents or suitable translation staff for workers who have English as a second language.

Sub-contractor assessments and safe working procedures should be provided to the principal contractor or their safety Adviser at least 2 weeks in advance of the planned start date to allow time for these assessments to be undertaken. Failure to meet this requirement may lead to a delay in the project and potential financial penalties for the offender.

The host sub-contractor must ensure adequate site supervision (defined as Site Supervisors Safety Training Scheme as a standard) and that safety monitoring is in place for the work being performed.

They must ensure that they remain responsible for the safe method of work they have implemented and that any changes to this or any other safety document being used on site is alerted to the Principal Contractor.

### **4.4 Design Information from Specialist Contractors**

Any specialist contractors (including electrical) are required to pass details of their designs and design risk assessments through the Principal Contractor, or the Site Project Manager, well in advance of the start of relevant work on the site. Where designs changes need to be made that have a Health and Safety implication, these must then be provided to the Principal Designer for appraisal prior to instigating the changes.

### **4.5 Plant and Electrical Inspection**

All contractors are to supply, maintain, inspect and operate their own equipment and plant. Scaffolds/towers/access systems erected on the site also fall under this category.

Copies of statutory inspections are to be handed to the Site Project Manager at the end of each inspection cycle. No contractor is to make use of equipment or plant provided or belonging to any other, without the expressed approval of the Site Project Manager and the appropriate contractor.

Contractors are to ensure that electrical equipment and the plant is clearly marked and 'in date' P.A.T. inspection labels attached.

- All portable electrical tools and appliances must be battery operated or 110 volts.
- If circumstances dictate that 230v is required it must be protected by a 30mA RCD and prior approval of its use must be given by the Principal Contractor's Site Project Manager. Furthermore, the PAT inspection regime is to be monthly for 230v.
- All 110-volt equipment is to be inspected and PAT certificated by a competent person at suitable intervals as defined in HSG141/107/150 and copies of the test certificates must be available to the Site Project Manager.
- All appliances will be visually inspected prior to use by the user.

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- Only a day's supply of fuels/oils and lubricants are to be brought onto the site (but never into the facility) to support plant running. Flammable oils/lubricants are to be stored in appropriate plastic/metal containers, with protection against spillages and a suitable means of spill clean-up kit available. Any storage tanks are to be bunded.
- Records of all inspection certificates are to be kept in the site safety management file.
- Contractors are to ensure barriers/exclusion must be fully utilised to protect 3rd party operatives.
- All operatives are to ensure that when it is necessary to leave the facility unattended during the maintenance phase they secure the entrance door to prevent unauthorised entry by others.
- No LPG is to be left unattended on the active site, and must not be left on the site at the end of the day.

### 4.6 Complaints

A complaints procedure is present within the Principal Contractor's safety management system and shall be available and used whenever a member of the public wishes to raise a complaint.

Complaints shall be addressed to –

**Contact:** Adrian Dale  
**E-mail:** [adrian@chromeservices.co.uk](mailto:adrian@chromeservices.co.uk)  
**Tel:** 07921 393599

The Site Project Manager will establish a complaints log and issues should also be logged in the site diary where necessary.

Feedback should be given and sought to ensure that two-way communications are instigated. It should be remembered that some issues may be of a sensitive nature and advice should, therefore, be sought via the Principal Contractor Management, legal Advisers or others as necessary before communications are established.

## 5.0 Legislation and Standard

It is Chrome Services Ltd.'s intention that the work will be carried out on the project in accordance with the framework of, but not limited to:

### Health & Safety Standards

- The Health and Safety at Work Act 1974
- Construction (Design and Management) Regulations 2015
- Management of Health and Safety at Work Regulations 1999
- The Reporting of Injuries, Diseases, and Dangerous Occurrences Regulations 2013
- The Control of Asbestos at Work Regulations 2012
- The Work at Height Regulations 2005
- The Control of Vibration at Work Regulations 2005
- The Control of Noise at Work Regulations 2005

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- The Regulatory Reform (Fire Safety) Order 2005
- The Control of Substances Hazardous to Health Regulations 2002 (as amended)
- The Provision and Use of Work Equipment Regulations 1998
- The Lifting Operations and Lifting Equipment Regulations 1998
- The Confined Spaces Regulations 1997
- The Health & Safety (Safety Signs & Signals) 1996
- The Manual Handling Operations Regulations 1992
- The Workplace (Health, Safety, and Welfare) Regulations 1992
- The Personal Protective Equipment at Work Regulations 1992 (as amended)
- The New Roads and Street Works Act 1991
- The Electricity at Work Regulations 1989
- The Health & Safety (First-Aid) Regulations 1981
- The Safety Representatives and Safety Committees Regulations 1977

### Environmental Standards

- The Waste Electrical Electronic and Equipment Regulations 2013
- The Hazardous Waste (England and Wales) Regulations 2005
- The Environment Protection Act (Duty of Care) Regulations 1991
- The Environmental Protection Act 1990

### Guidance

- GD1 TG20:13 Good Practice Guidance for Tube and Fitting Scaffolding
- GD2 SG4:15 Preventing Falls in Scaffolding Operations
- GN3 HSG47 Avoiding danger from underground services
- GD3 HSG17 Safety in the use of abrasive wheels
- GD4 HSG33 Health and safety in roof work
- GD5 HSG53 Respiratory protective equipment at work
- GD6 HSG85 Electricity at work: Safe working practices
- GD7 HSG150 Health and safety in construction
- GD8 HSG151 Protecting the public: Your next move
- GD9 HSG168 Fire safety in construction
- GD10 Fire Prevention on Construction Sites - JCOP 9th Edition

The Contractors on this project will be required to comply with the requirements of the above legislation and any Site Rules that are introduced to comply with legislation or the client's requirements.

## 5.1 General Standards

All personnel are expected to comply fully with health and safety law and the associated approved codes of practice. Contractors are, in addition, to be aware of and pay due attention to guidance issued by the Health and Safety Executive as well as that issued by trade bodies and authorities, which constitute industry 'best practice'. Method and policy statements submitted for these works will be reviewed by the Site Project Manager and Safety Adviser to ensure that these standards are met. On such occasions that they fail to meet the standard they will be returned for amendment action.

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All contractors are expected to assess all activities that they are associated with for risks and adopt safe methods of work in keeping with the Management of Health and Safety at Work Regulations 1999 and other relevant regulations (as well as the standards and detail set out in this document).

In some cases, however, this health and safety plan specifically requires the preparation and submission of site-specific Method Statements in advance of particular work operations. All contractors are to ensure that their employees are aware of these safe working method statements and have been suitably trained and have adequate supervision to ensure that the procedures are followed. Additionally, a signed copy of the controlling documents must be handed to the Site Project Manager, who will ensure all operatives employed on the task have signed the issued documents. Failure to issue the requested signed documents may result in a delay and subsequent financial implications.

### 5.2 Training Standards

C u r r e n t  s a f e t	<b>General construction works</b>	All work is to be carried by a competent person with adequate supervision to industry standards approved by CITB, CPCS, CSCS, PASMA, IPAF cards (not pass slips) and to meet requirements of the designated work.
	<b>Abrasive cutting/grinding</b>	Certificate of competence issued by employer or equipment supplier. Validity routinely 3 years. Certificate of training and appointment to mount abrasive wheels. (valid 3 years)
	<b>Gas/heating/plumbing works</b>	All work is to be conducted by a competent person to industry standards. Gas Safe is an accepted standard. Certificate of training achievement and registration to Gas Safe.
	<b>Electrical works</b>	All electrical work is to be conducted under the supervision of a competent person to IEE standards and is to be tested and inspected to the standards set in the IEE Wiring Regulations on completion.

y training certificates for the duration of the time employed on the project are required prior to contractor's operatives arriving on site. Operatives appointed to operate particular plant and equipment and to undertake certain specific forms of work on this project. Copies of the following certificates must be submitted to the principal contractor before work begins. (The list is far from exhaustive and other relevant training competencies should be included)

### 5.3 Information and Training for those on site

On first arrival at the site all workers will be given a short briefing which will include:

- Site details, address and telephone number, location of the site telephone (for emergencies)
- Potential interface with members of the staff, public and project residents.
- Safety responsibilities
- Site security and booking in/out arrangements. This will enable Site Management to control and restrict vandalism, theft, injury to third parties, and potential damage to the works. Therefore any observations to breaches in security must be highlighted to Site Management. It is essential that all site personnel, visiting or working, sign in & out of site as in the event of an emergency the sign in register will be used to check that everyone has



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- exited the building
- Site layout and nature of the works in progress/intended. (3rd party interface)
- Transport Management Plan
- Entry into building
- Awareness of other contractors involved onsite
- Asbestos Discovery (as applicable)
- Noise, vibration, and dust generated as a result of the work
- Preventing access to the work areas by the unauthorised persons.
- Site rules
- Welfare and first aid facilities – locations, name(s) of first aiders / Emergency First Aiders / Appointed Person
- Fire and emergency procedures including:
  - Escape routes
  - Assembly/Muster point
  - Location and types of fire extinguishers

**The names of those receiving induction training are to be recorded in the site records. No person will be allowed access to the site until they have received this induction briefing, or in the case of a visitor unless they are escorted at all times by a fully inducted person.**

### 6.0 Site Rules and Monitoring Arrangements

#### 6.1 Site Rules

The following rules are to be observed by all on site. Site induction will include these rules and other considered necessary by Site Management. Those working on site are required to sign indicating their agreement to comply.

- Individuals (or in the case of groups - the person in charge) must register on arrival on site and when leaving at the beginning and end of each working day.
- The mandatory site standard for PPE is as follows; Safety footwear to BS EN345, Hi-Visibility vests/jackets to BS EN471 and a Safety helmet (Hard Hats) to BS EN397. Additionally, all other PPE stated within Risk Assessments and Method Statement is to be worn.
- Individuals may only operate and use plant or equipment for which they are trained and authorised and where the Site Project Manager has received the appropriate training certificates.
- Plant is to be turned off at all times when not in use. Plant should be fitted with suitable silencers to reduce the disturbance to the surrounding area.
- Only battery powered or 110V electrical tools/equipment is to be used, ideally battery. Any other e.g. 230V must be sanctioned by the Site Project Manager, and if approved must be protected by a 30mA RCD and the PAT certification reduced to a monthly test.
- Defective or suspect equipment or tools must be removed from the site, tagged and not used until they have been repaired.
- Waste and debris must be cleared as work progresses and placed into the bins provided.
- The burning of waste on site is strictly prohibited. Once the waste has been separated on

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site into their designated waste streams, the Site Project Manager will ensure all waste materials are removed from the site and disposed of with due regard for environmental impact. Contractors removing their own waste are to demonstrate compliance to the Site Project Manager. All involved should follow the waste hierarchy of reduce, reuse and recycle before considering disposal.

- Tools and materials stored only as agreed by the Principal Contractor as there is a potential interface with the existing residents.
  - Areas below or close to those working at height must, as far as reasonably practical, be kept clear of all tools, equipment, materials, and debris. Operatives are to make provisions to prevent dropping items and that an exclusion zone is created.
  - Personnel are to ensure that drains, sewers, culverts, and ducts etc. are kept free from obstruction by rubbish and debris at all times and not used for discharging contaminants.
  - Smoking is prohibited inside buildings, in the vicinity of any flammable materials. The designated smoking area provided is to be used.
  - It is strictly forbidden to bring or consume alcohol or drugs on site or to be under their influence.
  - Horseplay and violent behaviour are not tolerated and will result in permanent exclusion from the site.
  - The Principal Contractor reserves the right to evict or refuse entry to any person for any reason, which it considers prejudicial to the safety or good conduct.
  - Mobile phones are only to be used in designated areas and never whilst operating tools/plant etc. Radios/MP3 players/CD players/headphones/earphones etc are prohibited from use on the site.
  - All of those on the site are required to wash before eating. Meals and drinks are only to be consumed in specified welfare areas. Any changes will be briefed accordingly by the Site Project Manager.
- All personnel are to ensure that at the end of each working day that no means of access e.g. hop ups, towers, steps, ladders, equipment etc. are left in a position which would allow unauthorised persons their use.
- The Site Project Manager is to ensure all operatives have received the training commensurate with the employers Method Statement. Where no evidence is available the operative must be refused entry.

### 6.2 Monitoring Arrangements

Safety standards will be monitored by the Principal Contractor through:

- A continuous inspection process by the Site Project Manager is in force. A checklist for these inspections is included with the site safety records. These inspections will include all contractors working on the site and a report of all actions required will be given to the contractor's foremen with instructions to rectify non-conformance in a timely manner.
- To carry out sample and grab audits on the H&S and CDM process.
- Once per week the Site Project Manager or appointed representative will inspect fire equipment, first aid equipment (and replenish if necessary), registers and site documentation. This inspection will be recorded on the designated form in the SMS file and when appropriate in the site diary.
- Monthly by the Contract Manager or appointed representative, who will carry out a

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hierarchical level of inspection of the site and produce a written safety inspection report for distribution.

Inspections required under the Construction (Design & Management) Regulations 2015 will be carried out by the principal contractor's safety Advisers and a formal report will be provided and be prioritised for remedial action/recommendations and filed with the site management system. This will be checked for closed out actions/progress on the next site inspection visit. This inspection regime will include sub-contractors. Additionally, contractors are required to audit/inspect their own works and equipment. Copies of such are to be handed to the Site Project Manager for record purposes.

The scheduled progress meeting chaired by the senior Principal Contractor representative will as part of agenda discuss health and safety reports, and relevant discussions between the Client, the Principal Contractor and members of the Design team for issues affecting the project. Ensuring the entire aforementioned have a feedback and closed down loop in line with the safety Adviser's safety site inspection form.

The Site Project Manager is to ensure client and Principal Designer are briefed accordingly on identified issues for discussion. Furthermore, the Site Project Manager is to ensure the following is incorporated into the inspection regime:

- Consideration of likely hazards and the reduction of risk wherever possible at all stages of the project;
- The introduction of the 'Risk / Hazards' of the week notice board giving due consideration to Regulation 10 of the Management of Health & Safety at Work Regulations 1999.
- Regular review of procedures and the Health and Safety Plan to ensure the correct execution of the project;
- Ensuring the regular site audits results are communicated to the workforce;
- Action Plans that target specific areas of risk identified by the HSE (e.g. falls from height, traffic impact accidents), identify methodology to reduce/ eliminate the most likely types of accident; identify a strategy for health; implement strategies for 'selling' the above to the workforce;
- Induction and monitoring of adherence to the minimum standard requirements expected for particular disciplines as identified in the Health and Safety Plan.

### 7.0 Activities with Risks to Health and Safety

The following areas have been identified as having potential risks. Risk Assessment sheets will be provided for these and will be added to the Health & Safety folder on the site.

#### 7.1 Use of and Contact with Power Tools

The hazards are from contact with electrical conductors, contact with the revolving tools and HAVS. The risk is low, the site power must be 110 Volt and the operatives should be trained in the proper use of tools. The tools must be visually inspected before first use and receive a periodic PAT test as required by the PUWER and Electricity at Works regulations. Individual risk assessments contain information on exposure limits for vibrating tools such as drills and breakers. It is not anticipated that HAVS will be an issue on this project, however, should any operatives suffer any form of numbness or pain associated with the use of vibrating tools they

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must take suitable breaks from use and the work activity should be shared.

### 7.2 Working at Height

**External works** will include the blockwork, cladding, render, roof construction, installation of windows and rainwater goods etc. These works shall be performed from fixed scaffolding supplied and constructed by the designated contractor.

When working from non-fixed systems the wind speed should be measured on a regular basis throughout the working day to ensure that systems are not being used outside of the limits set by the manufacturer.

Any platform that you need to work off must be at least 600mm wide, which is 3 scaffold boards wide. Scaffold boards will need supporting by transoms or trestles at a minimum of 1200mm centres.

#### **Tube & Fitting or Modular Scaffolds**

Scaffolding shall only be erected and dismantled by competent persons with the appropriate and recognised certification i.e. The Construction Industry Scaffolders Record Scheme – CISRS card scheme.

The scaffold structure is to be designed in accordance with the requirements of BS EN12811-1 & TG20:13. A conformance sheet or scaffold design is to be provided by the appointed scaffolding contractor and maintained on site. Brick guards to be kept in position on scaffold lifts.

All scaffolding shall be supplied, inspected and erected in accordance with the:

The European Standard BS EN12811-1

TG20:13

The Work at Height Regulations 2005

Construction (Design and Management) Regulations 2015

The Management of Health & Safety Regulations 1999

The Provision and Use of Work Equipment Regulations 1998

NASC SG4:15 Preventing Falls in Scaffolding Operations

Scafftags are to be fitted to all scaffold structures and completed/amended/inspected by a competent person as required by the system.

The Chrome Services Ltd supervisor/s will undertake two visual inspections of all site scaffolds each day.

Fixed scaffolds are to have an in date Scafftag fixed at the main access point at all times and ladders are to be removed/boarded off at the end of each shift to prevent access in the event of a member of the public gaining access to the site. If any non-conformances are identified during the inspections, then works must cease immediately until rectified and approved by the Chrome Services Ltd supervisor.

**Internal works** at a low level and so shall be performed utilising 'Hop Ups', aluminium towers or podium steps. If ladders or steps are required they are to be of Class One (Industrial) grade and the contractor must issue the Principal Contractor with a detailed Risk Assessment in accordance with Regulation 6 of the Working at Height Regulations 2005 and Regulation 3 of the Management of Health & Safety at Work Regulations 1999.

Where works at higher levels are required the contractor will utilise mobile aluminium scaffolding towers constructed and certified by a PASMA trained operative. Where there is a significant risk of fall, a permit to work will be issued.

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**Mobile Tower scaffolds** must only be erected, altered and dismantled by trained competent person/s whose names have been submitted to the Chrome Services Ltd person in charge and in accordance with:

The manufacturers/suppliers erection procedure,  
Provision and Use of Work Equipment Regulations 1998  
HSE – Construction Information Sheet No 10 (Revision 4)  
The Work at Height Regulations 2005

**Ladders** are a means of access and are not for working off unless detailed within your Safe System of Work which has been reviewed by Chrome Services Ltd. Stepladders may only be used to work off following receipt of a risk assessment. Ladders and Stepladders must be clearly marked as Industrial Grade.

### 7.3 Manual Handling

Whether the transport of materials to the work areas is undertaken by the operatives under their own Method Statements and Risk Assessments, or under the direction of the Principal Contractor, care must be taken to minimise the inherent risks.

Deliveries shall be dropped as close to the working area as is possible and when there is a need to handle items long distance a suitable lifting aid (trolley etc.) should be used.

Where manual handling cannot be avoided, heavy items shall be either broken down into smaller loads or handled as a group lift. All risk assessments and method statements provided by site contractors must identify heavy items used and how they are to be handled. Manual Handling HS(G) 149 'Backs for the Future' must be followed at all times by all contractors.

The site Tele-handler will manoeuvre materials and equipment from the site compound to the required work zone. Materials and equipment will generally be moved around the site to the place of work via, board carriers, pump trucks, pallet trucks or similar. Heavy items (structural steels) in the project area will be manoeuvred via the aid of genie lifts or similar.

### 7.4 COSHH

The hazard is harm to body tissue and/or body organs from the use of hazardous chemicals.

The use of hazardous materials and substances on this site is not permitted without the principal contractor having had sight of a valid COSHH assessment for the product as per the requirements of the Control of Substances Hazardous to Health Regulations 2002 (as Amended). Each individual contractor is responsible for creating these documents and ensuring their staff are protected and not putting other trades at risk when chemicals are in use.

If any product is needed on-site that does not already have a COSHH assessment then it must be brought to the attention of the Health and Safety Adviser so that an assessment can be completed.

The Site Project Manager is to send a copy of any assessment, upon request, to the Principal Designer, and inform the Principal Designer if any material or substance to be used is listed under the 'Approved Supply List' or 'Approved Carriage List' of The Chemicals (Hazard, Information and Packaging for Supply)(Amendment) Regulations 2002 or is comparable in hazard. COSHH Assessments of manufacturer's safety data sheets are to be included with the notification.

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### 7.5 Live Services

Before starting work the position of all existing services shall be ascertained as far as possible. Extreme care will be taken, at all times, not to disturb any existing services.

The Site Project Manager is to scrutinise all available plans along with the information provided by the Operating Companies responsible for their maintenance. Any and all unidentified cables and pipes are to be treated as live until it is confirmed otherwise. Additionally, the Site Project Manager is to have access to a cable detector to ascertain services when there is a requirement to demolish/chase walls.

If we are unsure at any time as to the location of any services, an investigation will take place to determine their whereabouts before the work commences using a cable detector. A qualified electrician will isolate and make safe any electrical works before commencing work.

BT overhead cables are in close proximity, plant operators to be made aware.

### 7.6 Noise, Vibration, and Dust

#### Noise

Emissions generated as a result of the work shall be restricted to between 09.00hrs and 17.00hrs. Works outside these hours are by prior arrangement with the principal contractor and client's agent. Where a specific issue is raised by local residents/businesses that will require changes to these working hours it shall be acted upon as soon as is possible.

In all cases, noise will be kept to a minimum with hearing protection used as deemed necessary in compliance with current regulations. Contractors must continually assess the level of noise and vibration that operations are creating and implement measures that keep levels within acceptable limits, not only for workers on site but for others who may be affected by the works. There will be a noise assessment detailing all tools found to be 85dB (A) and over available in the site health and safety folder.

#### Vibration

Vibration producing tools will be subject to a HAVS assessment to identify the safe working times.

#### **A(8) Daily Exposure Levels**

#### **Control of Vibration at Work Regulations 2005**

Exposure Action Value	2.5 m/s <sup>2</sup>
Exposure Limit Value	5 m/s <sup>2</sup>
Exposure Action Value	0.5 m/s <sup>2</sup>
Exposure Limit Value	1.15 m/s <sup>2</sup>

Chrome Services Ltd will ensure that workers operate equipment within the recommended guidelines. Information is provided on the site office notice boards.



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### Dust

Dust will be minimised by wetting down or extraction systems as applicable to the type of tool and activity being carried out. Good housekeeping principles will be followed and ensuring that no build up of waste materials/debris is allowed to occur. Appropriate respiratory protection will be available i.e. FFP2 & FFP3.

### **7.7 Hot Works**

Without exception, all works that generate heat or sparks (abrasive cutting, welding, soldering) must be sanctioned by the Site Project Manager and a Hot Works Permit raised by the designated Site Project Manager or his nominated deputy utilising the Safety Management File. Additionally, a fire extinguisher commensurate with the surrounding materials must be provided by the contractor.

Site Management is to ensure the designated operative knows how the extinguisher works and what its limitations are.

### **7.8 Biological Hazards**

**Leptospirosis** (Weil's disease) from rat urine is a possibility, therefore, waste will be well managed and not permitted to build up. Food waste will be properly disposed of so as not to attract rats to the site. As a precaution, all waste must be handled using gloves. Adequate washing facilities will be available on-site.

**Legionella** from water systems and bacteria from wastewater systems are not considered to be a significant risk on this site in its current situation. All water systems fitted shall be cleaned and, where required, suitably treated for bacterial infection before being handed over to the client.

### **7.9 Confined Spaces**

Any space identified as being a confined as per the Confined Spaces Regulations (1997) shall be controlled as per the requirements of the regulations.

The main concerns within the projects are access to manholes or other drainage systems. Works within confined spaces shall only be performed after the issue of a suitable permit to trained operatives working under an approved safe method of work.

### **7.10 Spills**

All on-site water sources shall be regularly checked to ensure that they are not being left running

and that they are not leaking. Construction water sources shall be kept away from electrical systems when they are fitted on the site and any spillages shall be cleaned up as soon as they are noted/generated. Spill kits will be made available on-site to deal with any accidental spillage of chemicals.

### **7.11 Exposure to UV Radiation**

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The site rules 'Long trousers and shirt to be worn at all times' will be enforced for the duration of the project.

Workers will be advised of the dangers and health risks of working in the sun at induction and via Tool Box Talks.

Contractors affected by sunscreen exposure to UV radiation (from the sun) will be advised to provide creams/lotions to their workforce with a sun protection factor (SPF) rating of 15 or more.

### **7.12 Control of Lifting Operations**

All plant and equipment brought onto site must be accompanied by all relevant certification and retained for the currency of the work operations.

Copies of the weekly inspections are to be made available to Chrome Services Ltd as soon as practicable.

Training certification for all equipment operators must also be produced and logged in the site appointed persons register.

Lifting operations involving lifting equipment:

- Must be planned properly
- Use people who are sufficiently competent
- Supervised appropriately
- Carried out in a safe manner

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### 8.0 Safe Working Procedures

#### 8.1 Method Statements and Risk Assessments

Method statements and Risk assessments will be required from the subcontractors prior to them commencing on site.

The site health & safety folder will contain the significant risks assessments and method statements provided by the subcontractor that are generally applicable to the work being undertaken on this scheme, together with procedures and policies that should be followed. The Principal Designer will have highlighted known significant risks to the contractors via the Pre-Construction Information. For high-risk activities, a site-specific method statement is required, which will be agreed before the work can commence. For routine site operations, these site rules should be observed together with any relevant guidance issued by the HSE.

#### 8.2 Personal Protective Equipment Requirements

In accordance with the Personal Protective Equipment at Work Regulations 1992, risk assessments have been carried out, and, as a result, the following policy will be adopted: Safety footwear, dust masks, safety goggles, hi-vis vests appropriate gloves and hard hats will be provided and worn as set out by the specific work activities by all site operatives and visitors. The site manager will be responsible for enforcing the wearing of all necessary PPE.

##### Head protection:



Hard hats must be worn on site at all times by all persons including visitors, delivery drivers, etc. regardless of apparently low risks.

##### High-visibility jackets:



High Visibility Jackets must be worn by all persons on site at all times.

##### Protective footwear:

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Protective footwear must be worn by all persons on site at all times with the type and level of protection depending on the site conditions and the activities carried out e.g. anti-slip, (steel toe caps and steel sole plates are required as a minimum)

Site visitors are not necessarily required to wear steel toe capped/plated boots, however, sensible footwear must be worn depending on site conditions.

### Overalls:



Overalls must be worn on site as and when the work necessitates in order to provide body protection against hazardous substances, moisture, contaminated ground etc.

### Hearing Protection:



Hearing protection must be worn on site where average noise levels reach 80dB(A) or 135dB(C). Although the legal requirement to enforce the use of hearing protection is at 85dB(A) or 137dB(C) it is company policy to enforce their use at 80dB(A) or 135dB(C) as good practice.

### Breathing Protection:



Respiratory protection must be worn on the site where indicated on the risk assessments for the various activities.

FFP3 masks must be worn when cutting, sanding, grinding silica based products or hardwoods. Additionally and brushing up activities will require damping down wherever possible. The labourer must wear an FFP3 mask as the content of dust may contain a mixed variety of hazardous dusts.

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### Lanyards/harnesses:



Must be worn if required by a particular Risk Assessment. Before relying on a harness and lanyard, the following must first be considered and ruled out: Elimination of work at height, collective fall protection (barriers) and collective fall prevention (safety netting). All harnesses must be thoroughly inspected every 3 months by a competent person.

PPE is the last form of defence. All hazards must be controlled by first considering elimination of the hazard, reduction of the severity of the hazard, isolation of the hazard or controlling the hazard.

Spare PPE must be onsite and readily available for employees and visitors to the site.

### 8.3 Construction Materials

The materials and substances in the permanent works are deemed to be within the normal experience of a competent contractor.

Where these present health & safety hazards, the contractor will carry out risk assessments, as required under COSHH, and introduce control measures.

### 8.4 Storage of Materials and Work Equipment

Inert materials such as blocks, timber and plasterboard will be stored on-site. Hazardous materials such as chemical cleaners and petrol will be locked away at the end of each working day. Power tools will also be removed from the site at the end of each working day.

Materials will be located on the site and brought to the working area as required. Where practical the construction materials will be delivered directly to the working area to minimise the need for the manual handling of materials. Materials will be stored in such a way that there is adequate working space to safely handle them manually or by machine. The storage of materials will be carefully controlled to ensure minimal risk to the work personnel, visitors and members of the public.

### 8.5 Storage of Waste Materials

Waste materials from the construction process will be deposited in waste skips provided by the company, which will be emptied on a regular basis.

A licensed waste handler will manage the waste, and a record of waste transfer notes will be maintained on site.

Any hazardous waste will be marked as such and handled and disposed of in an appropriate manner. Asbestos Treatment / Removal will be carried out by a certified competent Asbestos removal company.

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Chrome Services Ltd will not at any time permit the burning of waste materials on site. Every effort shall be made to comply with the Environmental Protection Act 1990 to prevent the pollution of the existing watercourses whilst the works are being undertaken.

### 8.6 Provision and Use of Temporary Services

Temporary services will be established in the early stages of the contract. Temporary and permanent Electrical Works will be carried out by NICEIC Registered Installer. All works to be certified under Part P of the Building regulations. Power required within the construction area where it is not available from the Client will be generated from portable generators where practicable. The company will permit no unauthorised use of the Clients services and any authorised connections will be inspected by the Client prior to use.

### 8.7 Temporary Works

The following Temporary Works Procedure is to demonstrate that an effective and robust arrangement is in place for controlling the risks arising from the use of temporary works. This should be read in conjunction with Section 5 below. Procedures for temporary works will be compliant with BS5975:2008.

#### **Temporary Works Procedure:**

Temporary Works Coordinator shall be the Site Manager.

Provision of temporary works design to include, where applicable, designers risk assessments and method statements

Where appropriate independent design or checking of temporary works may be required.

Control and supervision of erection, safe use, maintenance and dismantling of temporary works will be undertaken by the Site Manager

Provision of removing or dismantling Temporary Works ('permit to dismantle') where applicable, (e. g. removal of falsework) will only be allowed with the approval of the Site Manager.

Temporary works likely to be required on this project will include (delete as applicable):

#### **Site establishment:**

Fencing, hoarding and signage.

#### **Equipment/Plant:**

Mechanical hoist installation, crane bases/mats, anchors/ties, WCWP, piling mat

#### **Access:**

Scaffolding and edge protection. MEWPS, edge protection, walkways.

#### **Structure:**

Formwork, falsework, shoring, Temp bridges

#### **Earth works:**

Trenches, excavations, temp slopes, stockpiles

### 8.8 Permit to Work System



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Chrome Services Ltd shall use a permit to work system to control high-risk activities. No work shall be undertaken where a permit-to-work is required unless the permit states the correct date and correct commencement and completion times. Permit to work systems will operate for the following work activities:

1. Work within confined spaces – as defined by the Confined Spaces Regulations 1997;
2. Hot work – welding, cutting, grinding, etc.
3. Deep excavation work, e.g. connections into the existing surface water systems.
4. Work in the vicinity of any existing high voltage and medium voltage cable systems. Should any work adjacent to HV cables for which the local Electricity Company has responsibility, then a permit-to-work will be applied for from the supply authority prior to work commencing.

Permits to work will not prevent incidents unless:

- a) Their need and use have been established;
- b) Their requirements are adhered to;
- c) Staff are aware and competent;
- d) Appropriate equipment is available for testing and implementation.

Therefore Chrome Services Ltd will ensure that where such permit to work systems are required, the above conditions have first been satisfied.

### 9.0 Emergency Procedures

In order to be prepared for any emergency event, the company will, when considered necessary, plan for reasonably foreseeable incidents and prepare a written plan outlining procedures to be followed in such an event.

The company will, in consultation with workers and their representatives:

- a) carry out a risk assessment to identify foreseeable major incidents for which emergency procedures would be required;
- b) establish procedures to be followed by employees in the event of an emergency situation, including:
  - I. *raising the alarm;*
  - II. *means of escape;*
  - III. *assembly points and 'safe muster areas';*
  - IV. *summoning the emergency services;*
  - V. *evacuation of disabled persons;*
  - VI. *appoint persons to be responsible for specific procedures in the event of an emergency situation (including the shutting down of plant and making it safe before evacuating the area);*

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VII. *fire wardens and fire marshals (as necessary);*

VIII. *persons responsible for emergency power supplies and lighting;*

IX. *first aiders;*

- c) provide a written version of the procedures to all personnel;
- d) ensure that the plans cover out of hours working, weekend working and closures for holidays;
- e) ensure there is an up to date call-out list for key personnel and that this is readily accessible;
- f) keep all access routes for emergency services and all escape routes clear at all times;
- g) reassess the emergency plan at regular intervals and update or alter it as necessary;
- h) provide training in emergency procedures for all employees, plus specialist training for those with special responsibilities.

Most emergency situations are unlikely if all risks at the workplace are adequately controlled. When devising the emergency plan the company will:

- a) nominate personnel to be responsible for specific emergency actions and ensure that they are trained to deal with their responsibilities;
- b) ensure that all employees without special responsibilities are aware of how to evacuate the area without delay;
  - Reporting an Injury or Dangerous Occurrence
  - Training
  - Fire and Emergency Procedure

### 9.1 Fire

#### Control Measures

- Site fire layout plans will be located around the project indicating fire fighting equipment and emergency escape routes.
- Hot Work involving the use of blow lamps, welding equipment soldering irons, abrasive wheels, etc, must obtain the Company Hot Work Permit from the Site Supervisor/s prior to work operations commencing.
- Smoking is not allowed anywhere on the site.
- LPG, Oxy-gas, etc, is to be removed from the site at the end of each day unless stored in a suitable cage at the external compound, operatives and contractors are to inform the site supervisor of any LPG and flammable substances brought onto the site.
- Rubbish is not to be burnt on site.
- Waste materials are to be placed in skips positioned the site compound.
- Fire routes are to be maintained at all times.

Fire extinguishers to be placed in the site office and welfare facilities with fire points made up of fire extinguishers and signage to be placed strategically across the site.

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High-risk fire areas such as hot work areas must have fire extinguishers within easy reach.

- **CO2 – Black – Liquid, electrical**
- **Water – Red – Paper, wood, textiles, solids**
- **Foam – Cream – Liquid, wood, textiles, paper**
- **Powder – Blue – Liquid, electrical, wood, textiles, paper**

The emergency alarm must be tested weekly and all workers to be notified of the alarm at induction. Depending on the hazards and size of the site, the alarm siren will normally be an emergency air horn.

Please refer to the Emergency Plan for the location of fire extinguishers and alarms.

The assembly area must be an open space away from the work area avoiding any additional hazards and where staff can wait safely. The assembly area must not be at the site office.

The location of the assembly area for this project is highlighted on the Emergency Plan.

### Action

The person discovering a hazardous situation which has resulted or may result in a fire or explosion will alert other personnel, and if the fire is small, and if safe to do so, attempt to extinguish it using the correct fire extinguisher. If the fire cannot be quickly or safely extinguished, or if there has been, or there is the potential for an explosion, ensure that all personnel move out of the area as quickly as possible.

Control over any hazardous situation will be exercised by the Site Manager, who will immediately upon being made aware of the situation raise the alarm using the site emergency alarm. The site emergency alarm will be tested once per week. The Site Manager will direct all personnel to the Assembly Area and ensure that the emergency services have been called.

The Site Manager will go to the Assembly Area, check if any personnel are missing and be ready to receive and brief the emergency services giving the location of the emergency water supplies/hydrants and details of any missing personnel. The location of the Assembly Area is marked up on the Emergency Plan. (A risk assessment has been produced and is held in section 6 of the site health and safety folder.)

## 9.2 III Health

In the event of someone being taken ill or being injured as a result of an accident that requires medical attention, the IP should be taken to the nearest Hospital.

If the injury is serious or the IP cannot be moved then the Ambulance Service must be notified by phoning 999 and giving as much information as possible as to the nature of the incident and location of the injured parties. Carry out First Aid Treatment and keep them warm and comfortable. DO NOT MOVE THEM. Leave them for the Ambulance Crew who have the equipment and training to deal with such incidents. Do not give them anything to eat or drink.

## 10.0 Reporting of Accidents & RIDDOR

### 10.1 Accidents

## Construction Phase Plan

All accidents and near misses, however, minor must be reported to the Principal Contractor and recorded in the site accident book kept by the Site Project Manager regardless of the severity of the incident.

Once the accident book sheet is completed it is to be detached and returned to Head Office where it will be securely held in the interests of confidentiality. The Site Project Manager must be immediately informed of any accident or dangerous occurrence on the site or of ill health, which could be linked to site work.

All incidents and near misses must be recorded onto the Incident Report Form as soon as is reasonably practicable with a copy being submitted to head office in order that an investigation can commence.

**Near Miss** – an unplanned event that did not result in injury, illness, or damage - but had the potential to do so e.g. materials falling close to someone's head.

**Incident** – A planned/wanted event that resulted in or had the potential to result in injury, damage or loss. Injury, damage or loss resulted or could have resulted from the activities of the planned/wanted event.

**Accident** – An undesirable or unfortunate happening that occurs unintentionally and results in injury

### 10.2 RIDDOR

All reportable accidents are subject to the procedures detailed in Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013:

- Death, major injury, and over 10-day injuries or disease - reported by the person's employer. It is requested that a copy of the F2508 be acquired for record purposes.
- Death or an injury requiring hospital treatment of a person at the site not directly involved in the works - reported by the Principal Contractor.
- Dangerous occurrences at the site (as defined by RIDDOR 13) - reported by the Principal Contractor.
- Accidents or dangerous occurrences during transport to or from the site or in preparatory works at contractors' premises must be reported by that contractor - the Site Project Manager should, however, be informed of such incidents.

Advice from the Safety Adviser is to be undertaken on all RIDDOR issues to ensure the necessary reporting actions are taken. All RIDDOR reportable accidents will be investigated by thoroughly by the Safety Adviser who will create a report for the Principal Contractor and the associated employer.

As previously stated the Site Project Manager is to notify the Principal Designer of any accident or occurrence on the site that involves any employee in medical treatment or time off.

## Construction Phase Plan

Any notification to the Health and Safety Inspectorate under the 'Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013' shall be copied to the Principal Designer immediately.

### 11.0 First Aid Arrangements

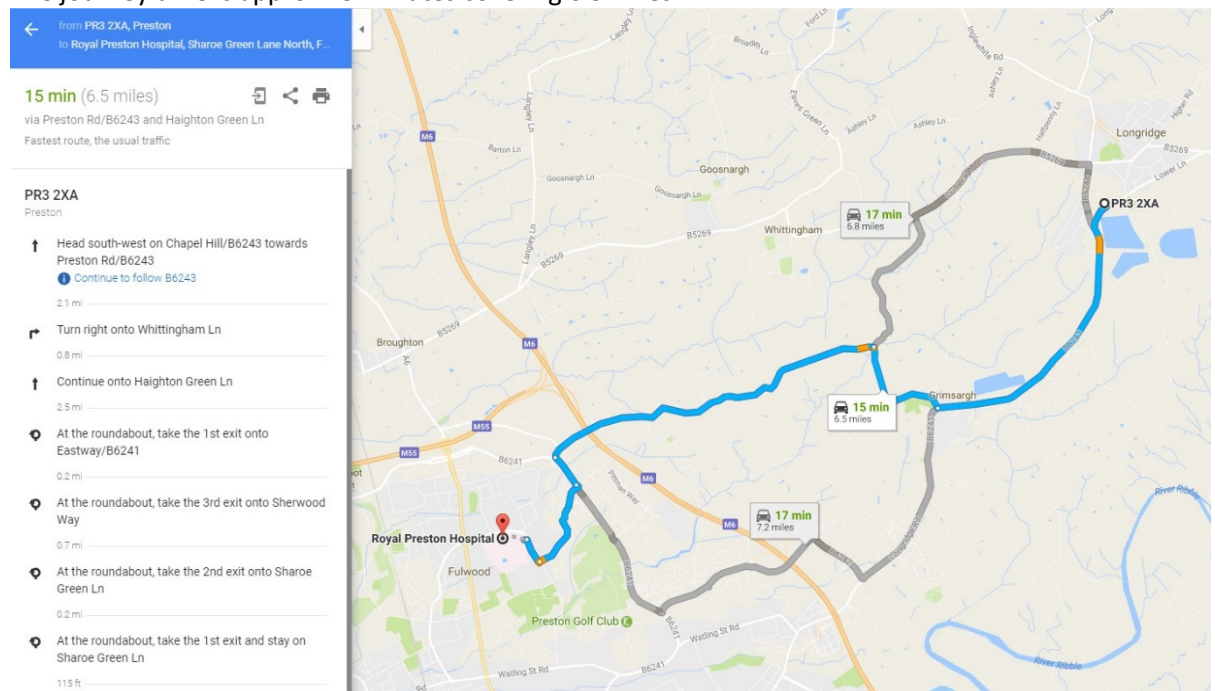
The Principal Contractor will ensure that a trained and in date 'First Aider', 'Emergency First Aider / Appointed Person' 'is available on site at all times during construction activities. A first aid box (20 persons) will be available on site. All instances requiring First Aid treatment are to be initiated via the Site First Aider / Appointed Person / Emergency First Aider. Where sub-contractors have a dedicated and authorised First Aider, then treatment may be provided and the Principal Contractor informed accordingly. First aid arrangements will be included in the initial site briefing given to all workers on the first arrival at the site.

Nearest hospital A&E Department:

**Royal Preston Hospital**  
Sharoe Green Lane North  
Fulwood  
Preston  
Lancashire  
PR2 9HT

Tel: 01772 716565

The journey time is approx 15 minutes covering 6.5 miles.



## Construction Phase Plan

### Additional Duties

In addition to the aforementioned the Site Project Manager is to ensure:

- Any notification to the Health and Safety Inspectorate under the 'Reporting of Injuries, Diseases, and Dangerous Occurrences Regulations 2013 shall be copied to the Contract Administrator immediately.

### 12.0 Welfare Arrangements

Welfare facilities will be provided and controlled by the Principal Contractor. They are for use on-site by all authorised persons. These facilities are to be kept clean and tidy by those using them.

**Location of welfare facilities:** Welfare facilities will be provided using a welfare cabin sited within the construction site.

**Drinking water:** A supply of wholesome drinking water will be available from temporary facilities and will be direct from the mains where possible. If using stored water, the storage facilities will be clearly marked and the water regularly changed to prevent it from becoming stale or contaminated. A supply of cups will be made available where the water is not an upward jet.

**Toilets:** A toilet block will be provided.

**Washing facilities:** Washing facilities:

- Clean hot and cold (warm) running water (running where reasonable practicable)
- Soap or other suitable means of cleaning
- Towels or other suitable means of drying
- Sufficient ventilation and lighting
- Sinks large enough to wash hands, face and forearms

**Rest Facilities/making meals:** Within the welfare unit a table, seating with backs, a means for heating water for drinks and for warming up food (kettle, microwave, gas/electric heating ring etc.) will be provided. Adequate heating must be provided.

**Smoking rules:** No smoking inside any welfare facilities. No smoking in any enclosed area onsite (roof + 50% walls). Smoking only in designated areas.

**Cleaning arrangements:** All welfare facilities on site must be maintained by all workers that use them. Additional cleaning will be carried out as and when necessary depending on the frequency of use, site conditions etc.

### 13.0 Consultation for People on Site

The Principal Contractor is available at all times to discuss matters of health and safety not already covered under within this plan and will discuss with, if appointed, representatives of the operatives.

## Construction Phase Plan

The Health and Safety Adviser can also be contacted at any time to discuss matters that may apply to the project.

### On Site Third Party Communication

The site manager will act as a daily liaison between other third party companies working.

### Joint Staff Communication

Consultation on health and safety matters will be encouraged and the requirements of the Safety Representatives and Safety Committees Regulations 1977 and the Health & Safety (Consultation with Employees) Regulations 1996 will be complied with. The main function of these consultations is to draw attention to any unsafe practices which become apparent and to bring forward suggestions for better safety standards and practices. Consultations will be encouraged during regular meetings.

Ongoing communications between the staff regarding the works and health and safety matters will be ongoing throughout the construction process.

### Project Information

The process for exchange of information between project parties will be as agreed at the Pre-Contract meetings and is established by the Project Manager/Architect and Principal Designer within the pre-construction information.

The Site Manager will have email and printing facilities for receipt of design changes and information directly from the architect and engineers.

Provision and record of construction and design change information will form part of the fortnightly Project Meetings.

### Contractor Communications

Health and Safety information and communications will include inductions and all site matters relating to design, construction and health and safety will be regularly undertaken by the site manager.

Toolbox talks shall be regularly provided to contractors during the project on subject relating to the works to maintain Health & Safety awareness.

## **14.0 Unforeseen Eventualities**

Procedures for dealing with unforeseen eventualities during project execution which result in substantial design changes and which might affect resources are as follows:

As soon as unforeseen eventuality arises, the Principal Contractor will inform the Client.

The health and safety issues arising from the eventuality are to be as soon as possible after the occurrence, together with proposals for dealing with them.

Details of the re-design and the health and safety implications are to be submitted for consideration and acceptance in due time before execution. Health & safety issues will be on the agenda of the progress meetings.

### 15.0 Information for the Principal Designers Safety File

#### Health & Safety File

#### Contents

##### **Preface**

Description of the CDM Regulations and importance of the Health & Safety File to the Client and the Client's responsibilities in respect of the Health & Safety File and future works.

##### **1. General project information**

- a. Names of Client, Principal Contractor and Principal Designer
- b. Emergency procedures and contact details in case of emergency
- c. Brief description of the scheme and the works carried out
- d. Site location plan(s) and scheme layout(s)
- e. Schedules of plot numbers, addresses and full postal addresses including post codes (as applicable)

##### **2. Residual hazards**

- a. Lead designer's statement including provisions for maintenance of the completed structure(s) and any implications for dismantling or demolishing the structure(s)
- b. Structural engineer's statement including ditto.
- c. Principal Contractor's/contractors' (e.g. timber/steel frame contractors) statements including provisions for maintenance of the completed structure(s) and any implications for dismantling or demolishing the structure(s)
- d. Asbestos surveys including details of asbestos removed/remaining, consignment and disposal certificates, asbestos register and management procedures
- e. Site investigation reports and remediation measures including details of: -
  - I. contaminated land removed/remaining, consignment and disposal certificates,
  - II. remediation measures and test certificates for imported materials including top soil
  - III. water-bearing strata, aquifers and water-extraction zones

##### **3. Key structural principles**

- a. Architectural concepts and design philosophy comprising a detailed description of key construction methods, materials and components used including provisions for future alterations and/or installations to conform with 'Lifetime Homes' e.g. drainage for future entrance level accessible shower, reinforced bathroom and cloakroom walls, etc.
- b. Structural design principles and methodology comprising a detailed description of key construction methods, materials and components used including any bracing, pre or posttensioned members, provisions for future alterations and/or installations to conform with 'Lifetime Homes' e.g. knock-out floor and wall panels installation of ceiling tracking hoist, etc.



## Construction Phase Plan

- c. Floor, wall and roof design loadings and loading restrictions particularly where these may preclude the placing of scaffolding, heavy plant or equipment (structural engineers, timber frame and truss manufacturers' calculations)
- 4. Hazardous materials**
  - a. Schedule of hazardous materials used in the works e.g. adhesives, lead paint, special coatings or pesticides which should not be treated with solvents or burnt off or in respect of which special precautions should be taken when handling
  - b. Product data sheets in respect of all of the foregoing
  - c. COSHH assessment/product safety data sheets in respect of all of the foregoing
  - d. Details of any residual hazards associated with these products/materials
  - e. Recommendations for cleaning, maintenance and handling
- 5. Details of installed plant and equipment by type requiring special measures for removal and/or dismantling**
  - a. Record drawings showing position in the overall plant installation/plant room
  - b. Diagrammatic drawings indicating principal items of plant, equipment and fittings and sequence of removal
  - c. Name, address and contact details of the manufacturer including catalogue number, model type or reference
  - d. Manufacturer's information and guidance concerning repair, renovation or decommissioning together with any special arrangements for lifting and/or dismantling
  - e. Information and guidance concerning dismantling, repair, renovation or decommissioning
- 6. Details of equipment provided for cleaning and/or maintaining the structure by type**
  - a. Schedule of installed plant and equipment
  - b. Record drawings showing locations of installations within/upon the building structure
  - c. Diagrammatic drawings indicating principal items of plant, equipment and fittings and their interdependence
  - d. Name, address and contact details of the manufacturer including catalogue number, model type or reference
  - e. Manufacturer's technical literature, including detailed safety precautions, operating and maintenance instructions
- 7. Nature, location and markings of significant mains, underground services and new connections**
  - a. Gas – including supplier
  - b. Water – including supplier
  - c. Electricity – including supplier
  - d. Drains and sewers
  - e. Telecommunications and data
- 8. Information and as-built drawings of the structure, plant and equipment and fire safety**
  - a. Architectural as-built drawings
  - b. Structural as-built drawings and calculations
  - c. Services, plant and equipment as-built drawings

## Construction Phase Plan

- d. Fire strategy and fire ratings of linings and structure (including copies of all correspondence between the building control body and fire and rescue authority), fire doors and fire compartmentation, fire alarm installations, fire fighting equipment and nature, location and marking of fire-fighting services

### **Handover / O&M Information**

#### **Contents**

#### **PART A: GENERAL**

##### **1) The Scheme and Parties to the Contract**

- a. Brief description of the scheme and works carried out
- b. Details of the Consultants and Designers
- c. Copies of consultant designers' collateral warranties
- d. Details of contractors and suppliers
- e. Copies of contractor designers' collateral warranties

##### **2) Statutory Consents and Approvals Relating to the Project as a Whole**

- a. Copy of planning permission including drawings and correspondence
- b. Confirmation of compliance with all planning conditions
- c. Copies of completed planning agreements i. Section 38 & 278 – Adoption of Roads and Highways, parking areas etc.
  - ii. Section 104 – Adoption of Sewers
  - iii. Section 106 – Planning obligations
  - iv. Section 184 – Vehicular Access/Footpath Crossing
- d. Copies of Building Regulation Application including drawings and correspondence
- e. Copies of Building Regulation Completion Certificates I. Building regulations
  - II. Gas Safe completion certificates
  - III. NICEIC Building Regulations compliance certificates

##### **3) Copies of Design Certificates and Reports Relating to the Project as a Whole**

- a. 'Building for Life' certificate / 'Lifetime Homes' certificate
- b. 'Robust Details' registration certificates
- c. 'Secured by Design' certificate / letter of confirmation from local police architectural liaison unit
- d. Considerate Constructor report(s) and certificate(s)

##### **4) Pre-existing hazards and remedial works (as applicable)**

- a. Details of Building Condition/Structural Engineer's Report
- b. Japanese Knotweed Infestation Report
- c. Japanese Knotweed Treatment and Eradication Report
- d. Timber treatment certificates

## Construction Phase Plan

- e. DPC guarantees

### **PART B: BUILDING STRUCTURE AND FABRIC**

#### **1) Test Certificates**

- a. Ground consolidation tests
- b. Pile test certificates
- c. Concrete crushing tests (Concrete cube tests)

#### **2) Building/Project Certificates.**

- a. NHBC (Buildmark) Inspection Certificates, Cover Note(s) and Certificate(s)
- b. SAP Assessments (Calculations)
- c. Code for Sustainable Homes Certificate
- d. Energy Performance Certificates (EPC's)
- e. Building Air Permeability Test Report(s)
- f. Sound Insulation Test Report(s)

#### **3) List of materials and equipment including product data sheets, material safety data sheets, COSHH, cleaning and maintenance instructions etc.**

- a. Bricks and blocks
- b. Windows, double glazing and window ironmongery
- c. Doors and door ironmongery
- d. Kitchens, sinks and taps
- e. Sanitary ware, showers and brassware
- f. Roofing materials and rainwater goods
- g. Floor and wall tiles
- h. Floor coverings
- i. Floor, wall and roof insulation materials
- j. Paints and decorative materials

#### **4) Guarantees, warranties and maintenance agreements from sub-Contractors, manufacturers and suppliers**

- a. Internal doors
- b. External doors (including SBD certification)
- c. Windows (including SBD certification)
- d. Double glazing units
- e. Sanitary ware and brassware
- f. Shower units and mixer valves
- g. Central heating boilers
- h. Central heating pumps
- i. Central heating programmer
- j. Immersion heater (if applicable)
- k. Vinyl floor coverings
- l. Kitchen units, sinks and taps
- m. Ironmongery
- n. Roofing materials and rainwater goods

## Construction Phase Plan

### **PART C: BUILDING SERVICES OPERATION & MAINTENANCE MANUALS INDEX**

(See Appendix for range of information to be included in individual operation and maintenance manuals for each system / installation as appropriate)

#### **1) Summary of systems/installations**

- a. Heating and plumbing
- b. Mechanical ventilation, heat recovery and air-conditioning
- c. Electrical services, power and lighting
- d. Solar energy and photo-voltaic installations
- e. Rainwater harvesting and 'Grey water' installations
- f. Fire detection and alarm installations
- g. Security alarms and intruder systems
- h. TV installations
- i. CCTV installations
- j. Emergency/warden control/door entry systems
- k. Sprinkler and fire-fighting installations
- l. Ground source heat pump installations
- m. Lightning protection installations
- n. Lift installations
- o. Fixed hoists
- p. Stair lifts
- q. Window cleaning equipment e.g. cradle tracks and runways
- r. Building maintenance systems

#### **2) Commissioning and test certificates**

- a. Benchmark boiler commissioning certificates
- b. Gas Safe Landlord/Home Owner Gas Safety test certificates
- c. Flushing/treatment certificates
- d. Electrical Installation test certificates
- e. Fire Alarm/Detection/Sprinkler design and test certificates
- f. Extractor fan and air-flow measurement
- g. TV Signal Reception Test Certificate
- h. Lifts and hoists including stair lifts
- i. Cradles and Building Maintenance Systems

#### **3) Schedule of meter readings at 'Handover'**

- a. Gas meters
- b. Electricity meters
- c. Water meters

### **PART D: DRAINAGE, LANDSCAPING & EXTERNAL WORKS**

#### **1) Drainage.**

- a. Generally including foul and surface water layouts
- b. Attenuation and flow control installations
- c. Cesspools and septic tanks

## Construction Phase Plan

### **2) Landscaping and external works.**

- a. Hard landscaping including layout drawings
- b. Soft landscaping including planting schemes
- c. External fixtures and fittings e.g. garden sheds, water butts, clothes dryers, cycle stands etc.

### **PART E: HOMEOWNERS MANUAL**

1. Sample Home User's Guide(s) for replication for each house type
2. Key schedule at handover
3. Emergency contact details

### **APPENDIX - Information, as relevant, for all installations identified in Section C**

#### **1. Summary of each system installed.**

- a. General description of installation
- b. Purpose and objectives
- c. Essential design criteria/performance characteristics
- d. Any limitations on design/installation
- e. Details of any residual risks or hazards associated with the use/maintenance of the installations

#### **2. As Built-Drawings and calculations complete with detailed index**

- a. As-installed drawings for each installation recording the construction, materials and components including:
  - (i) Record drawings showing overall installation
  - (ii) Diagrammatic drawings indicating principal items of plant, equipment and fittings.

#### **3. Manufacturers' literature including data sheets, operating details and recommendations for cleaning & maintenance.**

##### **a. Product details, including for each item of plant and equipment:**

- (i) Name, address and contact details of the manufacturer.
- (ii) Catalogue number or reference.
- (iii) Manufacturer's technical literature, including detailed operating and maintenance instructions.
- (iv) Information and guidance concerning dismantling, repair, renovation or decommissioning.

##### **b. Operation: A description of the operation of each fitting or installation, including:**

- (i) Control sequences.
- (ii) Procedures for diagnostics, troubleshooting and fault-finding.
- (iii) Emergency procedures including rescue operations and contact numbers in the event of a breakdown.

##### **c. Preventative maintenance and recommendations to be adopted to ensure efficient operation of the systems.**

- (i) Schedule of maintenance and testing frequency chart(s) to ensure efficient operation

## Construction Phase Plan

of installations.

(ii) Lubrication: Schedules of all lubricated items.

(iii) Spares: A list of recommended spares to be kept in stock, being those items subject to wear and tear or deterioration and which may involve an extended delivery time when replacements are required.

### **4. Commissioning and training.**

#### **a. Commissioning records and test certificates list for each installation – including:**

(i) Type test certificates for major plant and components.

(ii) Start and commissioning test certificates for major plant and components.

(iii) Whole installation test certificates.

(iv) Emergency/fail-safe devices

#### **b. Training provisions**

(i) Training certificates for operatives trained in use and operation of the system upon handover

(ii) Schedule of training providers for future training of operatives

### **5. Guarantees, warranties and maintenance agreements.**

A. Manufacturers' guarantees

B. Sub-contractor warranties

C. Supplier warranties

D. Maintenance agreements

## **16.0 Review of the Project**

The project will be reviewed on a continual basis as the contract progresses. Items identified as a potential hazard will be addressed and removed to enable the project to progress within the standard set by the Construction Phase Plan.

# **Appendix A**

## **Fire Plan & Fire Risk Assessment**

## **FIRE SAFETY PLAN**

### **1.0 INTRODUCTION**

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This fire safety plan has been developed for all site works being undertaken for Chrome Service Ltd.

In developing this plan we have fully considered the HSE Guidance booklet "Fire Safety in Construction Work" and, where appropriate, contacted the local HSE officer to ensure that all procedures and precautions are adequate and acceptable.

### **2.0 FIRE PREVENTION ON SITE**

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#### **2.1 Reducing the amount of combustible materials on site**

Materials will be delivered when they are to be used and transported to the area of the site where they are needed at that time.

No combustible materials will be stored in the entrance of the site or in any stairways, which form part of any escape route.

#### **2.2 Storage of flammable substances on site**

All flammable materials will be stored in the company vehicle when not being used.

#### **2.3 Rubbish disposal**

A tidy site policy will be maintained on site during all works and daily waste removed by the company vehicle.

#### **2.4 Protective coverings**

During some of our works, some protective coverings may be used. However, in general, these would be of fire retardant material. The use of flammable protective covers to doors, handles, panels and floor coverings will always be strictly prohibited on the main escape routes including corridors and stairways.

#### **2.5 LPG cylinders**



## Construction Phase Plan

All cylinders on the site will be stored, when not in use, in a storage facility established in the site compound. LPG will not be used in an established welfare or office facility on this project.

### 2.6 Demolition

N/A

## 3.0 REDUCING IGNITION SOURCES

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### 3.1 Smoking on site

Smoking on- site is strictly prohibited.

### 3.2 Plant and equipment

All plant and equipment will be inspected and recorded in the plant and tools register before being used on the site. Any petrol-powered tools must only be refuelled in the established site compound away from all flammable materials.

All electrical equipment properly mounted and protected to avoid heat being conducted to other materials and surfaces nearby.

### 3.3 Use of oxy-fuel equipment

Only competent and suitably experienced operatives will be allowed to set up and use such equipment. The precautions for safe use will be as follows:

All hoses will be of a recognised standard for example BS EN 559: 2009

To avoid any confusion all hoses will be colour coded: BLUE = OXYGEN, RED = ACETYLENE, and ORANGE = PROPANE

Safety devices to an appropriate standard, such as BS EN 730: 2002, will be used as required, including non-return valves on the inlet on the torch (both gas lines), flame arresters at the outlets and also flashback arresters incorporating both cut-off valve and flame arresters.

Properly fitted 'crimped' hose connectors will be used and not 'jubilee clips which may be over-tightened resulting in damage to the hose.

All equipment will be stored and transported on suitable bottle trolleys. The cylinders being stored vertically and not left lying down in vulnerable places.

### 3.4 Permit to work scheme

All hot work generating heat and sparks will be undertaken with the operative and contractor obtaining a hot-works permit from the principal contractor's appointed fire warden before any work starts. The fire warden will inspect all areas of the site, which have had hot-works ongoing during that day for ignition sources and confirm the area as safe.

## Construction Phase Plan

### **3.5 Electrical installations**

All electrical installations including temporary site supply will be installed and regularly inspected (weekly) by competent electricians.

### **3.6 Arson and site security**

Measures will be taken to ensure that the construction site and individual properties are secure at all times.

### **3.7 Temporary site accommodation**

No flammable materials will be stored in the site office. Fire action information will be clearly displayed.

### **3.8 Welfare facilities**

The designated welfare facilities (mess room) again will not contain any flammable substances, liquids, and/or materials etc. Users of these facilities are expected to keep them clean and tidy.

## **4.0 FIRE SAFETY PRECAUTIONS**

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### **4.1 Means of escape**

Our priority in the unfortunate event of a fire is the safe conduct of all site operatives to a safe area away from the site.

All escape routes will be maintained throughout the project by daily visual inspections. The established inspection procedures will ensure that escape routes are not blocked.

### **4.2 Travel distances**

The designated construction site will be an open area initially with enclosed structures formed as the dwelling are constructed.

Any work in a corridor, or other area, involving the use of flammable substances, will only be allowed to progress if the potentially blocked rooms/areas are vacant.

### **4.3 Assembly points (muster point)**

A designated muster point will be established adjacent to the site entrance.

### **4.4 Emergency signs**

All escape routes will be clearly indicated with proper signs in accordance with The Health & Safety (Safety Signs & Signals) Regulations 1996. The signs are white pictograms on green backgrounds.

## Construction Phase Plan

### 4.5 Fire alarms

An alarm system (Klaxon/air horn) will be established on the site by the fire warden, and as the project progresses reviewed and extended to accommodate the progress.

As indicated, the alarms will be visually inspected on a daily basis and then formally inspected and tested by the fire warden.

### 4.6 Firefighting equipment

During the safety induction talk, each operative will be instructed that the fire fighting equipment is open for free use in the event of a fire but only to aid escape! Equipment will include CO2, Water and Powder extinguishers. Furthermore, fighting fires is the fire brigades job and not the job of untrained operatives on a building site. DO NOT RISK LIVES FOR PROPERTY.

### 4.7 Emergency lighting

Where appropriate we will establish a battery powered (110 volt supply) emergency lighting system. This system is solely to aid escape during the event of a fire and mains power failure. The system will be inspected formally each week by the fire warden.

### 4.8 Fire safety points

All extinguishers will be positioned on clearly marked red boxes inside of the property on escape routes.

## 5.0 PLAN MAINTENANCE

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This fire safety plan will be reviewed as required during the work progression and referred to during all site safety meetings.

Signed by Contracts Manager: \_\_\_\_\_

Date: \_\_ / \_\_ /

Signed by appointed fire warden(s): \_\_\_\_\_

Date: \_\_ / \_\_ /

## Construction Phase Plan