

PRE-CONSTRUCTION INFORMATION

Construction (Design and Management) Regulations 2015

PROJECT: *Juniper Street Roof Repairs*

CLIENT: *National Museums Liverpool*

Prepared By: *Paul Foxtan*

DRC Job Reference: *DRC1881*

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VERSION CONTROL

Version No.	Date Issued	Purpose of Revision	Reviewed By
Revision 0	20/11/20	Initial draft for tender Issue	Paul Foxton

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1 INTRODUCTION

The purpose of this Pre-construction Information (PCI) is to provide the Principal Designer, Designers, Principal Contractor and Contractors with the information they need in order to plan and carry out the work safely, and provide a structure for establishing and maintaining appropriate arrangements to manage health and safety at all stages throughout the project, so that the risk of injury, ill health or damage to property being caused is effectively reduced and controlled.

The Principal Designer must make sure that the PCI is shared with all other Designers. At the completion of the design phase, the Principal Designer must update the PCI to include design information and provide the PCI to the Principal Contractor for consideration during planning of the health and safety arrangements for the construction phase.

Information contained within this PCI comprises details of existing site hazards, operations, investigative studies, design considerations, safe working procedures and the precautions which should be adopted. This includes information provided by the Client about existing site operations and safe working procedures and the precautions which should be adopted by the Principal Contractor to limit their impact on site.

The Principal Contractor should review the information included or referenced in this document, and provide the relevant information the Construction Phase Plan to demonstrate that appropriate health and safety arrangements will be implemented.

The Principal Contractor must make sure that the PCI is shared with all other Contractors.

Any conflict between the details contained in this document and any other contract document should be brought to the attention of the Client, Project Manager, Principal Designer for resolution.

1.1 PCI Development and Collation

This PCI document has been developed through reference to existing and new survey information collated by the Client and provided to the Principal Designer who will manage the flow of this information between all relevant parties involved within this project.

1.2 Client Health and Safety Requirements

As a Client under the Construction (Design and Management) Regulations 2015 (CDM regulations), National Museums Liverpool recognise that they have considerable influence over the health and safety performance achieved on construction projects in which we are involved.

The Client is committed to ensuring that the underlying principles and requirements of the CDM Regulations are fully implemented on all construction projects so that exemplar standards of health and safety performance are achieved across this project.

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1.2.1 Appointments

The Principal Designer, Designers, Principal Contractor and Contractors appointed by National Museums Liverpool shall be approved via the Client approved suppliers process.

1.3 Design Phase

The Client expects all Designers to be familiar with the HSE Principles of Prevention and Red, Amber, Green (RAG) lists, and demonstrate that they have been adopted in all design work undertaken on behalf of the Client.

Health and safety must be an agenda item at all design team meetings, and the Client expects the necessary workshops to take place during the design phase to identify strategies for safe access for the internal and external cleaning and maintenance of the building.

The Client expect that its Maintenance Teams to be consulted and included in the development and agreement of these strategies.

During the design phase health and safety hazards associated with the following must be identified and measures to reduce and control the level of risk, so far as reasonably practicable, developed;

- a. Internal stored artifacts;
- b. Occupation and Use of the Building;;
- c. Maintenance;
- d. Refurbishment / Repair;

The Client expects a combined Project Health and Safety Risk Register to be maintained by the Principal Designer throughout the project to record significant and unusual hazards associated, actions taken to eliminate or control the level of risk during design and residual risks that must be controlled during the construction and by the end user.

The Project Health and Safety Risk Register must be included with the PCI provided to the Principal Contractor / Contractors.

The Client also expects significant and unusual hazards that have not been eliminated during the design process to be annotated using pictorial warnings supported with written dialogue in a Residual Health and Safety Risks Box on design and construction drawings provided to the Principal Contractor/ Contractors.

This allows for all relevant risk information to be collated in one place and ensures all significant and unusual issues are not missed during design changes. This practice also ensures that the intended audience, the contractors and their employees will visually be made aware of these issues

1.4 Mobilisation for Construction

No work is to commence until the Principal Contractor's Construction Phase Plan has been assessed for its adequacy by the Client / Principal Designer and an authorisation to proceed has been issued.

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The Construction Phase Plan may be submitted using the Principal Contractor / Contractors own format that contains at least the level of information set out below. The level of detail should be proportionate to the scale and complexity and risks involved in the project.

The Principal Contractor's Construction Phase Plan must be sufficient to address clearly, the arrangements for managing and organising the project.

1.5 Construction Phase

On receipt of authorisation to proceed the Principal Contractor is under a legal duty to administer, implement and update the Construction Phase Plan as required by changes in design or circumstances, throughout the construction period.

Health and safety must be an agenda item at all site progress meetings, and the Client expects the necessary liaison to take place on a regular basis with the Client, or its nominated representative, throughout the construction phase to identify, amend and implement risk control measures to ensure the continuing health, safety and welfare of the Client and other visitors to the project.

To ensure that Principal Contractors and Contractors continue to manage health and safety to a high standard on site throughout the construction phase of projects, the Client will arrange for site health and safety inspections to be carried out by National Museum Liverpool's internal safety team.

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2 DESCRIPTION OF PROJECT

2.1 Nature of the Project

The project comprises the general repairs to the existing roof rainwater drainage systems. Currently leaking and damaged by birds. There is also some parapet works due to movement and damage.

2.2 Project Location Details

The details of the site to which this pre-construction Information relates are as follows:

National Museums Liverpool,
Building 1,
Juniper Street,
Liverpool
L20 8EL

2.3 Location



2.4 Project Timescales

Date for the commencement of design:

09/09/20

Time allocated for design (weeks):

TBC

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Date for appointment of Principal Contractor:	TBC
Time allocated for mobilisation by Principal Contractor:	4 Weeks
Date for commencement of construction period:	15/02/2021
Time period allocated for construction (weeks):	6 Weeks
Project completion date:	31/03/2021

The final agreed programme, giving the timescales for the commencement, phasing, sectional completion, final practical completion and commissioning of the works, is to be created and maintained throughout the project lifecycle and will form part of the agenda for discussion during the weekly site meeting.

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2.5 Details of Key Duty Holders and Authorities

Details of the nominated duty holders under the CDM Regulations are recorded below;

Role	Company Name Address	Contact Details
Client/ Project Manager	National Museums Liverpool Estates Management 127 Dale Street, Liverpool L2 2JH	Suzie McNicholas Suzie.McNicholas@Liverpoolmuseums.org.uk M: 07900 8288858
Principal Designer	DRC Consulting Salvus House Ayckley Heads Durham DH1 5TS	Paul Foxton Paul.foxton@drc-consulting.co.uk T: 0191 348 1524 M: 07426 822 861
Designer / Condition Surveyor	Purcell St James, 79 Oxford Street, Manchester M1 6FQ	David Clifton David.clifton@purcelluk.com 07765 244253
HSE	Redgrave Court, Merton Road, Bootle, Merseyside, L20 7HS	T: 0151 9514000
Local Council	Liverpool City Council Municipal Buildings Dale Street, Liverpool, L2 2DH	T: 0151 233 3000

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2.5.1 Services Directory

Service	Service Provider Contact Details
Telecom	BT Openreach – 0800 023 2023 (option1)
Water	United Utilities – 0345 672 2888
Gas	National Grid UK – 0800 111 999
Electricity	Electricity North West – 0800 195 4141
Other	

2.6 Existing Health and Safety File, Records and Plans

Detailed records of surveys, reports and location of existing service information etc. are located within existing Health and Safety File records provided as part of the tender documentation.

The Client has obtained of a number of detailed surveys, copies of which are provided within the appendices of this document. The key subject items are listed in the table(s) below and full consideration must be given to these records throughout the project from design through to completion.

Source	Existing Survey and Records Information	Reference
ETON Environmental	Asbestos Refurbishment survey commissioned and awaiting results.	TBC
Purcell	Roof Condition report	August 2020
T.D Bingham	H&S file for previous roof refurbishments	97075/RTH/TDB/t b.

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2.7 Existing Environment and Site

The proposed site and existing environment is an existing storage facility for national museums Liverpool (Building 1 – Juniper Street). The building is home to historically important artifacts stored until future display.

Whilst the scope of works is predominantly external consideration needs to be made to the internal contents within the structure. Specific consideration to water ingress and hot works to detailed in the Principal Contractors Construction Phase Health and Safety Plan.

The below photograph highlights two elevations of the structure. The building extends beyond what is illustrated in the right of the photograph.



2.8 Existing Services (Utilities)

The existing site has the usual, gas, water, electric and telecom services. It is not anticipated to be of relevance to the scheme as there are no services on the roof.

Care will be needed to not obstruct the existing security cameras around the structure. These are monitored 24/7. These will also provide some protection to the site establishment that it is proposed to be situated to the right elevation of the above photo.

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3 CLIENT CONSIDERATIONS AND MANAGEMENT

3.1 Arrangements

The Client is responsible for the health and safety of all their employees at work and other persons not in their employ, who are affected by the works. The client shall terminate the works if they believe that a person's safety is at risk.

The Client requires that all work is undertaken in accordance with all statutory requirements with respect to health and safety. In addition, all relevant codes of practice and guidance notes shall be adhered to.

The Principal Contractor shall define his health, safety and environmental management arrangements for all stages of the construction works within the Construction Phase Plan. The Principal Designer will review the development of the Construction Phase Plan, and will confirm when the Plan is adequate and in order for construction works to commence.

The Principal Contractor will be responsible for the day to day monitoring of health and safety within the construction site areas, and will ensure that the Construction Phase Plan is reviewed at regularly updated and revised as necessary throughout the duration of the project.

The Principal Contractor site activities and access arrangements will need to be planned sufficiently in advance, considering but not being limited to:

- a. Project management organisation;
- b. Management of risk (risk controls and principles of prevention when designing and developing proposals and be able to demonstrate this process);
- c. Scheduling and phasing arrangements;
- d. Communication, co-ordination and co-operation with other members of the project team (during design and construction);
- e. Site establishment, storage compounds, security and access routes;
- f. Identification and protection of utility services;
- g. Interface arrangements, in particular operations, residents and properties adjacent to the operational site;
- h. Contingencies for potential contaminants;
- i. Permit arrangements;
- j. Emergency arrangements specific to the site and nature of the works;
- k. Lifting operations;
- l. Maintaining access for personnel throughout the works;
- m. Maintaining access along the entrance road for adjacent users;
- n. Liaison and communication with all relevant parties;
- o. Temporary work design;
- p. Transportation plan;
- q. Arrangements for monitoring of health and safety;
- r. Providing strategy for achieving safety goals;
- s. Hand over procedures, delivery of Health and Safety File information.

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All designers appointed to the project shall consider the health and safety implications of their design with respect to the construction, operation, maintenance and ultimately demolition of the building. Details of any remaining identified hazards that it has not been possible to design out must be forwarded to the Principal Contractor, Principal Designer.

The Principal Designer shall review drawings and design changes throughout the project and raise any associated issues with respect to health and safety with the design team.

The nominated Site Manager shall be responsible for the day to day management and implementation of health and safety on site and not undertake site works.

The Principal Contractor shall establish a forum for discussing health and safety issues on site. Health and safety shall be included on the agenda of all site meetings and significant items minuted and distributed to all relevant parties.

A system of monitoring the construction works to ensure effective management of safety throughout the project duration shall be implemented by the Principal Contractor. This shall include, but not strictly limited to:

- a. Workplace inspections – general site safety;
- b. Statutory inspections – scaffold, plant equipment, etc.;
- c. Accident / incidents – reporting and investigating;
- d. Subcontractors – monitoring of nominated subcontractors.

Details of all accidents on site and investigation findings of those accidents shall be forwarded promptly to the Client and copied to Principal Designer.

The Principal Contractor is responsible for the creation of all required method statements and risk assessments with respect to his undertakings. In addition, the Principal Contractor shall collect and review the Risk Assessments and Method Statements (RAMS) of all subcontractors on site.

3.1.1 Planning and Management of Construction

All stages of planning and management of construction works should be undertaken giving due regard to health and safety, through liaison with; and engagement of the Principal Designer.

The Principal Designer will review the development of the Construction Phase Plan, and will confirm when the Plan is adequate and in order for construction works to commence.

3.1.2 Health and Safety Goals

The main objective is to ensure that adequate actions and precautions are taken to prevent harm being caused to those carrying out construction work and others who may be affected. The Principal Contractor will implement pro-active measures to promote the reporting of all accidents, incidents and near misses during the works.

The Clients target of Zero Lost Time Injuries will be of paramount importance in the preparation of all works and sufficient control measures must be put in place to ensure a safe working environment is achieved prior to the commencement of all those works.

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Proactive Indicators

Proactive monitoring regimes used to assist with supporting the prevention of incidents and accidents are, but not strictly limited to:

- a. Contractor SHE audits;
- b. Site based SHE inspections / safety walks;
- c. Senior Manager Safety Tours;
- d. Toolbox Talks;
- e. Behavioural observations and performance;
- f. Hours worked.

Reactive Indicators

Reactive indicators recording incidents and accidents which have occurred are, but not strictly limited to:

- a. Fatalities
- b. Major Injury
- c. Lost Time Injury (greater than 1 day)
- d. Medical Treatment Injury
- e. First Aid case
- f. Dangerous Occurrence
- g. Reportable Disease
- h. Near Miss
- i. Environment Incident

Contractors who require a full definition of the above subjects can request these from the Principal Contractor.

Lessons learnt should be shared throughout all phases of the work and not kept until project completion, they should be used as it enables information to be shared across other Contractors and sub-contractors.

3.1.3 Induction and Training

All personnel on site must have received adequate training to undertake their work in a safe and competent manor. Information on training of personnel refresher training and statutory training certification should be held by the Principal Contractor and must be available for inspection upon request with prior notification.

Any training needs identified as being required during the course of the project shall be undertaken. These may be in the form of undertaking new / additional third party health and safety training associated with use of plant and equipment, toolbox talks or some other suitable method.

All persons on site should be given a site specific health and safety induction to familiarise themselves with emergency procedures, management requirements and specific site details. These inductions should be recorded and maintained within the site safety file.

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Personnel should hold and carry either a current CITB CSCS and / or CPCS, CCNSG card or other equivalent UK recognised standard passport and be trained and qualified to undertake their appointed tasks and comply with site rules and practices.

All foreign national card holders must have their cards and competences stated upon them checked for comparison to UK recognised standards.

3.1.4 Communication and Liaison

All communication and liaison on site will be established during the initial engagement of the Principal Contractor. The Principal Contractor shall co-operate with the Client to ensure a proactive line of communication within the project. The formal arrangements for communications between the Principal Contractor, Client, Principal Designer and Contractors are to be defined within the Construction Phase Plan.

Weekly site meetings will be held between the Client and Principal Contractor to ensure that all relevant information relating to the contract will be issued and discussed as and when the information is made available. The Principal Designer will maintain regular contact with the project throughout the construction phase and will ensure that all information received by all parties is issued in a prompt and timely manner.

It is expected that the implementation of the plan will include regular reporting and updating of such critical items of progress, health, safety and environmental, risks and design (including design change) etc. through but not limited to the following:

- a. Health and safety co-ordination meetings;
- b. Planning meetings;
- c. Progress meetings;
- d. Design review meetings;
- e. Safety meetings;
- f. Inductions;
- g. Tool box talks;
- h. Safety briefings;
- i. Health and safety notice boards;
- j. Reports and Logs
- k. E-mail;
- l. Electronic filing system.

Progress meetings will be held at intervals on an agreed day and time. An agenda item at this meeting shall include a review of Health, Safety and Environmental Management of the project and should cover:

- a. Actions required following any previous meeting;
- b. Health and safety planning of future work including liaison with Client, Designers;
- c. Key risks and concerns;
- d. Safety status and statistics (reports of hazards, near misses, proactive health and safety inspections, surveys and tours);
- e. Report on agreed health and safety indicators.

The Principal Contractor will be required to co-operate and co-ordinate his work with that of others, including adjacent farm operations, on a daily basis and ensure interfaces are adequately planned and communicated to the relevant individuals to ensure their safety and to manage activities within the programme as effectively as possible.

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3.1.5 Site Security

Site security arrangements are to be commensurate with the hazards encountered so as not to allow access to those hazards by third parties, the general public and especially children. The final arrangements will be discussed with the Principal Contactor and will be outlined within the Construction Phase Plan.

Further reference should be made to “Protecting the public: your next move”. All construction areas of the site should be fenced off and suitably signed. Arrangements will be discussed with the Principal Contactor and be outlined within the Construction Phase Plan.

The Principal Contractor shall prior to the commencement of work develop and implement suitable arrangements for site security within the Construction Phase Plan. The plan shall detail arrangements including but not limited to the following:

- a. Control of unauthorised personnel;
- b. Method of restricting access to unauthorised personnel and general public;
- c. Measures to minimise the risk of vandalism and theft;
- d. Protection of general public and other from risk associated from the work activities;
- e. Pedestrian and traffic management arrangements.

The current facility has a 24/7 security presence with 2 guards on an evening. This security measure will remain in place during the project however it is internal to the building only.

The security team have highlighted the need for an alarm on the scaffold to warn of an intruder gaining access to the roof. The exist cameras will need some adjustment to suit the site welfare and any scaffolding.

3.1.6 Welfare Provision

Welfare arrangements shall be provided and maintained in a clean and tidy condition by the Principal Contractor, as required by the Construction (Design and Management) Regulations 2015. Whenever possible, sanitary accommodation shall be on mains drainage with flushing mechanisms and permanent water supply. The recommended sanitary provisions are scaled in the table below:

No. of workers	No. of water closets	No. of urinals	No. of wash stations
1-15	1	1	2
16-30	2	1	3
31-45	2	2	4
46-60	3	2	5
61-75	3	3	6
76-90	4	3	7

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The facilities will contain:

- a. Wash stations with hot / warm and cold running water, soap and towels.
- b. A mess room for periods of rest and the eating of meals containing a source of potable water for drinking and a means of heating food.
- c. A drying room for drying wet clothes and footwear where appropriate.
- d. A suitable area for holding site meetings / inductions.
- e. Male, female and disabled toilets.

The installation and maintenance of the above and of the work site in general are such as to provide adequate fresh air, lighting, temperature and weather protection.

Note: Portaloo units do not contain hot water and therefore do not comply with Schedule 2 of the CDM Regulations (Welfare Facilities).

The below photograph highlights the area allocated for welfare to the side of the building. Also the map that follows.



The Red arrow to the left of the building indicates the proposed siting of cabins.

There are no service connections so therefore the appointed Principal Contractor shall plan for being self-sufficient.

Site welfare arrangements shall consider the ongoing Covid pandemic. Strategies and details for ensuring risks are minimised to operatives shall be included in the

construction phase plan for prior approval. This includes a Covid risk assessment.

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3.1.7 Site Access and Egress Points

The site can be accessed will accessed off Bankhall Lane. The Principal Contractor will need to setup welfare on this road and create an access point to the roof. Likely installation of a Haki staircase to the roof. There are likely needs for installing a full scaffold around elements of the building to achieve a safe working platform.

Adequate signage will be displayed from the road, to warn road users of the potential danger from vehicles gaining access / egress from the site. The roads adjacent to the site access point will be kept in a clean and tidy manner; any excess mud on the road will be cleared at regular intervals. All routes will be kept free of obstacles and trip hazards during the period of construction.

The site and existing road network allows sufficient space for the Principal Contractor to plan for turning of vehicles with the site establishment and will not require reversing of vehicles into the public highway. The Principal Contractor is required to provide details, including a traffic management plan within Construction Phase Health Plan.

3.1.7.1 Site Hours

Planning has not advised on restrictions to working hours, however it is anticipated that construction at the site will be carried out within normal site hours 8am to 6pm.

The location will not require any restrictions of delivery times.

3.1.8 Site Accommodation and Unloading Areas

Site accommodation will be in line with the welfare facilities, the laydown area will be identified on a site drawing and adequate pedestrian segregation from vehicular movement will be afforded to ensure safe access and egress around site and adjacent the work area.

This information should be included within the Principal Contractor's Construction Phase Plan and provided to the Principal Designer for review prior to works commencing on site.

3.1.9 Site Transport and Vehicle Movement Restrictions

The planning, management and effective segregation of construction activities from neighbouring site operations will be crucial in ensuring the safety of workers, visitors, general public and construction staff working on the site during the period of works. Adequate consideration must be given to the effective segregation of construction activities at all times, and communication of site activities to all persons who may be affected by such works.

The Principal Contractor shall develop and include a suitable Traffic Management Plan (TMP) within his Construction Phase Plan for controlling traffic whilst on site, including specific arrangements for safe site access/egress. The Traffic Management Plan should take into account the following:

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- a. Controlling traffic whilst on site, including specific arrangements for safe site access / egress and segregation of vehicles and pedestrians;
- b. Arrangements for delivery and removal of plant and equipment, materials / waste and on site storage and car parking arrangements;
- c. Deliveries of large or complex loads / planned abnormal load movements;
- d. Road restrictions, existing access routes and vehicle movements;
- e. Arrangements to safely manage/eliminate hazards highlighted within the design risk assessment and project hazards identified within this document;
- f. Turning areas and control of reversing vehicles;
- g. Lighting / Signage;
- h. Existing utilities e.g. overhead services
- i. Emergency access to existing facilities.
- j. Limiting construction traffic movements, during peak hours on the local highway network.

The Principal Contractor will be required to provide detailed traffic management proposals for further discussion and agreement with the Client, Principal Designer. Priority must be given to existing public access when planning vehicle movements to and from site. Access for emergency and service vehicles along the existing approach roads must also be maintained free from obstruction and kept clear for emergency vehicles.

3.1.10 Permit to Work Systems

The Principal Contractor shall ensure a permit to work is in place for all particularly hazardous operations on site. This should include, although may not be strictly limited to:

- a. Hot works;
- b. Works at height;
- c. Lifting Operations.

No work will proceed on site unless RAMS documentation has been reviewed and accepted by the Principal Contractor, and permission to commence the work has been authorised by his nominated representative e.g. Construction Site Manager.

All Contractors and Sub-contractors will carry out and produce RAMS for their work activities. All documents will be task specific, and be signed, dated and tracked by the Principal Contractor.

Details of the Principal Contractor arrangements for the safe systems of work, including Permit to Work systems and the production and approval of RAMS documentation shall be included within the Construction Phase Plan.

It should be noted NML issue a roof working permit to work that is relevant to the scheme. A copy of this permit is included in the appendices to this document. There is also a set of safety guidelines that must be followed by the tendering contractors and a COVID-19 Checklist.

3.1.11 Fire Precautions

An adequate fire emergency plan will be developed by the Principal Contractor and outlined within the Construction Phase Plan, this plan will outline the number of Fire Extinguishers required on site along with the placement of such devices. The plan should take into account the location of the site and the need for muster points and procedures. The fire plan should comprise, but not be limited to:

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- a. Emergency routes / means of escape (to be displayed and marked on plan);
- b. Means of extinguishing fire (operatives to be trained);
- c. Means of minimising risk;
- d. Permit procedures e.g. Hot Works;
- e. Emergency procedures (including first aid provision);
- f. Name of fire marshal(s) / first aiders (to be displayed);
- g. Frequency of testing emergency arrangements.

Appropriate personnel shall be trained as Fire Marshals and identified within the Construction Phase Plan.

3.1.12 Emergency Procedures and Means of Escape

An adequate emergency plan detailing action to be taken in an emergency and precautions to be taken to reduce risk shall be developed by the Principal Contractor. Action to be taken in instances of the following shall be included:

- a. Fire;
- b. Medical emergency.

Details to be included (where appropriate) within the emergency plan:

- a. Raising the alarm;
- b. Evacuation;
- c. Roll call / muster point;
- d. Isolation;
- e. Summoning of emergency services;
- f. Firefighting equipment;
- g. Emergency lighting;
- h. Escape signage;
- i. Display of fire plan;
- j. Nomination of fire wardens;
- k. Co-ordination with other parties.

The Construction Phase Plan shall include details of the completed emergency plan. It should consider the neighbouring homes and ensure evacuating personnel.

3.1.13 First Aid Services

The Principal Contractor shall in accordance with the First Aid at Work Regulations make an assessment of first aid needs appropriate to the circumstances of the workplace, ensuring that appropriate first aid provision is available at the site facilities either with the presence of first aiders or emergency first aiders and the appropriate equipment to support foreseeable events. Details of first aid provision should be detailed within the Construction Phase Plan.

3.1.14 Smoking Restrictions

Smoking will only be allowed in designated areas, this will not include the welfare facilities. This includes the use of electronic cigarettes.

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3.1.15 Parking Restrictions

The Principal Contractor is required to detail parking arrangements within their Construction Phase Plan avoiding as far as practicable impact on adjoining roads and access points as well as neighbouring occupant parking arrangements. There is no restrictions on parking around the site.

Any damage caused as a result of contractor parking or compound siting must be made good at the end of the works.

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4 ENVIRONMENTAL RESTRICTIONS AND EXISTING RISKS

4.1 Safety Hazards

A separate project CDM risk register is included in the appendices to this document and should be considered by the Principal Contractor when planning work on the project. Some of the key items to consider;

- Working fragile roof surfaces.
- Working on steep gradients with no anti slip surfaces.
- Protection of the general public and NML personnel below the roof works
- Fire risk from cutting and hot works, highly combustible material stored below the roof.
- Moving materials to high level, loading of roof surfaces and manual handling.

4.1.1 Boundaries and Permanent / Temporary Access

All vehicle movements shall be subject to a speed restriction defined within the Traffic Management Plan and heavy vehicle movement shall be accompanied by a representative of the Principal Contractor.

Movement of heavy vehicles which would result in abnormal delays to existing road users shall only be undertaken after prior notice has been given to the dwellings along the route. Contractors shall ensure that all roads are kept free of debris arising from construction activities and shall make good any defects resulting from the execution of the works.

4.1.2 Deliveries, Waste Collection or Storage Restrictions

Any material designated as waste will need to be sent to a licensed site and Waste Transfer Notes will be required by the Client to ensure that no fly tipping has occurred, these should form part of the Construction Phase Plan. Prior to work commencing it shall be a requirement that a comprehensive waste management plan be developed and approved by the Client.

4.1.3 Adjacent Land Uses

The adjacent land uses include a large recycling facility, a direct neighbour to the site. The building is further surrounded by other businesses including tool hire and builder merchants.

4.1.4 Existing storage of hazardous materials

There are no hazardous materials stored on or below the roof.

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4.1.5 Existing Services (Utilities)

The Principal Contractor should ensure the correct level of controls are in place to identify all known services prior to any site establishment, plant movements. It is not anticipated that the roof works will come into contact with any services.

The Principal Contractor shall develop suitable RAMS, comply with and take due consideration of the following standards / requirements:

- a. Compliance to HSE guidance on Avoiding Danger from Under Ground Services 2000 (Reprinted 2005) HSG47 HSE Books ISBN 0 7176-1744-0;
- b. Compliance with Health and Safety in Excavations 1999 (Reprinted 2006), HSG185, HSE Books ISBN 0 7176 1563 4;
- c. Identification and protection of overhead services on access to and within close proximity to the work areas (Refer to HSG GS6 guidance documentation).

In addition to any service drawings provided, the Principal Contractor shall verify all service positions prior to commencing work and shall check all work areas thoroughly for any other services which may be present but not recorded on the Drawings. All surveys are to be referenced within all RAMS submitted by the Principal Contractor.

The Principal Contractor will need to be self-sufficient in terms of services. There will be services up to the site and the contractor will need to manage connections to site establishment or bring water and a generator if required.

4.1.6 Confined Spaces

It is not envisaged that there will be many areas of confined space working on the project however if an area is deemed to meet the requirements of the Confined Space Regulations (excavations can be classed as confined spaces), then it will be commensurate that the Principal Contractor has the correct level of training and procedures in place.

Whilst every effort should be made in design to eliminate or reduce the need for confined space working, should it be deemed necessary to undertake work in confined spaces, appropriate controls as set by the Confined Space Regulations 1997 must be strictly observed. The Principal Contractor shall implement a safe system of work for any operation to be undertaken within a confined space, taking into account but not limited to the following:

- a. The nature of the confined space;
- b. The nature of the work to be carried out;
- c. Elimination of sources of danger;
- d. Documented risk assessment;
- e. Permit requirements;
- f. Training and competence requirements;
- g. Work control permit system;
- h. Emergency procedures.

Such arrangements must be outlined by the Principal Contractor within the Construction Phase Plan.

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4.1.7 Working at Heights

The Principal Contractor shall comply with all relevant legislation regarding working at heights and adopt a suitable hierarchy of controls as defined within the Work at Height Regulations 2005. The Principal Contractor shall ensure a management system is in place for managing site access equipment for all contractors e.g. ladders, tower scaffolds and carry out a risk assessment and take the appropriate precautions before commencing any work at height.

The existing health and safety file produced by T.D Bingham Partnership highlights the roof covering for the two storey section of the building only. The Two storey section is cover with a Kingspan system, accompanied with a latchway system. Inspection records and the H&S file info are included in the appendices to this document. It does not indicate whether it is suitable for loadbearing of personnel or materials. The H&S file does not include any residual risk information.

An investigation into the material used on the lower roof is required. Not accessible as part of the pre-construction health and safety visit. If this is a fragile covering, under netting could be required or other methods of fall arrest for operatives working on the roof repairs.

4.1.8 Manual Handling

All manual handling activities are to be kept to a minimum by the use of mechanical aids (e.g. barrows, lift trucks etc.) will be used instead. Where mechanical aids are not practical the manual handling activity should be risk assessed as described within the Manual Handling Operations Regulations, to ensure the operator / operatives are not put risk by lifting beyond their capability, overreaching or overstretching and causing themselves injury. Management controls and details are to be provided within the Construction Phase Plan.

4.1.9 Excavations

No excavation work will be conducted without a thorough examination of the risk involved. All excavation work is to be undertaken within the controls of the site specific procedure and comply with HSG47 'Avoiding danger from Underground Services' and HSG185 'Health and Safety in Excavations'.

4.1.10 Ground Conditions

Not applicable to the scheme.

4.1.11 Existing Structure

The existing structure is a mixture of brick built to the single storey section and concrete framed build for the two storey element. The roof to the entire building is steel framed with a cladded covering.

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More details to the existing roof covering is needed to assess loadings and whether elements of fragile surfaces remain.

It should however be noted that during the pre-construction info site visit by the DRC CDM advisor the below photograph was taken and it does highlight movement in the parapet on one section of the building. This could be unsafe and needs further investigation.



4.1.12 Structural Modifications

There are no known or obvious signs of structural modifications.

4.1.13 Fire Damage, Structural Modifications

No known

4.1.14 Work on or Near Water

Not applicable to the scheme.

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4.1.15 Lifting Equipment

The Principal Contractor shall identify his arrangements for the management of work for all aspects of lifting operations within his Construction Phase Plan. The safe systems of work must comply with The Lifting Operations and Lifting Equipment Regulations (LOLER) 1998 and BS 7121 and should include but not be limited to the following steps:

- a. Assess the lifting operation;
- b. Assess the ground conditions;
- c. Consult with other responsible parties;
- d. Ensure that all plant and equipment is inspected, and that scheduled/mandatory maintenance has been carried out;
- e. Ensure that emergency procedures are in place;
- f. Organise and ensure proper control of the operations.

4.1.16 Plant and Equipment

All plant and equipment brought to site will be subject to inspection, an emergency spill kit should be provided and located within the project boundary to contain any leaks and discharge that may occur. Restrictions with regards to the overall movement of vehicles have already been identified within this document and the Principal Contractor will ensure that the Construction Phase Plan reflects these restrictions.

The Principal Contractor will need to demonstrate how it will ensure equipment used is suitable for use on site, complies with all Permits to Work, site rules and regulations that are applicable, including but not limited to the following:

- a. Select and provide equipment and plant that is fit for purpose with respect to its integrity, where it is to be used and the tasks or processes for which it shall be used;
- b. Equipment and plant shall be maintained in an efficient state, in efficient working order and in good repair as required, with auditable maintenance logs kept up-to-date as required by relevant Legislation.
- c. All equipment and plant, whether purchased or hired, shall be examined and checked by the Principal Contractor prior to being used and he shall ensure all necessary information, instructions and manuals are provided;
- d. The Principal Contractor shall ensure that his own and that of his Subcontractors plant, equipment, and construction tools required for the execution of the works meet all legal requirements and are maintained in a safe and efficient condition and in accordance with manufacturers recommendations.

4.2 Health Hazards

4.2.1 Asbestos

A refurbishment survey has been commissioned for the scheme. This will be provided once received.

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4.2.2 Hazardous Substances

There are no known hazardous substances used in the existing roof structure.

4.2.3 Contaminated Land

Not applicable to the scheme.

4.2.4 Existing Structures Containing Hazardous Substances

There hazardous substances known to be stored within the existing structure. Asbestos survey is awaited at the time of this first draft.

The original steel roof supports are still in use therefore any work to those as part of the guttering repairs needs to take into account the presence of lead paint.

4.2.5 Health Risks from Client Activities

Not Applicable.

4.2.6 Other Health Risks

None to note.

4.2.6.1 Leptospirosis

The neighbouring recycling centre could be a magnet for rodents. Therefore the Principal Contractor needs to consider the risk and take measures to reduce risks to operatives. Ensuring food waste is not left in and around the site welfare. Regular cleaning of the welfare and awareness given to the operatives through toolbox talks.

4.2.6.2 Psittacosis

Whilst there is the presence of bird waste on the roof it is unlikely to be dry and presenting a dust that presents the risk of psittacosis. This should be assessed by the Principal Contractor. Any environmental cleans of the structure will need to be discussed with NML.

5 SIGNIFICANT DESIGNS AND CONSTRUCTION HAZARDS

Designers' duties relate to ensuring their designs pay due consideration to health and safety and the avoidance of foreseeable risk. Their duties extend beyond the construction phase of a project. The health and safety of those who will maintain, repair, clean, refurbish and ultimately demolish all aspects of the structure must also be considered. Where risks cannot be eliminated the Designer has a duty to limit and control the associated risk. The obligation on Designers is to provide information on the relevant construction assumptions they have made as part of the design process but does not require them to outline methods of dealing with the hazard.

5.1 Design Assumptions, Work Methods and Control Measures

The Principal Contractor shall take cognisance of information provided by his appointed Designers and develop safe systems of working to address the significant hazards associated with the design. RAMS shall be incorporated within the Construction Phase Plan prior to executing any particular activity.

5.2 On-going Design Work

On-going design considerations, including temporary works, designed access equipment, individual specialist Contractor and specialist Designer packages, are required to be developed with due consideration for the health and safety of all concerned both during construction and subsequent occupancy and maintenance. Each element of design is to be co-ordinated for health and safety aspects by the Principal Designer.

5.3 Control of Significant Risks

Risk Assessments are required by the Management of Health and Safety at Work Regulations 1999 and Method Statements are required to be undertaken and developed for all potentially hazardous works on site.

The Principal Contractor shall collect and approve these documents from subcontractors in addition to those created for his own works.

All other members of the project team (structural engineer, M&E services consultant, Principal Contractor, sub-contractor, etc.) shall develop risk considerations where they design or modify a design for any works, fixtures or fittings, etc. This is of particular note where any works are "design and build".

The Principal Contractor shall collect design risk considerations from all related parties, and forward these to the Principal Designer for inclusion within the CDM Health and Safety File.

6 HEALTH AND SAFETY FILE

There is an existing Health and Safety File for the site associated with the previous roof works. One will be developed as part of this project and made available to the Client on project completion and should include information on the following topics where relevant:

a. Description of Project:

- A project description, programme details, project team;
- Extent and location of existing records and plans relevant to health and safety on site, including information about existing structures when appropriate.

b. Residual Hazards:

- Details of residual hazards and how they have been dealt with e.g. surveys or other information concerning asbestos, contaminated land, water-bearing strata, buried services, confined spaces etc. Recorded in the form of a Residual Risk Register.

c. Key Structural Principles:

- Those incorporated into the design of structures, e.g. bracing, source of substantial stored energy, including pre- or post-tensioned members, safe working loads for floors and roofs, particularly where these may preclude placing scaffolding or heavy machinery there.

d. Hazards associated with materials used:

- Details of hazards associated with materials such as lead paint, special coatings (that perhaps should not be burnt off), insulation material, adhesive, paints etc.

e. Installed plant and equipment:

- Health and safety information regarding the safe removal or dismantling of installed plant and equipment.

f. Cleaning and Maintenance:

- Health and safety information about equipment provided for cleaning and maintenance purposes.

g. Services:

- Nature, location and markings of significant utilities, pipelines and services.

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h. As-built drawings:

- Information and as built drawing.

An electronic copy of the health and safety file shall be prepared as the project progresses and will be delivered to the Client at the completion of the works.

A copy of all information should also be issued in an electronic format. The format of the electronic data issued is to be as follows:

- a. All documents and product data sheets are to be in PDF format;
- b. Design Team drawings are to be in PDF and AutoCAD DWG format.

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7 LIST OF APPENDICES

Asbestos Survey

NML Permit to work

Safety Guidelines for Contractors

Contractor Induction Checklist

Contractors H&S Questionnaire

COVID-19 Induction

Roof condition survey

Mansafe system details

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