

Cooper & Withycombe

CONSULTING ENGINEERS

**Historic Ships Workshop
HM Royal Naval Base
Portsmouth
PO1 3NH**

**CDM 2015: Pre-Construction Health
and Safety Plan**

November 2020

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PRE-CONSTRUCTION HEALTH AND SAFETY INFORMATION

Introduction to The Health & Safety Information

This Pre-Construction Health and Safety Information has been prepared in accordance with the Construction (Design & Management) Regulations 2015.

The contractor for this contract will be appointed as the Principal Contractor as defined in the CDM Regulations.

The contractor must be able to satisfy the client that they have adequate resources and are in all respects competent to execute the duties of the Principal Contractor as required by The CDM Regulations.

Co-operation is an essential part of the Regulations. It is important that all persons concerned with the project co-operate with any other person concerned to enable that person to perform any duty or function under the Regulations.

1.0 **PROJECT DETAILS**

1.1 **Client**

National Museum of the Royal Navy
HM Naval Base
Portsmouth
PO1 3NH
Telephone: 02392 891370
Contact: Stephen Green / Lucy Murphy / Roy Smith
Email: Stephen.green@nmrn.org.uk

1.2 **Principal Designer**

Dannatt Johnson Architects LLP
77 Great Suffolk Street
London
SE1 0BU
Telephone: 020 7357 7100
Contact: Sonia Tong
Email: Sonia.tong@djarchitects.co.uk

1.3 **Architect and Cost Consultant**

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77 Great Suffolk Street
London
SE1 0BU
Telephone: 020 7357 7100
Contact: Sonia Tong
Email: Sonia.tong@djarchitects.co.uk

1.4 **Structural Engineer**

Mason Navarro Pledge
Bancroft Court
Hitchin, Hertfordshire
SG5 1LH
Telephone: 01462 558710
Contact: David Rafferty
Email: dr@mnp.co.uk

1.5 **CDM Advisor**

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1.8

Other Contacts

Health and Safety Executive
Construction Division
151 Buckingham Palace Road
London
SW1W 9SZ

2.0 THE EXISTING ENVIRONMENT

2.1 The Site and Adjacent Land Use

The site is within HM Royal Naval Base, Portsmouth.

The work is to be undertaken to the Historic Ships Workshop which forms part of the Grade II* Listed Great Ropehouse, built in 1771 and reconfigured during the 1950s-1960s. The building is situated within a Conservation Area within the secure side of the Naval Base. The Historic Ships Workshop comprises original 1771 brick walls (to resist fire) with a 1950s mansard steel roof, finished with clay tiles and asphalt.

The Historic Ships Workshop is close to the Portsmouth Historic Dockyard visitor attraction and is sited amongst Naval storage and workshop buildings.

The project is to create more working space, office space and modern welfare facilities in Bay 1.

2.2 Access

Access will be via Trafalgar Gate. The contractor and vehicles will need to be escorted as per the normal escorted pass procedure.

2.3 Working Space

The contractor will have enough space for a compound and parking. The entrance should be Herras fenced, and marked up with site boards and safety boards, so that the public and adjoining occupiers are protected, and there is no doubt that it is a building site.

2.4 Existing Buildings

2.4.1 The Historic Ships Workshop is a substantial brick built warehouse as set out in 2.1.

2.5 Existing Services

As there are no valid 'as installed' drawings available for services present, the contractor should take all necessary precautions to identify services prior to undertaking the work. The following services are likely to be present in the vicinity of the works:

- Electricity
- Gas
- Water
- Drainage
- Telecoms / Data

3.0 **AVAILABLE INFORMATION**

3.1 **Existing Drawings**

All available drawings are attached to the tender.

3.4 **Mechanical & Electrical Services**

There are no electrical and mechanical drawings beyond those appended to the tender document.

3.5 **Asbestos**

The employer is to provide an R&D survey in advance of the work. The contractor should however remain vigilant and immediately report any suspect material to the Architect and stop work.

3.6 **Project Drawings**

Dannett, Johnson Architects drawings:

605B-EX-00-000 – Location Plan
605B-EX-00-001 – Site Plan
605B-EX-11-000 – Existing bay 1 – Floor Plans
605B-EX-21-001 – Existing sections AA_BB & CC
605B-EX-21-002 – Existing sections DD & EE
605B-EX-21-003 – Existing section FF
605B-EX-31-001 – Existing M&E Internal Elevations 01
605B-EX-31-002 – Existing M&E Internal Elevations 02
605B-EX-31-003 – Existing M&E Internal Elevations 03

605B-SKD-00-100 – Proposed Bay 1 Access and logistics plans
605B-SKD-30-000 – Existing and proposed south elevation

605B-EN-12-000 – Enabling works bay 1 – Floor plans

605B-BD-75-001 – Laminating cabin

605B-FD-19-000 – Proposed bay 1 fire plans

605B-WD-10-000 – Proposed bay 1 overview
605B-WD-10-001 – Pr bay 1 – Ground floor – Zone 1
605B-WD-10-002 – Pr bay 1 – Ground floor – Zone 2
605B-WD-10-011 – Pr bay 1 – First mezzanine – Zone 1
605B-WD-10-012 – Pr bay 1 – First mezzanine floor– Zone 2
605B-WD-10-020 – Pr bay 1 – Second floor plan
605B-WD-30-000 – Proposed bay 1 – Floor finishes
605B-WD-30-001 – Proposed bay 1 – Skirting finishes
605B-WD-30-002 – Proposed bay 1 – Wall finishes
605B-WD-30-0013– Proposed bay 1 – Ceiling finishes
605B-WD-15-001 – Proposed bay 1 – Ground floor RCP – Zone 1
605B-WD-15-002 – Proposed bay 1 – Ground floor RCP – Zone 2
605B-WD-15-011 – Proposed bay 1 – First Mezzanine – Zone 1 RCP
605B-WD-15-012– Proposed bay 1 – First Mezzanine Floor – Zone 2 RCP
605B-WD-15-020 – Proposed bay 1 – Second floor RCP
605B-WD-16-000 – Proposed bay 1 – Electrical plans
605B-WD-20-001 – Proposed – Long sections AA, BB and CC
605B-WD-20-002 – Proposed – Sections DD and EE
605B-WD-20-003 – Proposed – Section FF
605B-WD-40-010 – Interior elevations – 2nd floor window
605B-WD-40-020 – Interior elevations – WC Mess portal storage wall
605B-WD-50-000 – Unisex bathroom plans
605B-WD-50-001 – GF Unisex WCs
605B-WD-50-002 – GF shower block

605B-WD-50-003 – GF washroom and cleaners cupboard
605B-WD-50-004 – 1F Male female WCs
605B-WD-35-005 – GF Unisex bathroom details
605B-WD-51-000 – Mess room kitchenette
605B-WD-51-002 – Existing kitchenette – refurbishment

605B-BD-70-000 – Proprietary structures scope
605B-BD-70-001 – Mess room mezzanine floor – Stair 1 scope
605B-BD-70-002 – Machine room mezzanine and stair 2 scope
605B-BD-70-003 – Stair 2 – Stair 3 scope
605B-BD-71-001 – Wall partition and lining types
605B-BD-71-002 – P3 and P4 typical details
605B-BD-71-003 – Window balustrade and dado
605B-BD-71-010 – Ceiling floor details
605B-BD-72-001 – Typical door details – for new stud walls
605B-BD-70-002 – Typical door details – for new stud walls
605B-BD-72-020 – Proposed PVC curtain details
605B-BD-75-000 – Laminating cabin

MNP Structural comments – Lintels
MNP Structural comments – Timber boxes

605B-SCH_01 (doors)
605B-SCH_02 Historic Ships Workshop – 3v ironmongery schedule
605B-SCH_03 Lighting Schedule

4.0 DESIGN INFORMATION

4.1 Hazard Identification and Risk Assessment

Risk assessments for hazards identified, where reasonably practical, in the development of the project to tender stage have been reviewed by the Architect and Structural Engineer. This review has not identified any unusual notes or hazards other than those likely to be encountered on refurbishment work of this nature.

The contractor should address any residual hazards arising from the risk assessments or identified in their development of the working procedures and method statements, together with any other identified hazards likely to be encountered in the course of executing the works and their future maintenance.

4.2 Significant Health & Safety Hazards

The Principal Contractor should note the following particular hazards relating to the contract works which include but are not necessarily limited to:

1 *Existing Services*

The presence of existing services close to the works should be established prior to starting work.

2 *Asbestos*

The employer is to provide a R&D survey prior to the contractor starting work. Should asbestos containing materials be found, the Contract Administrator should be informed immediately and instructions for action agreed. Any removal and disposal necessary may only be undertaken by a licensed asbestos contractor to agreed method statements and programmes. All waste should be dealt with appropriately and, if necessary, disposed of to suitably licensed tips.

3 *Existing Buildings & Site*

The condition and nature of the existing building should be considered in planning the works and other site operations. Particular issues identified during the design include but are not exclusive to:

- Current weight limit on the North Camber Road is 10kN/m² due to subsidence.
- Proximity to the public and other users of the site.
- Potential for building instability due to lack of historic information and the need for temporary works during this project
- Relocation of electrical services

4 *Materials*

The proposed materials for use in the works are commonly used in the construction industry. However the information on the COSHH sheets that are supplied with the products installed should be accurately followed.

5 *Protection of Adjacent Occupiers*

The proximity of the works to areas in use by adjacent occupiers. Particular note should be made of:

- Noise
- Vibration
- Dust
- Moving materials onto site

4.3 **Method Statements**

The Method Statements shall include, but not be exclusive to, the following details/information:-

- Protection to access routes together with signage details.
- Proposed work sequence for project.
- Description of personnel/trades to be employed.
- Equipment to be used
- Preparation.
- Materials handling.
- Control measures.
- Dust and debris removal.
- Lifting of plant and materials
- Scaffold erection and dismantling.
- Site and working space security.
- Safety procedures.
- Procedures for working at heights.
- Monitoring procedures.
- Prevention of nuisance to adjacent buildings and facilities.
- Details of site access and storage.
- Fire control.
- Fire access and egress routes
- Emergency liaison procedures.

Reference should also be made to the items listed in the Project Preliminaries.

The Principal Contractor shall ensure that suitable Method Statements are produced well in advance of the commencement of any activity that presents a significant health and safety risk. These must be incorporated in and co-ordinated with the Construction Stage Health and Safety Plan.

5.0 HAZARDOUS CONSTRUCTION MATERIALS

5.1 Under no circumstances will any materials which could be harmful to the end user or hazardous to the works be allowed to be used. The Principal Contractor will not permit their use during the project. All construction materials will be used for the purpose for which they were intended and in accordance with the manufacturer's recommendations and guidance.

5.2 Contractors shall comply with manufacturer's Health & Safety data sheets and the Control of Substances Hazardous to Health Regulations 1988 (COSHH) regarding the transport, storage and use of substances and materials injurious to health.

The materials to be used in the works shall be identified by the contractor and appropriate Risk Assessments for their use be undertaken in accordance with the COSHH Regulations.

A list of the materials used should be collated together with reference to COSHH assessments. This information should also be included in the Health & Safety File.

5.3 Substances Generally Known to be Deleterious at Time of Use

Substances generally known to be deleterious at time of use, including substances referred to as being hazardous to health and safety in the current edition of "Hazardous Building Materials" - A Guide to the Selection of Alternatives edited by S R Curwell and S G March are included, as well as substances listed in the H.S.E. EH40 annual publication.

1. **Asbestos:** Asbestos or asbestos products as defined in the Asbestos Regulations 1969 or any statutory modification or re-enactment thereof.
2. **Lead:** Lead where metal or its corrosion products may be directly ingested, inhaled or absorbed.
3. **Urea Formaldehyde:** Urea formaldehyde foam or materials which may release formaldehyde quantities which may be hazardous or an irritant. Reference will be made to the limits set from time to time by the Health & Safety Executive.
4. **Materials which are Generally of Mineral Fibres:** Materials which are generally of mineral fibres, either man-made or naturally occurring, which have a diameter of 3 microns or less and a length of 2 microns or less which contain any fibres not sealed, encapsulated, or otherwise established to ensure that fibre migration is prevented.

5.4 **Specified Materials**

The Principal Contractor is to be cognisant of the hazards associated with all materials that are used on the construction site. These include but are not necessarily limited to the following:

- 1 Silicone
- 2 Lime mortar
- 3 Polyester and Epoxy Resins
- 4 Paint
- 5 Weight of steelwork

6.0 **SITE-WIDE ELEMENTS**

6.1 **Areas Available for the Contractor**

Welfare facilities will be provided by the client on site, including toilet and handwashing facilities.

An area for parking and a modest site compound will be provided on site.

6.2 **Welfare Facilities**

The Principal Contractor should provide adequate facilities including appropriate sanitary and washing facilities for site operatives and visitors. These should, as a minimum, comply with the Health and Safety at Work Act: Construction (Health, Safety and Welfare) Regulations 1996 and the 'Code of Welfare Conditions for the Building Industry'. This should incorporate sufficient facilities to enable handwashing and social distancing, for the site to be Covid-secure.

7.0 OVERLAP WITH CLIENT'S UNDERTAKING

7.1 General

Refer to the Project Preliminaries for details.

7.2 Working Hours

Normal working hours will be 9:00am to 5:00pm Monday to Friday. Work outside these hours shall only be permitted with the written consent of the Employer and shall comply with local authority instructions.

7.3 Noise Abatement

The Principal Contractor shall ensure that sufficient and adequate measures are taken to control noise levels produced by the construction operation to prevent nuisance and comply with the requirements of the Local Authority and BS5228 "Code of Practice for Noise Control on Construction and Demolition Sites".

All compressors and pneumatic percussive tools to be used on the site shall be fitted with silencers of a type recommended by the manufacturers.

7.4 Interruption of Existing Services

The Principal Contractor shall not interfere with or divert any existing services either on site or to adjacent buildings without the agreement of the Contract Administrator or employer. Any temporary disconnection associated with the works shall be done at a time agreed with the employer and Contract Administrator.

8.0 **SITE RULES**

8.1 **General**

The contractor should especially note the following rules:

8.2 **Smoking**

Smoking on site is prohibited.

8.3 **Radios**

The use of music playing devices on site is not permitted.

8.4 **Noise**

Comply with Project Preliminaries.

8.5 **Flammable Materials**

The filling of fuel containers or transfer of flammable liquids within poorly contained or ventilated areas of the building is prohibited.

8.6 **Additional Rules**

The Principal Contractor shall provide rules including but not exclusive to the following:-

training; induction; equipment; personal protective equipment; permits to work; accident reporting; working at heights; moving equipment on or off site.

9.0 PROJECT LIAISON PROVISIONS

9.1 Contacts

Prior to the commencement of the work, the Principal Contractor shall provide the Architect with a list of names, addresses and telephone numbers of key contact personnel, including the Director who would be responsible for and capable of organising remedial action in the event of an emergency on site outside normal working hours.

9.2 Construction Phase Health & Safety Plan

Prior to commencement of the works, the Principal Contractor shall develop a Construction Phase Health & Safety Plan, indicating his proposals for addressing the hazards. The Principal Contractor shall incorporate hazards arising during construction from unforeseen circumstances into the Health & Safety Plan. During the construction, liaison must be maintained by the Principal Contractor with the Contract Administrator.

9.3 Site Meetings

A Health & Safety item shall be included on the Agenda for each site meeting. A copy of the minutes shall be provided to the Principal Contractor and Contract Administrator. This item shall report but not be exclusive to:

- Accidents
- Incidents
- Any hazardous materials found
- Protection of public

10.0 HEALTH & SAFETY FILE

10.1 The Principal Contractor is responsible for the collection and collation of construction information for inclusion in the project Health & Safety File. The information to be provided shall include but is not exclusive to:

- A brief description of the work carried out;
- any hazards that have not been eliminated through the design and construction processes, and how they have been addressed (eg surveys);
- key structural principles (eg bracing, sources of substantial stored energy)
- hazardous materials used (eg lead paints and special coatings);
- health and safety information about equipment provided for cleaning or maintaining the structure;
- the nature, location and markings of significant services;
- information and as-built drawings of the building.

Further details of the requirements are described in the Project Preliminaries.

10.2 An electronic copy of the Health & Safety File, maintained and updated by the Principal Contractor, shall be provided to the Employer as soon as practical upon completion of the works.

10.3 Relevant copies of the site photographs shall also be sent to the Employer.

Appendix A: Pre-qualification H & S questionnaire

**NATIONAL MUSEUM OF THE ROYAL NAVY – HISTORY SHIPS WORKSHOP
INTERNAL REFURBISHMENT AND CONSTRUCTION OF NEW ACCOMODATION**

PRE-QUALIFICATION QUESTIONNAIRE FOR PRINCIPAL CONTRACTORS

From:

National Museum of the Royal Navy

Tel: 02392 891370

Address:

HM Royal Naval Base, Portsmouth, Hampshire, PO1 3NH

TO BE COMPLETED BY TENDERER

To:

Tel:

Email:

Address:

Reference:

Completed by:

Position

Date

Signature

Please answer the following questions and supply relevant information as requested, providing supporting details and documentation separately.

- 1 Provide examples of work carried out previously, which is comparable in size and nature to this project. Examples enclosed.

Yes No

2. If more than five people are employed, provide a copy of your organization's safety policy, as required by s.2(3) of the Health and Safety at Work Act etc. Copy of policy supplied:

Yes No

3. Provide details of your organization's health and safety management procedures. How will these be used to ensure efficient management of health and safety during the construction phase of this project? Details enclosed:

Yes No

4. Supply examples of construction risk assessments prepared in accordance with the Management of Health and Safety at Work Regulations. Examples enclosed:

Yes No

5. Who in your organisation has day-to-day responsibility for the management of health and safety?

Name:

Position:

Telephone:

Address:

Email:

- 6 Provide details of the experience and qualifications of the person named at 5 above. Curriculum Vitae enclosed:

Yes No

- 7 Who will be responsible for site health and safety on this project?:

Name:

Position:

Telephone:

Address:

Email:

- 8 Provide details of the experience and qualifications of the person named at 7 above. Curriculum Vitae enclosed:

Yes No

- 9 How many professional staff do you employ in your head office?

- 10 Provide details of experience, qualifications, membership of professional bodies, etc and arrangements for continuing professional development of key staff who would be employed on the project. Curriculum Vitae enclosed:

Yes No

Arrangements for continuing professional development enclosed:

Yes No

- 11 Have any formal notices been issued or legal proceedings been taken against your organization by the Health and Safety Executive in the last 3 years?

Yes No

If yes, please provide details separately

- 12 Provide details of any accidents/incidents reported by, or on behalf of, your organization to the Health and Safety Executive during the last 3 years (as required by the Reporting of Injuries, Diseases and Dangerous occurrences Regulations 1985 (S1 1985/2023). Details enclosed:

Yes No

- 13 Provide an example of a health and safety plan which you have previously prepared at construction stage. If you do not have one available, outline the methods you would adopt to format a reply to the pre-tender health and safety plan prepared by the Planning Supervisor. Details enclosed:

Yes No

- 14 How do you intend to manage, monitor and control health and safety during the construction phase of the project? Details enclosed:

Yes No

- 15 Provide details of the safety training which you would provide to your employees and to others to ensure their competence whilst they are employed on this project. Details enclosed.

Yes No

- 16 What measures would you adopt to ensure the competence of the contractors to whom you propose to award work on this project? Details enclosed:

Yes No

- 17 What resources (including staff, equipment and technical facilities), as required by the Construction (Design and Management) Regulations 2007, does your organization intend to allocate to this project? details enclosed:

Yes No

**HEALTH & SAFETY
CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2007**

TENDERER DECLARATION

--oOo--

I declare that:

- 1 I have read the Health & Safety information for this Project and fully understand the Health and Safety matters set out in it in relation to this Project.

- 2 I have taken full account of these Health and Safety matters in the preparation and pricing of my Tender.

- 3 I have the experience and resources necessary to discharge the duties of the Principal Contractor for this Project as defined in the CDM Regulations.

Signed

for

Address

.....

.....

..... Date

Appendix B: Designer Risk Assessment

3.3.1 RISK ASSESSMENT

Project 605b- Historic Ships Workshop, NMRN Portsmouth

13.11.2020

No	Work/ Activity/ Element	Hazard	Population at Risk	Likelihood	Severity	Action at Design Stage	Considerations by Contractors	Owner
1.0	Location / Adjacent Operations							
1.1	Site located within live naval base	Injuries to navy base personnel. Obstruction of Fire Escape routes	Contractors/ public	Low	High	Client to consider getting the building out of the borders of the live naval base, to ensure effective segregation. Consideration of methods of containment of the site area, construction activities and sources of health and safety risk.	Principal contractor's CPP to include a logistics plan that eliminates hazards to naval personnel from construction traffic and activities e.g. provide marshalling/ protected routes and Method Statement.	Client / PC
1.2	Access to site	Transport of heavy materials	Contractors/ public	Low	High	Restrict sizes of elements	Loading/Handling equipment; Marshalling/segregation; Contractor to provide Method Statement.	PC
1.3	Site adjacent to the existing historic dockyard museum.	Injury to museum visitors and staff	Contractors/ public	Low	High	Client to consider how construction works impact the interaction between buildings. Consideration of methods of containment of the site area, construction activities and sources of health and safety risk.	Principal contractor's CPP to include logistics plan that eliminates hazards to museum visitors and staff from construction site hazards i.e. robust containment and segregation measures.	Client / PC
1.4	Construction noise and vibration	Nuisance to adjacent operations	Staff / public	Medium	Low	Client to liaise with existing Noise Restrictions, requirements and constrains in place. A noise survey should be carried out if necessary. Phasing of works to follow employer's requirements - constraints in terms of noise and vibration e.g. quiet periods etc.	Principal contractor to observe the client's requirements and constraints. Contractor to use plant which is fitted with suitable noise suppression, sited where it has minimum noise and vibration impact.	Client / PC
2.0	Demolition and Strip-out							
2.1	Working close to live services	Electricity; Flood	Contractors	Medium	High	Record drawings available for M&E services installed as part of the 1997 admiralty library fit-out project. Consider survey of existing live services based on existing record drawings prior to strip-out.	All live services must be isolated or disconnected. Where some services need to be kept live e.g. temporary site electrics or water supply, these services must be clearly marked or ensure that they are not accidentally disturbed during the work.	Client / M&E

3.3.1 RISK ASSESSMENT

No	Work/ Activity/ Element	Hazard	Population at Risk	Likelihood	Severity	Action at Design Stage	Considerations by Contractors	Owner
2.2	Asbestos – lack of asbestos survey information and only partial information of previous asbestos removal.	Asbestosis; Cancer	Contractors	Low	High	Asbestos register identifies asbestos panels and gaskets (dated 1995). Records refer to an asbestos survey carried out on 25.01.1995 however no survey report is included in the SH12 information pack. Envirochem fibre counting report indicated that ACMs may have been removed in March 1999. Due to the age of the existing records, a full R&D type survey should be commissioned prior to demolition and strip-out.	Any remaining ACMs must be removed in full accordance with the current asbestos regulations. Only properly qualified, experienced and licensed contractors should be used. If during the works any further suspect materials are found this must be reported to the project manager so that testing can be arranged. No works should restart until adequate precautions are put in place.	Client
2.3	Demolition and strip-out scope (Refer to architect’s specification for more details).	Collapse of existing / temporary structures	Contractors	Low	Medium	Stability of existing internal masonry wall relies on timber joists to be removed. In permanent condition new mezzanine will provide restraint, sequence and/or temporary works to be designed to maintain stability during construction.	Contractor must refer to the existing structural information and ensure the proper design, installation and maintenance of any temporary works e.g. propping. Works must be carried out in accordance with a safe sequence to avoid accidental collapse. Mechanical remote demolition should be considered and persons not involved in the work kept away. Temporary works coordinator must be identified.	Structural Engineer
3.0	Below-ground Structures etc:							
3.1	Existing external buried services around the e.g. electricity, water, gas and telecommunications. New drainage runs may be required in proximity to these assets.	Electricity; Flood; Fire; Explosion; Disruption	Contractors	Low	Medium	Buried services survey available for the dockyard site.	Ensure a safe system of work is followed i.e. consult the existing service plans, use automatic service-locating devices and record and mark the line of identified services, hand dig trial holes and use safe digging practices.	M&E
3.2	Foundations of main building are unknown. No historic information currently available.	Collapse	Contractors, public	Low	High	Trial holes required in existing ground bearing slab at start of contract.	Investigation holes should be located such that there is no obstruction to escape routes.	Structural Engineers / Client

3.3.1 RISK ASSESSMENT

No	Work/ Activity/ Element	Hazard	Population at Risk	Likelihood	Severity	Action at Design Stage	Considerations by Contractors	Owner
4.0 Structures above Ground:								
4.1	Existing ground floor structure and underlying conditions are unknown.	Collapse	Contractors	Low	Medium	Site investigation recommended to determine the existing slab over the toilets	Site investigations to be carefully planned and coordinated. Measures to be taken to prevent falls into pits and excavations and trial holes to be back-filled as soon as possible.	Client
4.2	Installation of new ground and first floor mezzanine structures	Collapse	Contractors	Low	High	Advice taken form proprietary mezzanine supplier	Steel erection must be carefully planned and executed in accordance with a detailed method statement which specifies the use of safe platforms e.g. MEWPs and mobile towers for access to connections, measures to prevent falls from edges and falling objects, safe manual handling of heavy steels, exclusion of other trades and measures to ensure stability of the assembly in its temporary condition.	Structural Engineers / PC
4.4	Installation of new floors and ceilings and capacity under loading with new machinery eg. Roller shutters	Collapse	Contractors	Medium	High	Floor loads to be designed to 3.5KN/m ² to meet loading requirements for general office used for new floor. Details of additional wall loadings provided to mezzanine supplier.	Works must be carried out in accordance with a detailed method statement. Suitable guard rails and barriers must be in place as work progresses, safe access to the work provided, temporary supports for formwork and falsework properly installed and checked. Schedule of the designed floor loadings to be provided by the Supplier for the Health and Safety File.	Structural Engineer
4.5	Installation of balustrade assemblies to the edges of mezzanine floors, stair voids window reveals	Falling from heights; Falling objects	Contractors	Medium	Medium	Barriers to be designed to withstand the minimum lateral loads as required by AD N of the Building Regulations for protection against impact and also BS6180:2011 – Code of Practice for Barriers around Buildings.Barrier heights to be a minimum of 1100mm in accordance with BS 6180.	Ensure safe and suitable protection of any open edges by providing suitably rigid and high guard rails in the temporary condition.	Design Team / PC

3.3.1 RISK ASSESSMENT

No	Work/ Activity/ Element	Hazard	Population at Risk	Likelihood	Severity	Action at Design Stage	Considerations by Contractors	Owner
4.6	Installation of brick/blockwork & lintels	Lifting of heavy materials; falling materials; working at height.	Contractors	Medium	Medium	Restrict sizes of elements, weights noted on drawings	Contractor to provide full scaffold; Contractor to provide required lifting equipment.	
4.7	Painting/ finishing	Working at height; falling materials; Solvent-based chemicals	Contractors	Low	Low		Ensure adequate ventilation to prevent solvent build-up	Body harness/lanyard handed to Client at completion
5.0 Envelope								
5.1	Removal and replacement of existing industrial door	Falling from heights; Falling objects, crushing and collapse of large objects	Contractors, Public	Medium	High		Ensure that falls from heights and falling objects are prevented by using equipment that that protects all at risk e.g. access equipment and platforms fitted with guard rails such as independent scaffold and MEWPs. Platforms must be capable of supporting weights of persons and materials and be stable i.e. tied into the structure. Contractor to provide method statement	Design Team / PC
5.2	Repair and overhaul of existing windows	Falling from heights; Falling objects	Contractors, Public	Medium	High	Design to confirm working at height will be unavoidable if windows need to be replaced. Scope of windows replacement to be confirmed by survey. Design team to produce a maintenance strategy	Ensure that falls from heights and falling objects are prevented by using equipment that that protects all at risk e.g. access equipment and platforms fitted with guard rails such as independent scaffold and MEWPs. Platforms must be capable of supporting weights of persons and materials and be stable i.e. tied into the structure.	Design Team / PC

3.3.1 RISK ASSESSMENT

No	Work/ Activity/ Element	Hazard	Population at Risk	Likelihood	Severity	Action at Design Stage	Considerations by Contractors	Owner
5.3	Removal of paint from existing metal windows – existing coating likely to contain lead.	Lead (fumes and dusts)	Contractors	Medium	Medium	Paint samples to be tested for lead content. Specification for paint removal poultice that does not create dust or fumes and use of needle guns.	Ensure that paint removal is carried out in accordance with a method where dusts and fumes are not created, manufacturer’s recommendations are followed. As last resort, the use of specific PPE (protective clothing, gloves and face mask) is worn, good hygiene facilities provided and work areas segregated.	PC
6.0	MEP							
6.1	Services at high level distribution e.g. AHUs, ductwork, pipework, cable trays, rainwater goods Possibility of supporting ventilation plant and ductwork from existing roof trusses	Falling from heights; Falling objects; General maintenance hazards (moving parts, electricity, sharp edges etc.)	Contractors	Medium	Low	Investigation of structural capacity of roof trusses will be needed. Provision unobstructed / clear access to services at high level. Safe strategy for accessing and maintaining any plant supported on or hung from the existing roof trusses.	Safe access, maintenance and plant replacement strategy to be provided for the Health and Safety File as required by the CDM 2015 Regulations.	Structural Engineers / PC
6.2	Utilities – Movement of distribution boards and addition of high voltage electrical services	Electricity	Contractors	Medium	Medium	Design team to survey existing services	Ensure a safe system of work is followed	PC