

DEPARTMENT FOR TRANSPORT  
INTERNATIONAL MARITIME ORGANISATION BUILDING

# Electrical Infrastructure Works

**Pre-Construction Information**

May 2017



FAITHFUL  
GOULD



Document Status					
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## Disclaimer

This document and its contents have been prepared and are intended solely for the Client's information and use in relation to the electrical infrastructure works at the International Maritime Organisation Building, 4 Albert Embankment, London.

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## Pre-Construction Information Development

In accordance with the Construction (Design and Management) Regulations 2015, any project where there is a requirement for more than one contractor to complete the work a Principal Designer and Principal Contractor is to be appointed.

The role of the Principal Designer is to manage, monitor and coordinate the pre-construction phase and as part of this duty provide pre-construction information to the relevant parties involved with this project.

Project to which this document relates: **Electrical Infrastructure Works**

Collation of Information Commenced: **February 2017**

## Pre-Construction Information: Collation/Issue Record

### COLLATION

Type of Pre-Construction Information Identified	Information Requested By	Date Requested	Date Received
Scope of works / works locations and tender package	Principal Designer	01/02/2017	03/02/2017



## 1.0 Project Brief

### 1.1 Project Description and Programme Details

#### Site Information

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

International Maritime Organization (IMO)  
4 Albert Embankment  
London  
SE1 7SR

#### Nature of the Project

The works will comprise of the following:

LV Upgrade Works – Replacement of life expired distribution boards and MICC cabling.

Emergency Lighting Works – Installation of manual test key switching banks to emergency lighting circuits and installation of emergency lighting to Core B risers.

Control Panel Works – Replacement of AHU Fan Motor Starters with Variable Speed Drives.

Sump Pump Works – Replacement of basement ground water sump pumps, control panels and associated wiring and discharge pipework and installation of a new central control panel with

BMS integration

For a more detailed scope of works please refer to the M&E design specification.

#### Project Programme

The works are planned to commence – 11<sup>th</sup> September 2017

The works are anticipated to complete – 15<sup>th</sup> December 2017

#### Sectional Completion Details/Phasing Arrangements

The site will remain operational and the works will be phased to permit un-interrupted continuous trading.

#### Planning and Preparing for Construction

A minimum of 4 weeks is provided to allow the contractor time to plan for the construction work.



## 1.2 Project Directory – Key Participants

Company Name	Address	Telephone Numbers	Contact
<b>Client</b>			
Department for Transport	Spring Place 105 Commercial Road	Tel: 020 381 72358	Shaun Rogers
C/O Maritime & Coastguard Agency	Southampton SO15 1EG	Tel: 020 38172380	Elaine Teoh
<b>E-mail Address:</b>	<a href="mailto:Shaun.Rogers@mcga.gov.uk">Shaun.Rogers@mcga.gov.uk</a> <a href="mailto:elaine.teoh@mcga.gov.uk">elaine.teoh@mcga.gov.uk</a>		
<b>Facilities Management</b>			
International Maritime Organisation	4, Albert Embankment London SE1 7SR	Tel: 020 7587 3106  Tel: 07969 242121	Gerhard Bildstein - FM  Steve Wright - (Engie (Managed Building Services Provider)
<b>E-mail Address:</b>	<a href="mailto:GBildste@imo.org">GBildste@imo.org</a>		
<b>Client Project Manager</b>			
Faithful+Gould	Euston Tower 286 Euston Road LONDON NW1 3AT	Tel: 020 7121 293	Simon Guild
<b>E-mail Address:</b>	<a href="mailto:simon.guild@fgould.com">simon.guild@fgould.com</a>		
<b>Designer – M+E</b>			
Troup Bywaters + Anders	183 Eversholt Street LONDON NW1 3AT	Tel: 020 3058 9801	James Campbell
<b>E-mail Address:</b>	<a href="mailto:j.campbell@ServicesManagementSolutions.co.uk">j.campbell@ServicesManagementSolutions.co.uk</a>		
<b>Principal Designer / CDM Advisor</b>			
Faithful+Gould	Woodcote Grove Ashley Road EPSOM Surrey KT18 5BW	Tel: 01372 753121	Victoria Keable
<b>E-mail Address:</b>	<a href="mailto:victoria.keable@fgould.com">victoria.keable@fgould.com</a>		
<b>Enforcing Authority</b>			
Health and Safety Executive	Rose Court 2 Southwark Bridge Rd LONDON SE1 9HS	Tel: 0845 345 0055	Principal Inspector
<b>Principal Contractor</b>			
TBC			



### **1.3 Workplace (Health, Safety and Welfare) Regulations 1992**

#### **Relevant Requirements**

The completed works will be used as a workplace; consequently the finished design will need to comply with the relevant requirements of the Workplace (Health, Safety and Welfare) Regulations 1992.

### **1.4 Existing Information, Plans and Records**

All existing relevant drawings in relation to the works will have been provided with the tender documentation.

Should further existing or new drawings be required, then this should be requested directly from the client via the Project and Facilities Manager.



## 2.0 Client Considerations

### 2.1 Arrangements

#### 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 Client or their CDM Advisor will review the development of the construction phase plan and will confirm when the plan is adequate and sufficient for the construction works to commence.

#### 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.

#### Communication and Liaison

All Project Communications should be directed through Faithful+Gould as the Client Project Managers.

Good communication channels will also be required with the rest of the project team.

All those in control of construction work are required to provide workers (including the self-employed) under their control, with any information that they require to carry out the work safely and without risk to health.

The Principal Contractor shall ensure that all workers are provided with a suitable, site specific induction to inform them of the arrangements for health, safety and welfare at their work site. This should include any relevant findings resulting from risk assessment, including risks arising from activities of other operatives working nearby.

A building induction including site rules will be provided in the first instance which will then need to be incorporated into the Principal Contractors own induction.

Site rules should also be explained along with the procedures to be followed in the event of any worker finding themselves in a position of serious and imminent danger.

The Principal Contractor has a specific duty to make and maintain arrangements to enable effective co-operation and consultation between themselves, contractors and workers. Arrangements made in respect of co-operation and consultation with workers on site should be recorded by the Principal Contractor and included in the construction phase plan. Such arrangements will require regular review and updating, as circumstances on site change.

Such arrangements need to cover all workers effectively, including those who may only be on site for brief periods. The arrangements should be proportionate to the size and complexity of the work, the scale of hazards and the size of the workforce.

The Principal Contractor shall implement a range of mechanisms to ensure that on-site consultation is effective. This could include regular consultation meetings, consultation during inductions, daily briefings, toolbox talks, etc.



## Site Security

The Principal Contractor shall have sole responsibility to ensure the work areas are secured throughout the duration of the works.

Contractor security passes for access and egress to the building will be provided by the Facilities Management Team.

In order to protect the general public from on site activities, a detailed description of security arrangements including; hoarding, fencing, signage, signing in and out procedures etc. are to be included in the construction phase plan. The Principal Contractor shall provide suitably robust demarcation between the works and all roads, hardstandings and pavements where applicable. All site security measures should be in accordance with HS (G) 151 – 'Protecting the Public – Your Next Move'.

The Facilities Managers advice with regards to general site (building) security should be sought when compiling the construction phase plan. Although the building belongs to the Department for Transport, the IMO does not appear to be subject to same Government security restriction, or at least this is not prominently displayed – e.g. Black Heightened Security notices. However, we believe this is under review noting current world issues.

All site security procedures during the works are to be included within the Principal Contractor's construction phase plan.

## Welfare Provision

Welfare arrangements are to be in accordance with Schedule 2 of the Construction (Design & Management) Regulations 2015 and are to be commensurate with the site undertaking.

The Client / Facilities Manager believes welfare provision can be provided within the building / individual plant rooms but this will need to be further discussed and agreed at the pre start meeting in line with current client/building/occupant requirements.

Minimum requirements are as follows:

- Toilets
- Washing facilities (including showers if considered appropriate)
- Hot and cold running water
- Drying rooms
- Mess room
- Drinking water

All facilities are to be accessible and are to have adequate heating, lighting and ventilation throughout the duration of the works.

Welfare arrangements are to be included within the construction phase plan

## Location of Temporary Site Accommodation, Unloading Areas etc.

Proposals for the location and layout of temporary site accommodation like the welfare unit, storage and loading/unloading areas etc are to be included within the principal contractor's construction phase plan.



## 2.2 Third Party Requirements

### Localised Hoarding Requirements

The Principal Contractor should consider the erection of localised hoarding/screens in respect of segregating hot works and potentially noisy and dusty operations from other on site activities and neighbours should these works also be carried out externally.

### 'No Go' Areas and Other Authorisation Requirements

Third party properties within close proximity to the site will require special consideration when compiling the construction phase plan - this may include the London Fire Brigade Headquarters, the Windmill Pub and Westminster Tower.

The IMO share a separate rear loading area with Westminster Tower. However it is not believed this entrance will be required to be used, preferring the main IMO loading bay.

### **The Fire Brigade Headquarters access and egress must remain clear at all times.**

Where necessary the local authority should be consulted and under the Control of Pollution Act 1974 a Section 61, 'Consent to Statutory Nuisance' should be submitted as required.

The Principal Contractor shall ascertain any pertinent restrictions from the local authority prior to commencing works (i.e. any restrictions on times authorised for works which are audible at the site boundary).

### Site Access, Egress, Transport Arrangements and Vehicle Movement Restrictions

There will be no requirement for on site transport arrangements.

Vehicular and Pedestrian (operatives) access to the site is from Lambeth Road and then Lambeth High Street through the rear loading bay entrance next to the Windmill Pub.

Proposals for any local Contractor site access and egress points are to be included within the Principal Contractor's construction phase plan.

Consideration should be given to the existing access or means of escape for other building users at any time.

Goods lifts: 5000KG / 66 person's capacity servicing the Basement and Ground floor only with another of 1200KG / 16 person's capacity for all floors.  
Lift 7 is a passenger lift of 1000KG / 13 persons capacity.

The contractor is to ensure all routes used are kept clean and free from obstruction at all times.

Movement of all site related vehicles onto and off of the site is to be closely monitored and a suitable and trained banksman / marshal employed where necessary.

Proposals for Contractor site access / egress points are to be included within the Principal Contractor's construction phase plan.

Consideration should be given to the existing access or means of escape for other users at any time.



## Parking Restrictions

Parking on the site is limited and restricted. The Client / Facilities Manager may be able to make one space available within the IMO's car park for perhaps a van that will contain tools etc. but this will need to be further discussed and agreed at the pre start meeting in line with current client/building/occupant requirements.

Where agreed, the Principal Contractor shall identify, in the construction phase plan, all designated areas of the site that will accommodate vehicle parking for site operatives. It should be ensured that these areas do not impede on other site activities.

Within Lambeth High Street at the rear of the IMO building there are pay parking bays limited to a 4 hour stay.

Vauxhall Underground and Rail stations are a short walk from the IMO and there are buses that server the building along Albert Embankment.

## Client Permit-to-Work Systems

The permit-to-work system is to be adopted for works on electrical services, hot works (in plant rooms notably), works in confined spaces or any other high risk activities identified.

Daily 'hot work permits' will be required where welding, cutting, grinding and the use of naked flames are undertaken. Plant, equipment or flammable materials must be covered with flame retardant materials (or removed) in areas where 'hot work permits' are in operation. In this case, continuous flammable atmosphere monitoring may be required and a fire watch maintained both during and for a period after the hot works have ceased.

A building induction including PTW will be provided by Engie in the first instance. This will then need to be incorporated within the Principal Contractor's own Induction and construction phase plan.

## Fire Precautions

A competent person shall be appointed to act as a Fire Marshal and the proposed fire emergency procedures included within the construction phase plan. The adopted procedures are to be brought to the attention of all operatives and visitors to the site. The Principal Contractor is to provide suitable firefighting equipment and is to maintain an emergency evacuation procedure throughout the progress of the works.

The site emergency routes and exits are to be marked on a plan of the site, included by the Principal Contractor in the construction phase plan and communicated to the school, all operatives and visitors.

Note must be taken, when formulating the fire plan, of any existing systems that are operated within third party properties. The fire plan should comprise, but not be limited to:

- Means of escape indicating escape routes (to be displayed)
- Means of extinguishing fire (operatives to be trained)
- Means of minimising risk
- Hot work permit procedures
- Emergency procedures, including details relating to site employees, if any
- Name of the Fire Marshal (to be displayed)

All works undertaken on the premises should be in accordance with the article, 'Joint Code of



Practice Fire Prevention on Construction Sites and Buildings Undergoing Renovation’.

Fire precaution procedures are to be included within the Principal Contractor’s construction phase plan.

An Emergency First Aid Notice shall also be displayed on site.

A copy of the buildings existing fire evacuation plan was requested but was not available at the time of compiling this report.

### **Emergency Procedures and Means of Escape**

The site emergency routes and exits are to be marked on a plan of the site, included by the Principal Contractor in the construction phase plan and communicated to all operatives and visitors. All emergency routes are to remain open throughout the duration of the works, noting some exists will form the access/egress routes to some plant rooms.

An Emergency First Aid Notice shall be displayed on site.

Procedures in respect of other emergencies are also to be described in the construction phase plan and communicated to all operatives and visitors. These should include (but not be limited to):

- Location and telephone number of local hospital Accident and Emergency (A&E) department – St Thomas’s / 020 7188 7188
- Location and telephone number of local police station - Kennington / 101
- Location and telephone number of local ambulance station – Waterloo / 999
- Location and telephone number of local fire and rescue station – 999 / Albert Embankment - adjacent
- Emergency telephone numbers for statutory services –

National Grid Gas - 0800 111 999 / EDF Electricity - 0800 028 0247

- In the event of an environmental emergency, the Environment Agency should be contacted – 0370 850 6506

It is recommended the Principal contractor adopts the IMO emergency procedures, exit routes and muster point which is the park at the rear of the building name “Old paradise Gardens”. The weekly fire alarm test is undertaken on a Saturday. The Principal contractor will be expected to provide their own Fire Extinguishers at each work location.

Although thought unlikely on this project, where it is necessary to undertake work in confined spaces, as defined by the Work in Confined Spaces Regulations, the appropriate controls as set out by these regulations must be strictly observed.



## Confined Spaces

Where it is necessary to undertake work in confined spaces, as defined by the Work in Confined Spaces Regulations, the appropriate controls as set out by these regulations must be strictly observed. The Principal Contractor shall implement a safe system of work for any operation to be undertaken within a 'confined space'. This must be communicated to all operatives engaged in the task and a permit-to-work system introduced. The Principal Contractor shall also refer to the HSE publication INDG 258, 'Safe Work in Confined Spaces'.

Engie will be able to provide more detailed information on the areas of work and how they can be safely accessed / egressed which can be further discussed at the pre start meeting

Both Confined (where applicable) and restricted space procedures are to be included by the Principal Contractor within the construction phase plan.



## 3.0 Environmental Restrictions and Existing Risks

### 3.1 Safety Hazards

#### **Boundaries and Permanent/Temporary Access**

The Principal Contractor shall ensure that all boundaries are clearly understood prior to the works commencing.

All access and provided through the IMO, Engie and the Principal contractor own systems following agreement at the pre start meeting. The Main Hall and Conference areas will be out of bounds at all times unless prior authorisation is sought and agreed or is during the recess period where access is required through these areas.

#### **Delivery, Waste Collection or Storage Restrictions**

In accordance with environmental legislation, all waste generated from the works shall be, where practicable, segregated and disposed of to a licensed tipping facility utilising registered and licensed waste disposal contractors.

Although no longer a legislative requirement, to assist with the disposal of waste it is recommended and best practice that a site waste management plan be in place, prior to works commencing. All waste removed from site must be recorded, and the plan is recommended to be retained for two years, following practical completion.

In the case of hazardous waste, all products shall be removed and disposed of in accordance with relevant local enforcing bodies. All licenses obtained and transfer notes shall be retained as proof of correct disposal.

The Principal Contractor shall ensure, so far as is reasonably practicable, that site deliveries and collections are scheduled at suitable times during the day so as to avoid anti-social hours, site peak drop off and pick up rush hours and work rush hours events where the volume of local traffic may increase.

Arrangements for storing, removing and the location of skips are to be included within the construction phase plan.

#### **Current Use of the Site**

The site currently is run by the Department for Transport and is headquarters of the International Maritime Organisation. The building has 8 floors, Ground and basement. There are no plant rooms on floors 6, 7 and 8.

#### **Existing Structures**

Ensure existing structures are sufficiently supported and protected throughout the works. Ascertain if any additional information is required to ensure the safety of all persons and the Works.



## **Current or Anticipated use of Adjacent Sites**

Use of adjacent sites is currently as follows:

Commercial property, offices, London fire Brigade HQ, open spaces, residential property

Where applicable, the Principal Contractor shall indicate, in the construction phase plan, specific arrangements for maintaining services, safety and providing a safe entrance and exit route to all the aforementioned sites.

## **Road and Traffic Systems Adjacent to the Site**

The Principal Contractor shall be mindful of the need to work in harmony with the local community and observe local traffic restrictions which must be adhered to at all times.

The Principal Contractor shall take into consideration the health and safety implications posed by variations in the traffic systems. The following is a list of items for consideration; however, this list is merely indicative and not exhaustive:

- Emergency Access – The London Fire Brigade Headquarters is adjacent to the IMO and has a traffic light access / egress control system on Albert Embankment
- Red routes – Albert Embankment, Blank Prince Road and Lambeth Road
- Double yellow lines – Lambeth High Street
- Blind corners – Sometimes due to amount of traffic in the area and emerging traffic from other buildings such as the Fire Brigade Headquarters and Westminster Tower
- Narrow roads – Lambeth High Street
- Junctions – All around the IMO building with Albert Embankment, Blank Prince Road, Lambeth Road and Lambeth High Street
- Bus stops – Outside the IMO on both sides of Albert Embankment
- Bus Lanes – Outside the IMO on both sides of Albert Embankment
- Pedestrian crossings – Adjacent to the IMO building on Albert Embankment and opposite the London Fire Brigade Headquarters. This is also used as their Emergency access / egress control system
- Parking bays – Lambeth High Street – Pay at machine



### **Existing Services (Utilities)**

The property is served by gas, water, electricity, telecoms and drainage however all services affected by this project can be isolated locally within each plant room.

Further information will be available from Engie with regards to local isolations and permits to work / isolate that will be required as some of the AHU systems will affect the operational capability of the building such as the kitchen areas.

If further isolation of services is considered necessary, then the Principal Contractor shall request isolation certificates and location plans from the utility suppliers. The Principal Contractor shall be in possession of these certificates and plans prior to any works commencing that may disturb utility supplies. A robust safe system of work must be included within the construction phase plan to satisfy the CDM Advisor that, so far as is reasonably practicable, all foreseeable risks have been mitigated.

The Principal Contractor shall presume all services to be live within the site unless there is strong and verified evidence to suggest otherwise.

### **Ground Conditions / Ground Contamination**

Not applicable to the project.



## 3.2 Health Hazards

### Asbestos

A project specific refurbishment and demolition (R&D) survey has been commissioned and the results will be issued. It is planned that all asbestos requiring removal will be removed through the contract by a licensed asbestos removal specialist. The Principal Contractor should provide confirmation that this has been completed to the Contract Administrator, Project Manager and the Client Advisor at an appropriate time and prior to commencement of the main refurbishment works on site.

If the Principal Contractor intends to go beyond the extent of the R&D survey provided, the contractor must procure a further refurbishment and demolition survey which must be carried out by the same specialist company (that completed the first R & D survey, unless otherwise approved) and be to the areas affected by the works in accordance with HSE document HSG 264 Asbestos: The survey guide.

The further survey mentioned in 3.16 (where applicable) must be taken as the first activity prior to any disruptive works (e.g. disturbing surfaces). A copy of the survey report is to be submitted to the Contract Administrator, Project Manager and the Client Advisor for review. Where applicable the specialist Asbestos Consultant will then prepare a specification of works regarding the asbestos.

### Existing Storage of Hazardous Materials

Ammonia is used within the cooling system which is located on the roof and adjacent to plant room 18. There is an Ammonia detection system, but there is the possibility this will need to be shut off during works to the plant room. The Principal Contractor will therefore need to ensure he has temporary procedures in place to deal with Ammonia detection.

The Principal Contractor should also ensure no operatives working on the project suffer from any allergies or conditions related Ammonia before they commence work. The details of this should also be included within the induction.

### Health or other Risks Arising from Client Activities

- HV/LV maintenance has been scheduled for the 12<sup>th</sup> / 13<sup>th</sup> August
- Being an international organisation, the IMO building could be targeted by extremists although there is no information available to date to suggest this may be the case
- Roof gantry system has very high steps
- IMO Secure IT / telecoms room within Plant Room 9 with separate walkway
- AHU 26 is connected with the Kitchen Gas Extract System
- World Maritime Day – 28<sup>th</sup> September 2017



## 4.0 Significant Design and Construction Hazards

### 4.1 Design Assumptions, Work Methods and Control Measures

The Principal Contractor, where applicable, shall take note of information provided by all designers and develop safe systems of working. Risk assessments and method statements shall be incorporated within the construction phase plan prior to executing any high risk/hazardous operation.

All RAMS are to be provided to Engie for review prior to works commencing and to ensure works do not clash with their programme of works.

### 4.2 Ongoing Design Work

Each element of design is to be co-ordinated for health and safety aspects by the appointed Principal Designer.

### 4.3 Significant Risks

The Principal Contractor shall review and address the significant risks associated with the design as detailed within the Design Risk Register at Appendix A.

The construction phase plan should also properly address general risks associated with the project in the form of safe systems of work before commencing on site.

Summary of general construction risks to be taken into account – not exhaustive:

- Asbestos/hidden asbestos
- Dismantling of equipment
- Possible confined / restricted spaces – Lift motor room access, restricted access to AHU's at height etc.
- Noise
- Work on non-isolated services
- Mechanical and electrical
- Loading and unloading/movement of equipment
- Manual handling/heavy lifts/handling of materials and equipment
- Hot works in plant rooms
- Fire
- Work at heights and access to high level working
- Work in residential areas
- Interface with adjacent site users / need for access / egress for London Fire Brigade HQ at all times
- Work affecting escape routes
- Low head room in some areas



#### 4.4 **Materials Requiring Special Precautions**

Materials to be incorporated in the works are subject to the requirements of the Control of Substances Hazardous to Health Regulations (COSHH) as amended. The Principal Contractor shall perform risk assessments for hazardous materials. The requirement is applicable to subcontractors and must be co-ordinated by the Principal Contractor.

As far as the Principal Designer was aware at the time that this pre-construction information was prepared; the works do not involve the use of materials or any techniques that are unfamiliar or unconventional. Neither the use of the specified materials nor the execution of the work should present unknown risks to a competent Contractor.

Caution should be exercised, however, when handling the various 'hazardous substances' which are commonly used. The Principal Contractor shall ensure that Material Safety Data Sheets (MSDS) are available and COSHH assessments undertaken. This information should be read and understood, plus, all control measures, as described within the COSHH assessments, should be put in place.

Particular activities involving materials which are hazardous to health need to be assessed. Method statements should be established prior to works commencing.



## 5.0 The Health and Safety File

### 5.1 Formats and Contents

The Principal Contractor will be responsible for compiling the Health & Safety File/Operation and Maintenance Manual on this project.

A copy of the format/content is to be agreed by the client.

All relevant information must be issued to the client by the Principal Contractor within the timescale specified by the client.



## 6.0 Appendices

### 6.1 No Appendix documents attached



## Victoria Keable

### Health & Safety Consultant

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