

SECTION 1

Preliminary Matters

1.0 Introduction

- 1.1 An Act of Parliament founded the Imperial War Museum in 1920 following the Great War to act as a National War Museum to collect and display material relating to that War. Due to the general interest displayed by the Dominion Governments this led to the title "Imperial War Museum" (IWM).
- 1.2 The Imperial War Museum was opened in 1920 at a site in Crystal Palace, but eventually acquired its current home at Lambeth Road in July 1936 on the site of the former Bethlem Royal Hospital.
- 1.3 At the commencement of the Second World War the Museum's terms of reference were extended to cover both the Great War and the Second World War, and again in 1953 to cover all military operations involving British & Commonwealth forces since August 1914.
- 1.4 In addition, the IWM provides exhibits of educational and general interest to members of the public.
- 1.5 IWM Duxford is a former RAF fighter station originally dating from the First World War. It has a long and distinguished history from 1924 until its closure as an RAF Station in 1961 and is particularly famous for its role in the Battle of Britain in 1940.
- 1.6 Today, IWM Duxford is one of the world's leading aviation museums, housing some 200 aircraft ranging from flimsy biplanes to modern day jets. Many of the aircraft at IWM Duxford still fly. The airworthy aircraft at the Museum belong to private collectors and operators and are an important part of IWM Duxford's unique living atmosphere. IWM Duxford is internationally renowned for its annual programme of world-class air shows.
- 1.7 The American Air Museum stands as a memorial to the 30,000 Americans who died flying from bases in the UK including IWM Duxford, during the Second World War. This outstanding example of modern British architecture houses IWM Duxford's unique collection of historic American combat aircraft including the SR-71 Blackbird, the only one of its kind on display in Britain and the B-24 Liberator. The arrival of these new stunning exhibits led to the reconfiguration of the American Air Museum, and the Rededication Ceremony on 27 September 2002, with former president of the US, George Bush and HRH the Prince of Wales present.
- 1.8 IWM Duxford is not just about aircraft and the Museum houses an outstanding collection of tanks, military vehicles and artillery displayed

in walk through battle scenes in the Land Warfare Hall. Two of the most poignant exhibitions are 'The Normandy Experience' and the 'Monty' Exhibition.

1.9 As of 2003, the Imperial War Museum consists of 4 other major public tourist attractions:

- 1.0.1 HMS Belfast moored in the Pool of London
- 1.0.2 Cabinet War Rooms & Churchill Museum
- 1.0.3 Lambeth Road
- 1.0.4 IWM North, Trafford, Manchester

1.1 PRELIMINARY PARTICULARS ETC.

1.1.1 Employer

Imperial War Museum
Duxford Airfield
Duxford
Cambs
CB22 4QR

1.1.2 Contract Administrator

S J Rogers FRICS
Capital Projects manager
Imperial War Museum
Duxford CB22 4QR

Tel 01223 497220 e-mail sjrogers@iwm.org.uk

1.1.3 Principal designer.

Ridge and Partners LLP
Harling House
47-51 Gt Suffolk Street
SE10BS
Tel 0207 593 3400
e-mail MAllen@ridge.co.uk

1.1.4 General Description of the Works

The works comprise re-roofing of building 173, located on the north site at IWM Duxford.

Works include some miscellaneous repairs.

1.1.5 Location and Access to Site

The site is located immediately to the east of the M11/A505 junction in South Cambridge shire.

Access into the site is from the A505 to the south side and via the staff entrance/guardroom. Access to the North site will then be via the 'Bailey-Bridge' over the A505 and directly to the building.

The bridge is rated for a 3 tone loading only. Thus material deliveries using heavier vehicles will access the north site directly from the A505 and north site gates. The contractor's foreman will be required to pick up the gate key from the control room, deal with the delivery, and then return the key on completion of the delivery.

1.1.6 Tender Drawings

The following drawings form part of this specification and will become contract documents.

DUX-B173- Roof-0-001	Roof plan
DUX-B173 -E-001	Elevations
Dux-B173-S-001	Sections.

IKO insulation layout plan.

1.2 GENERAL MATTERS

1.2.1 Limits of site operations

The contractor shall limit his operations to the immediate area of the works.

The contractor shall be responsible for storing materials, arranging for loading/unloading materials and organizing his works in a manner that does not interfere with other parts of the site and access to same.

No materials can be stored within the building. Materials may be stored in the covered yard on the south side of the building.

The building is occupied and used as a storage building. IWM staff have a need occasionally to access the building.

1.2.2 Preliminary investigation

The Contractor shall be deemed to have visited and inspected the site and to have examined drawings (if any) and contract documents and to have adequately acquainted himself with local conditions, accessibility of the works and site, the nature of the ground and subsoil, supply of and conditions affecting labour, the availability and supply of materials, water, electricity and telephones, all in relation to the execution of the works as no claim on the ground of want of knowledge in such respect will be entertained.

1.2.3 Abbreviations and references

The following abbreviations, references or terms are used in the Specification.

CP	-	British Standards Code of Practice
BS	-	British Standard Specification

The term 'Contractor' used throughout this document relates to the Contractor who is contracted to carry out and complete the works. The contractor shall be the 'Principal Contractor' under the CDM regulations.

Reference to CA means the Contract Administrator or other consultant, when appointed; with authority under the terms of the contract to act in such a capacity.

The reference to Building Inspector means Building Control Officer, District Surveyor or any other person with authority under statute to require compliance with any regulation or byelaw.

The terms 'Approved', 'Selected', or 'Directed' means the approval, selection, or direction of the client/CA.

The term 'Provide' means that the item(s) is to be supplied, delivered and fixed at the expense of the builder.

The term 'Day Work' is applicable to the work of an unknown or unforeseen nature that could not be specified and therefore estimated for during the preparation of the schedule of works. Such work is usually paid for on a time and material basis with the Contractor submitting evidence of hours of work and invoices for materials, plant, etc.

1.3 STATUTORY/GENERAL OBLIGATIONS

1.3.1 Safety/Health and Welfare

Allow for complying with all enactments, regulations and working rules relating to safety, health and welfare of work people.

The Contractor's attention is drawn to Section 2 of this Specification, which covers Health & Safety matters specifically.

These works are subject to the CDM Regulations but are deemed non-notifiable.

1.3.2 Working Hours

Monday to Friday - 0730 - 1700. Weekend working will only be allowed with the express prior agreement of Employer. The contractor may extend working hours on weekdays subject to approval of Employer.

1.3.3 Statutory Regulations

The works must be undertaken in compliance with Statutory Regulations, Building Regulations, Gas Safety Regulations, Water By Laws and IEE Regulations. Contractor is to allow in his tender for compliance, particularly in respect of service installations, which require contractor's design input.

1.3.4 Noise

Fit all compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles.

1.3.5 Public and Private Services

Adequately protect, uphold, maintain and prevent damage to all services. Do not interfere with their operation without consent of the service authorities or private owners or the CA as appropriate.

1.3.6 Existing Features

Prevent damage to existing buildings, fences, gates, walls, roads, paved areas, other of the site features, which are to remain in position during the execution of the works.

The contractor shall be responsible for properly making good to the satisfaction of the C.A. all areas disturbed during the execution of the works. Contractor is to plan the works so as to cause minimal disturbance to adjacent areas.

1.3.7 Structural Fabric

Works must be undertaken in a manner that does not cause damage/disturbance to the fabric of the building.

1.4 MANAGEMENT/ADMINISTRATION PROCEDURES

1.4.1 Supervision

Accept responsibility for co-ordination, supervision and administration of the works, including subcontractors. Arrange and monitor a programme with each subcontractor, supplier, Local Authority and statutory undertaker and obtain and supply information as necessary for co-ordination of the work.

The Contractor is to provide a competent person to constantly supervise the works and shall inform the CA of the name of such person.

The person is to be able to adequately receive directions given to him by the CA and is to remain on site throughout the duration of the contract and shall not be changed without prior approval from the CA.

The person is to implement the requirements of the Construction (Design & Management) Regulations 2007 as they apply to this project, and must assist the Planning Coordinator in maintaining the health and safety file for this project.

1.4.2 Insurances

Before starting work on site submit to the employer (through the CA) documentary evidence and/or policies and receipts for all insurances which are required to be taken out by the Contractor.

1.4.3 Programme

As soon as possible and prior to starting work on site, prepare, in an approved form, a programme for the works that should make allowance for all;

1. Subcontractors works including completion of drawings etc.
2. Work resulting from instructions issued with regard to the expenditure of provisional sums.
3. Other work concurrent with the contract.

1.4.4 Commencement of Work

Inform CA as least seven working days before proposed date for commencement of the work on site.

1.4.5 Monitoring

Record progress on site and keep a copy of the programme on site. Update or re-draft without delay if circumstances arise which affect the progress of the works with copies of all revisions to CA.

1.4.6 Site Meetings

Hold regular site meetings as necessary for the proper management and co-ordination of the contract and as required by the CA. Meetings will normally be held every four weeks. Attend all meetings and inform subcontractors and suppliers when their presence is required. Notify all consultants. The CA will take the Chair and minutes will be taken and distributed by the CA.

1.4.7 Notice of Completion

Give CA at least one week's notice of anticipated dates of practical completion of the whole or parts of the works.

1.4.8 Measurements

Give reasonable notice to the CA before covering up work, which the CA requires to be measured.

1.4.9 Covering Up

Give not less than one working days notice to the CA or Clerk of Works before covering up.

1.5 RESOURCES/TEMPORARY WORKS AND SERVICES

1.5.1 Accommodation

Provide necessary temporary sheds, offices, mess rooms, sanitary accommodation, and other temporary buildings required for Contractor's own and domestic subcontractor's use.

The contractor's personnel will be able to use a toilet facility in the rear yard of building 6, located approximately 100m SW of building 173.

Routes into/out of the building must not be disrupted and fire escapes and routes away from the building similarly must not be obstructed.

Scaffolding/access platforms must not be placed so as to restrict access into/out of the building by any of the users, private, or commercial.

1.5.2 Protection

Provide temporary fencing, hoardings, screens, vans, planked footways, guard rails, gantries and the like as may be necessary for protecting the public and others, for the proper execution of the works and for meeting the requirements of the Local or other Authority.

The contractor will be required to fence the works to prevent unauthorized persons entering into the working area. Plastic mesh fencing held by metal posts, to 1.2m height is considered adequate. Contractor's materials storage areas will need to be enclosed by Herras fencing, which is to be secured closed at the end of each working day.

1.5.3 Scaffolding

The contractor must allow in his tender for providing a safe means of access for operatives to all areas subject to works. In deciding what access equipment is necessary, the contractor must fully appraise the works, undertake a risk assessment and identify the most suitable method of operation.

Scaffolding must be in accordance with BSEN12811-1 (2003).

Unless the scaffold is a basic configuration described in recognized guidance, for example NASC publication TG20-08 (volume 1), the scaffold should be designed by calculation, by a competent person, to ensure it will have adequate strength and stability.

If proposing a scaffold that is termed a 'basic' scaffold under volume 1 of TG20-08, the contractor must demonstrate to the CA that the scaffold meets all of the criteria for a basic scaffold.

Any proposed modifications or alterations outside a generally recognized basic configuration must be designed by a competent person.

Where the scaffold falls outside the scope of a 'basic' scaffold, the contractor must supply to the CA detailed information to show compliance with the BSEN12811-1 standard. Further advice on what is required is contained in volume 2 of TG20-08. **As a minimum, this must include drawings showing the general scaffold arrangement, a method statement describing the erection and dismantling**

sequence, the permitted platform loadings, restrictions on use and calculations to show compliance with the standard.

On completion of the scaffold erection, a handover certificate must be issued to the CA, which should refer to the relevant drawings, permitted working loads, and restrictions on use. The handover certificate must be issued by a competent person (by means of experience or assessment, appropriate for the type and complexity of the scaffold erected).

Where the scaffold is the subject of design the person responsible for the design shall make an inspection and certify the scaffold is erected in accordance with the design and drawings.

Regular inspection should be carried out (minimum weekly) also by a competent person.

Erection, alteration and dismantling of all scaffolds must be under the direct supervision of a competent person – an advanced scaffolder or design engineer with the appropriate industry experience.

The contractor is referred to HSE guidance note for a list of scaffold structures that need to be the subject of design.

For the avoidance of doubt, the means of access to any particular scaffold working platform must be arranged so that it is outside of the working platforms and does not obstruct or restrict their use. e.g. a ladder access tower, or platform steps. (The use of trap doors within the platforms will not be permitted).

If ladders are proposed for access to scaffold platforms, these must not be used for bringing materials or tools of any sort to the working platform. A separate arrangement must be made for bringing material to the platform level – hoists etc.

NOTE: The purpose of the scaffold is to facilitate safe access to undertake the various roofing and repair works described in later sections of this specification.

1.5.4 Water

Water for the works is available on site free of charge. Contractor is to make temporary arrangements for storing and distributing around the site.

1.5.5 Electricity

The contractor is to make his own arrangements for the supply of power he may require. Use of power from within the building is not possible.

1.6 THE WORKS GENERALLY

GENERALLY

1.6.1 Good Practice

Where and to the extent the materials, products and workmanship are not fully specified they are to be:

1. Suitable for the purposes of the work stated in or reasonably to be inferred from the contract documents, and
2. In accordance with good building practice including the relevant provisions or current BSI documents.

1.6.2 Manufacturers Recommendations

Handle, store, prepare and use, or fix each product in accordance with manufacturers printed or written instructions/recommendations. Inform CA if this conflict with any other specified requirement.

1.6.3 Workmanship

The works to be carried out by, or under the close supervision of, experienced tradesmen, skilled in the particular type of work.

1.6.4 Service Runs

Make adequate provisions for services, including unobstructed routes and fixtures. Wherever possible, ducts, chases and holes to be formed during construction rather than cut.

PRODUCTS/MATERIALS GENERALLY

1.6.5 Products to be New

Unless otherwise specified. Ensure that the whole quantity of each product and material required to complete the work is of consistent kind, size, quality and overall appearance.

Handle, store and fix products with care to ensure that they are not damaged when incorporated into the works.

1.6.6 Or Equivalent Approved

Means that the products of different manufacturers may be substituted if prior approval has been obtained, but the CA reserves the right to insist on a named product(s) the rates or prices will be held to be based on the product(s) specified, unless agreed otherwise.

1.6.7 Proprietary Names

The phrase 'or equivalent' is to be deemed included whenever products are specified by proprietary names.

1.6.8 Single Source

Where a choice of manufacturer or source of suppliers is allowed for any particular product or material, the whole quantity required to complete the works must be the same type manufacturer or source. **Do not change without approval.** Produce written evidence or sources of supply requested by CA.

ACCURACY/SETTING OUT

1.6.9 Accuracy

The contractor is to set out the route of the path and obtain CA approval prior to commencement of excavations.

PROTECTION/CONDITION OF WORK/DRYING OUT

1.6.10 Site administration and Security

Adequately safeguard the site, products, materials, plant, the works and any existing buildings affected by the works from damage and theft. Take all responsible precautions to prevent unauthorized access to the site, the works and adjoining property.

1.6.11 Stability

Accept responsibility for stability and structural integrity of the works during the contract, and support as necessary. Prevent overloading/damage. Details of design loads may be obtained from the CA.

1.6.12 Inclement Weather

Adequately protect the works from damage by inclement weather and use all reasonable and approved building aids and methods to prevent or minimize delays during cold or inclement weather.

1.6.13 Rubbish

Remove rubbish and debris as it accrues and keep the site and works clean and tidy.

1.6.14 Drying Out

Control the drying and humidity of the works and the application of heat to prevent:

1. Blistering and failure of adhesion.

2. Damage due to trapped moisture.
3. Excessive movement.

ALTERATIONS/EXTENSIONS/MAINTENANCE WORK

1.6.19 Make Good

Means carry out local remedial work, including the following as appropriate and necessary to leave the work sound and neat to approval:

1. Remove defective parts of existing finishes and components and around any stated features.
2. Fill, dress down, piece in, patch, extending existing finishes, make minor repairs and adjustments.
3. Re-fix or re-stick.
4. Redecorate.
5. Consequent upon alteration, extension and maintenance work is deemed to be included in such items.

SAMPLES/APPROVALS/TESTING/INSPECTION

1.6.22 Samples - materials

Where approval of products or materials is specified, submit samples or other evidence of suitability. Do not confirm orders or use materials until approval has been obtained. Retain approved samples on site for comparison with products and materials used in the works. Remove when no longer required.

1.6.23 Samples - workmanship

Where samples of finished work are specified, obtain approval of stated characteristics before proceeding with the works.

Retain approved samples on site for comparison with the works. Remove samples which are not part of the finished works when no longer required.

1.6.24 Approvals

Inspection of any other action by the CA must not be taken as approval of materials, products or work unless the CA confirms in writing the express terms referring to:

1. Date of inspection.

2. Part of the work inspected.
3. Respect or characteristics which are approved.
4. Extent and purpose of the approval.
5. Any associated conditions.

FIXING/FASTENINGS/ADHESIVES/MORTAR

1.6.25 Fixings Generally

Use fixings and jointing methods and types and spacing's of fastenings which are suitable having regard to:

1. Nature of compatibility with products/materials being fixed and fixed to.
2. Recommendations of manufacturers of fastenings and manufacturers of products/material being fixed and fixed to.
3. Materials and loads to be supported.
4. Conditions expected in use.
5. Appearance - being subject to approval.

WORK AT COMPLETION/MAKING GOOD DEFECTS

1.6.26 Cleaning

Cleaning materials and methods are to be as recommended by manufacturer of product being cleaned.

In the absence of such recommendations cleaning materials and methods are to be approved by CA.

1.6.27 Certification

Not required.

1.7 CONTRACTUAL MATTERS

1.7.1 Form of Contract

The Form of Contract will be the JCT Agreement for Minor Works 2016 Edition, together with amendments to date.

The Contractor should include for all costs incurred in compliance with the Terms and Conditions of the Contract.

The Specification and drawings (if any) will become contract documents.

The Contractor must include for all works whether referred to in the Specification or not, and for all works which are not included in the Specification, or on the drawings which could reasonably be expected to be included in the works.

1.7.2 Appendix 1 to these Preliminaries

Appendix 1 at the end of these Preliminaries describes the contractual details that will be included in the Contract Conditions.

1.8 CONTINGENCY/ PROVISIONAL/ PRIME COST SUMS

1.8.1 Contingency Sum

Allow a contingency sum of £2000 – to be spent only on the written authorization of the CA.

1.8.2 Provisional Sum

N/A.

1.8.3 Provisional Repairs

Not used.

1.8.4 Prime Cost Sums

Not used.

1.9 APPROVED SUB-CONTRACTORS

The contractor shall submit with their tender the name of any subcontractors they intend to use.

1.10 PROVISIONAL DAYWORKS

Not used.

1.11 WORKS UNDERTAKEN CONCURRENTLY BY OTHERS

Building services and fabric are maintained on the site by an FM contractor appointed by the IWM (Kier Workplace). This contractor will have staff at the Duxford site undertaking general maintenance duties. No works are anticipated to take place in the areas subject to removal works.

1.12 PHASING OF WORKS

No specific phasing is required.

1.13 TEMPORARY SIGNAGE AND FENCING.

The working area is to be adequately protected from unauthorized entry by enclosures/barriers and the like.

Contractor is to provide appropriate warning signs and notices in order to warn the site users of works and the dangers of unauthorized entry.

Contractor/subcontractor advertising will not be permitted.

1.14 SITE RULES

The Museum operate specific rules for 'Safe Working Conditions and Protection of its Staff, Visitors and Collection'.

These are included within the contract documents.

The C.A. will carry out a site induction for all contractors' operatives on the morning of the first day of starting on site.

The site foreman will be expected to induct subsequent operatives during the course of the works. Induction records will be checked by the C.A.

1.15 SECURITY CLEARANCE

All of the contractor's staff will need to be security cleared prior to undertaking any work on site. Security forms are available from the guardroom and must be completed and returned at least 2 weeks prior to commencement.

1.16 NEW SUPPLIER

The successful contractor if not on the museum's approved supplier system, will be required to complete a 'New Suppliers Form and return it to the C.A. within 5 days of award of contract.

1.17 AUTHORISATION TO WORK

Before works can commence, the contractor will require an 'Authorisation to Work' certificate from the CA/Project manager. This will require the submission of a Construction Phase Plan (CPP) setting out how health and Safety aspects of this project will be managed, what provisions for welfare are to be provided and containing suitable and sufficient Risk assessments and method statements (RAMS). This plan must be submitted at least 1 week prior to commencement.

The CA/Project manager will sign off the authorization to work form, and the contractor will also be required also to sign the form confirming the work will be undertaken in accordance with the CPP and RAMS.

If the information provided by the contractor is inadequate – an authorization will not be issued.

APPENDIX 1

Contract:

The form of contract will be the JCT Agreement for Minor Building Works 2016 edition together with any amendments to date.

ARTICLES OF AGREEMENT:

Recitals:

First. The work required is; Re-roofing works Building 173 IWM Duxford.

Second. Documents comprise the contract specification, drawings referred to therein, and the IWM rules for contractors working on IWM premises.

Third. The contractor shall supply a fully priced copy of the specification to the employer.

Fourth. The employer is not a contractor under the CIS rules.

Fifth. This project is considered to be *Non* notifiable under the CDM Regulations 2015.

Sixth. Not applicable.

Seventh. Applies, excepting paragraphs 3, 4 and 5.

Articles :

Article 3 The Contract Administrator. Mr S Rogers on behalf of the IWM.

Article 4 The Principal Designer is Ridge and Partners LLP as stated at 1.1.3 above.

Article 5 The appointed contractor will be the 'Principal Contractor' for the purposes of the CDM Regulations.

Contract Particulars:

Base date 01 January 2019.

Fourth Recital and clause 4.2 The employer at the Base date is not a contractor.

Fifth Recital The works are considered to be not notifiable under the CDM Regulations.

Sixth Recital	Not applicable.
Seventh Recital	Supplemental provisions 1 and 2 apply.
Article 7 (and Schedule 1)	The arbitration provisions of article 7 and schedule 1 apply.
Clause 1.1	4 weeks. Beginning on the date of receipt by the contractor of the tender documentation.
Clause 2.2 Commencement Completion	To be agreed
Clause 2.8 Liquidated Damages	Nil.
Clause 2.10 Rectification Period	none (nil)
4.3	Percentage is 95%
4.4	Percentage is 95%
4.8.1.	3 months
4.11	Deleted
5.3.2	Contract Insurance required is £10million minimum
5.4A & 5.4B	Clause 5.BA applies % addition to cover fees – 20%
7.2	Nominator shall be President of the RICS
Schedule 1	Appointment of arbitrator shall be the President of The Royal Institute of Chartered Surveyors