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## PROJECT PARTICULARS

### Name of Project

Perimeter Fencing at RAF Museum London

### Nature of Project

Replacement perimeter fencing

### Location of Project

RAF Museum London, Grahame Park Way, London, NW9 5LL

### Length of contract

8 weeks

### Names, addresses and points of contact of employer and consultants

#### EMPLOYER (CLIENT)

Name: RAF Museum London

Address: Grahame Park Way

London

NW9 5LL

Point of contact: Thomas Power (Head of Estates)

Email: thomas.power@rafmuseum.org

Telephone: 07584 677 861

#### CONTRACTOR

TBC

## PROJECT PARTICULARS (CONT’D)

### 1.1.5 Names, addresses and points of contact of employer and consultants (cont’d)

#### CONTRACT ADMINISTRATOR

Name: SP Projects Limited

Address: Unit 16 Mold Business Park

 Wrexham Road

 Mold

 Flintshire

 CH7 1XP

Point of contact: Benjamin Lowery

Email: ben.lowery@sp-projects.com

Telephone: 07508 720 806

#### PRINCIPAL DESIGNER – PRE-CONTRACT

Name: SP Projects Limited

Address: Unit 16 Mold Business Park

 Wrexham Road

 Mold

 Flintshire

 CH7 1XP

Point of contact: Simon Hughes

Email: simon.hughes@sp-projects.com

Telephone: 01352 700 228

#### DESIGNER

The Contractor

## DRAWINGS

**1.2.1 List of drawings from which the tender document was prepared**

The tender drawings are those contained in the appendices.

### Other documents

#### PRE-CONSTRUCTION INFORMATION

See the appendices

#### LIST OF DRAWINGS AND OTHER DOCUMENTS RELATING

TO THE CONTRACT BUT NOT INCLUDED IN THE TENDER

DOCUMENTS

* None

## THE SITE AND EXISTING BUILDINGS

**1.3.1 The site**

The site will be limited to areas of work.

### Existing buildings on or adjacent to the site

The existing buildings surrounding the site form the RAF Museum London.

### Surrounding land/building uses

See 1.2.2

### Existing mains services

### ON THE SITE/ADJACENT TO THE SITE

The Contractor is to be responsible for ascertaining the position of all electric, gas,

telephone, water, drainage and other services.

The contractor is responsible for taking reasonable precautions in excavation

in accordance with HSG47 *Avoiding danger from underground services.*

The contractor is responsible for maintaining all the existing mains and services

at the site, including, but not limited to: electric, gas, water, telephone and

drainage services. The Contractor is to make good any damage at his own

expense.

### Soils and ground water

No information available.

### Site investigation

Carried out by the contractor for the design.

### Health and safety file

A health and safety file related to the adjacent carpark is available at the site on request

from the client.

**1.3 THE SITE AND EXISTING BUILDINGS (CONT’D)**

### Health and safety hazards

The following materials and substances are (or have previously been) commonly used in construction works and are identified as potentially posing special health and/or safety hazards during the project. This list is not intended to be either comprehensive or specific to this project. The materials specifically relating to this project will require identification and control methods to be documented as the project develops.

Acrylic Resin Cement

Asbestos Concrete

Asphalt Creosote

Bitumen Mineral Pitch

Diesel Fuel Epoxy Resins

Formaldehyde Formaldehyde

Resin Powder Hardwood Dust

Kerosene, Paraffin, Burning Oil

Lead Mortar

Paint (2 component) Petrol

Paint Thinner Pitch (coal tar)

The following may be present:

Fragile materials: none reported

Fire Damage: none reported

Post-tensioned reinforced concrete: none reported

Structural instability: none reported

Dust: likely

### Access to the site

The access to the site is from Grahame Park Way.

### Parking

For the purposes of this tender, the contractor should assume he will be required

park his vehicles within his designated contractors compound.

### Use of the site

The contractor is not to use the site for any other purpose than for carrying out

the works.

### Site visits

The contractor has visited the site and no addition to the contract sum will be

permitted due to the contractor not having noted something which would have

been visible on a site inspection.

##  DESCRIPTION OF THE WORKS

### The Works

Replacement Perimeter Fencing at RAF Museum London, Grahame Park Way,

London, NW9 5LL

### Preparatory works by others

Not applicable

### Work by others concurrent with the contract

Not applicable

### Completion work by others

Not applicable

## THE CONTRACT CONDITIONS

 The Form of Contract will be the JCT Minor Works Building Contract with contractor’s design

 2016 (MWD 2016), incorporating all amendments up to and including base date, executed as

 a deed.

 **ARTICLES OF AGREEMENT**

 **THE RECITALS**

 First Recital

Replacement Perimeter Fencing at RAF Museum London, Grahame Park Way,

London, NW9 5LL

Second Recital

The Works include the design and construction of the fencing all other associated

works.

Third Recital

The drawings are those as listed in Appendices A and B.

Delete reference to ‘a Specification’

Work Schedules to apply

Delete references to ‘a Schedule of Rates’

Fourth Recital

Delete references ‘the Contract Specification’ and ‘a Schedule of Rates’

**THE ARTICLES**

Article 3 – ARCHITECT/CONTRACT ADMINISTRATOR

Contract Administrator – See section 1.1.5.3

Delete **“**Architect”. “Contract Administrator” to apply

Article 4 – PRINCIPAL DESIGNER

The Contractor

Article 5 – PRINCIPAL CONTRACTOR

 The Contractor

**Contract Particulars**

Fifth Recital and Schedule 2 (paragraphs 1.1, 1.2, 1.5, 1.6, 2.1 and 2.2) – BASE DATE

 5 days before the tender return date

Fifth Recital and clause 4.2 – CONSTRUCTION INDUSTRY SCHEME (CIS)

 Employer at the Base Date is a ‘contractor’ for the purposes of CIS

Sixth Recital – CDM REGULATIONS

 The project is not notifiable

Seventh Recital – FRAMEWORK AGREEMENT

 Delete

**1.5 THE CONTRACT CONDITIONS (CONT’D)**

 **ARTICLES OF AGREEMENT (CONT’D)**

**Contract Particulars (Cont’d)**

Eighth Recital and Schedule 3 – SUPPLEMENTAL PROVISIONS

 Collaborative working – provision 1 applies

 Health and safety – provision 2 applies

 Cost savings and value improvements – provision 3 applies

 Sustainable development and environmental considerations – provision 4 applies

 Performance indicators and monitoring – provision 5 does not apply

 Notification and negotiation of disputes – provision 6 applies

 Employer’s nominee – To be confirmed

 Contractor’s nominee – To be confirmed

Article 7 – ARBITRATION

 Article 7 and Schedule 1 (*Arbitration*) apply

Clause 2.3 – WORKS COMMENCEMENT DATE

 28th March 2022

Clause 2.3 – DATE FOR COMPLETION

 20th May 2022

Clause 2.9 – LIQUIDATED DAMAGES

 at the rate of £375 per week

Clause 2.11 – RECTIFICATION PERIOD

 12 months from the date of practical completion

Clause 4.3 – INTERIM PAYMENTS – INTERIM VALUATION DATES

 TBC

Clause 4.3 – PAYMENTS DUE PRIOR TO PRACTICAL COMPLETION

 95 per cent

Clause 4.3 – PAYMENTS BECOMING DUE ON OR AFTER PRACTICAL COMPLETION

 97½ per cent

Clauses 4.3 and 4.8 – FLUCTUATIONS PROVISION

 no fluctuations provision applies

Clauses 4.3 and 4.8 – PERCENTAGE ADDITION FOR SCHEDULE 2 (PARAGRAPH 13)

 Delete

Clause 4.8.1 – SUPPLY OF DOCUMENTATION FOR COMPUTATION OF AMOUNT TO BE FINALLY CERTIFIED

 3 months from the date of practical completion

Clause 5.3 – CONTRACTOR’S PUBLIC LIABILITY INSURANCE

 £10,000,000

**1.5 THE CONTRACT CONDITIONS (CONT’D)**

 **ARTICLES OF AGREEMENT (CONT’D)**

**Contract Particulars (Cont’d)**

Clauses 5.4A, 5.4B and 5.4C – INSURANCE OF THE WORKS ETC. – ALTERNATIVE PROVISIONS

 Clause 5.4A *(Works insurance by Contractor in Joint Names)* applies

Clause 5.4A and 5.4B – PERCENTAGE TO COVER PROFESSIONAL FEES

 15 per cent

Clause 5.4C – INSURANCE ARRANGEMENT – DETAILS OF THE REQUIRED POLICY OR POLICIES

 Delete

Clause 7.2 - ADJUDICATION

 The nominating body is the Royal Institution of Chartered Surveyors

Schedule 1 (paragraph 2.1) – ARBITRATION – APPOINTER OF ARBITRATOR

 President of a Vice-President of the Royal Institution of Chartered Surveyors

**THE ATTESTATION**

The Agreement will be executed by both the Employer and the Contractor as a deed.

**THE CONDITIONS**

SECTION 1: DEFINITIONS AND INTERPRETATION

 SECTION 2: CARRYING OUT THE WORKS

 SECTION 3: CONTROL OF THE WORKS

SECTION 4: PAYMENT

SECTION 5: INJURY, DAMAGE AND INSURANCE

SECTION 6: TERMINATION

SECTION 7: SETTLEMENT OF DISPUTES

**THE SCHEDULES**

 SCHEDULE 1: ARBITRATION

SCHEDULE 2: FLUCTUATIONS – CONTRIBUTION, LEVY AND TAX CHANGES

SCHEDULE 3: SUPPLEMENTAL PROVISIONS

## EMPLOYER’S REQUIREMENTS: PROVISIONS, CONTENT AND USE OF DOCUMENTS

### Definitions and interpretations

### DEFINITIONS

The use of terms within the preliminaries document, drawings and

schedule of works shall be, unless specifically stated otherwise, as those included in

section 1 of the form of contract *Definitions* *and Interpretation* or those included in

the relevant British or international standard.

* CA means the person nominated in the contract as architect or contract

administrator

* PRODUCTS means materials (including naturally occurring materials) and

goods intended for permanent incorporation in the works.

* APPROVAL means the approval in writing of the CA unless specified

otherwise.

### COMMUNICATION

Definition: Includes the verbs: advise; inform; submit; give notice; instruct;

agree; confirm; seek or obtain information, consent or instructions; or make

arrangements

Format: The communication shall be as set out in the conditions of the form of contract.

An email sent with a read receipt shall be

an acceptable method of issuing a notice or communication under the contract.

Response: The contractor is not to proceed until a response has been received

unless the form of contract specifically states otherwise.

### PRODUCTS

Definition: Materials, both manufactured and naturally occurring, and goods,

Including components, equipment and accessories, intended for permanent

incorporation in the works.

Includes: Goods, plant, materials, site materials and things for incorporation

into the works.

 The products used for the works shall be those specified in the tender documents.

 If the Contractor wishes to substitute products of different manufacture to those

 specified, details must be submitted with the tender giving reasons for each

 proposed substitution. Substitutions which have not been notified at tender

 stage may not be considered.

### SITE EQUIPMENT

Definition: All appliances or things of whatsoever nature required in or about

the construction for completion of the works, but not materials or other things

intended to form, or forming, part of the permanent works.

Includes: Construction appliances, vehicles, consumables, tools, temporary works,

scaffolding, cabins and other site facilities.

**1.6 EMPLOYER’S REQUIREMENTS: PROVISION, CONTENT AND USE OF DOCUMENTS (CONT’D)**

### 1.6.1 Definitions and interpretations (cont’d)

### DRAWINGS

Definition: Contract drawings are those contained in the appendices.

**1.6.7** CONTRACTOR’S CHOICE

Where a choice of manufacturer or source of supply is allowed for any particular

product or material, the whole quantity required to complete the work must be

of the same type, manufacturer and/or source unless otherwise agreed.

Written evidence of sources of supply are to be provided as and when required

by the contract administrator.

### TERMS USED IN SCHEDULE OF WORKS

* REMOVE means disconnect, dismantle as necessary and remove the stated

Element, work or component and all associated accessories, fastenings,

supports, linings and bedding materials, and dispose unwanted materials.

It does not include removing associated pipework, wiring, ductwork or other

services.

* FIX ONLY means all labours in unloading, handling, storing and fixing in

position, including use of all plant.

* SUPPLY AND FIX: unless stated otherwise all items given in the schedule of

Works and/or on the drawings and/or in the specification are to be supplied

and fixed complete.

* SET ASIDE FOR REUSE means:
	+ During removal prevent damage to the stated components or

materials, and clean off bedding and jointing materials.

* + Stack neatly and adequately protect and store until required

by the employer or for use in the works as instructed.

* REPLACE means:
	+ Remove the stated existing components, features and finishes.
	+ Provide and fit in lieu new components, features or finishes

which, unless stated otherwise, must match those which have

been removed.

* + Make good as necessary
* REPAIR means carry out local remedial work to components, features and

finishes as found in the existing building/on the existing site. Re-secure or

re-fix as necessary and leave in a sound and neat condition. It does not include:

* + Replacement of components or parts of components
	+ Redecoration

**1.6 EMPLOYER’S REQUIREMENTS: PROVISION, CONTENT AND USE OF DOCUMENTS (CONT’D)**

### 1.6.1 Definitions and interpretations (cont’d)

#### 1.6.8 TERMS USED IN SCHEDULE OF WORKS (CONT’D)

* RE-FIX means fix removed products in the original location once removed.
* MAKE GOOD means carry out local remedial work to components, features

and finishes which have been disturbed by other, previous work under this

contract and leave in a sound and neat condition. It does not include:

* + Replacement of components or parts of components.
	+ Redecoration (except insofar as the original finishes were

disturbed).

* + The meaning of the term shall not be limited by this definition

where used in connection with the defects liability provisions

of this contract.

* EASE means make minor adjustments to moving parts of the stated component

to achieve a good fit in both open and closed positions and ensure free movement

in relation to fixed surrounds. Make good as necessary.

* TO MATCH EXISTING means use products, materials and methods to match

closely all visual characteristics and features of the existing work, with

joints between existing and new work as inconspicuous as possible, all to

approval of appearance.

* SYSTEM means equipment, accessories, controls, support and ancillary

items, including installation, necessary for that section of the work

to function.

### MANUFACTURER AND PRODUCT REFERENCES

“Manufacturer” means the firm under whose name the particular product is

marketed; “product reference” means the proprietary brand name and/or

reference by which the particular product is identified.

### SUBSTITUTION OF PRODUCTS

Where the substitution of a product different to that specified is permitted,

before ordering the product the contractor is to inform the CA of the reasons

for the substitution. When requested, submit for verification documentary

evidence that the alternative product is equivalent in respect of material,

safety, reliability, function, compatibility with adjacent construction, availability

of compatible accessories and appearance. Submit certified English translation

of any foreign language documents.

Any proposal for use of an alternative product must also include proposals for

Substitution of compatible accessory products and variation of details as

necessary, with evidence of equivalent durability, function and appearance of

the construction as a whole.

If substitution is approved, and before ordering products, provide revised

Drawings, specification and manufacturer’s guarantees. Substitutions which

have not been notified at tender stage may not be considered.

**1.6 EMPLOYER’S REQUIREMENTS: PROVISION, CONTENT AND USE OF DOCUMENTS (CONT’D)**

### 1.6.1 Definitions and interpretations (cont’d)

### CROSS-REFERENCES

Where a numerical cross-reference to a specification section or clause is given

on drawings or in any other document the contractor must verify its accuracy

by checking the remainder of the annotation or item description against the

terminology used in section or clause to which reference is made; where a

numerical cross-reference is not given, the relevant sections(s) and clause(s)

of the specification will apply – cross referencing thereto being by means of

related terminology; where a cross-reference for a particular type of work,

feature, material or product is given relevant clause(s) elsewhere in the

referred to workmanship also apply; the contractor must, before proceeding,

obtain clarification or instructions, in relation to any discrepancy or ambiguity

which may be discovered.

### REFERENCED DOCUMENTS

Where, and to the extent that, this Schedule of Works conflicts with referenced

Documents, this Schedule of Works prevails.

**1.6.13**EQUIVALENT PRODUCTS

Where the specification of a product different to that specified is permitted,

before ordering the product the contractor is to inform the CA of the reasons for

the substitution. When requested, the contractor is to submit for verification

documentary evidence that the alternative product is equivalent in respect of

function, material, safety, reliability, compatibility with adjacent construction,

availability of compatible accessories and appearance. The contractor is to submit

certified English translation of any foreign language documents; Any proposal for

use of an alternative product must also include proposals for substitution of

compatible accessory products and variation of details as necessary, with

evidence of equivalent durability, function and appearance of the construction as

a whole; If substitution is approved, and before ordering products, the contractor

is to provide revised drawings, specification and manufacturer’s guarantees.

**1.6.14**SUBSTITUTION OF STANDARDS

Where any product is specified to comply with a British Standard for which there

is no equivalent European Standard, it may be substituted by a product complying

with a grade or category within a national standard of another Member State

of the European Union, or an international standard recognised in the UK, specifying

equivalent requirements and assurances in respect of material, safety, reliability,

function, compatibility with adjacent construction, availability of compatible

accessories and, where relevant, appearance. In advance of ordering the contractor

is to submit notification of all such substitutions and, when required, submit

for verification documentary evidence confirming that the products comply with

the specified requirements. Any submitted foreign language documents must

be accompanied by certified translations into English.

**1.6 EMPLOYER’S REQUIREMENTS: PROVISION, CONTENT AND USE OF DOCUMENTS (CONT’D)**

### 1.6.1 Definitions and interpretations (cont’d)

### 1.6.15 CURRENCY OF DOCUMENTS

 References to standards, type approval certificates, catalogues, codes of practice

and the like are to the editions, revisions, versions and amendments current

at the base date of the contract; References to BSI documents are to versions

and amendments listed in the BSI Standards Catalogue, including updates

current at the base date of the contract.

1.6.15 PRODUCT SIZES

Unless otherwise states:

General dimensions: products are specified by their co-ordinating sizes.

Timber: cross section dimensions shown on drawings or listed in the specification/

work schedules are:

* + Target sizes as defined in BS EN 336 for structural softwood and

hardwood sections.

* + Finished sizes for non-structural softwood or hardwood sawn

and further processed sections.

### Documents provided on behalf of employer

#### ADDITIONAL COPIES OF DRAWINGS AND DOCUMENTS

An electronic copy of the contract documents (including drawings, works schedules,

specification, etc.) will be issued to the contractor free of charge. Hard copies

will be issued on request, but will be charged to the contractor.

1.6.2.2 DIMENSIONS

Figured dimensions shall be in preference to the scale of the drawings

 and where possible dimensions shall be taken from the building.

The contractor is to request from the CA any dimensions which are not

shown on the drawings and which cannot be deducted from information on

the drawings.

1.6.2.3 MEASURED QUANTITIES

The contractor is to take accurate site dimensions for all specified products

prior to manufacture and is to note that any product sizes shown on the drawings

or work schedules are approximate only. No claim for loss due to the contractor’s

failure to comply with this clause will be considered.

The specification and drawings shall take precedence over any measured

quantities.

1.6.2.4 THE SCHEDULE OF WORKS

All sections of the schedule of works must be read in conjunction with the Preliminaries/

General Conditions.

**1.6 EMPLOYER’S REQUIREMENTS: PROVISION, CONTENT AND USE OF DOCUMENTS (CONT’D)**

### Documents provided on behalf of employer (cont’d)

#### 1.6.2.5 DIVERGENCE FROM THE STATUTORY REQUIREMENTS

The contractor is to inform the CA immediately should there come to light

any divergence between the drawings/specification/work schedules and

the requirements of the Building Regulations, other Statues, statutory

undertakers and any other regulatory bodies. Any failure of the contractor

to inform the CA of any such divergence as soon as is reasonably practicable

will result in any additional costs incurred by the employer as a result of the

above delay being payable by the contractor to the employer.

### Documents provided by the contractor, subcontractors and suppliers

#### DESIGN INFORMATION

Not applicable

1.6.3.2 PRODUCTION INFORMATION

Not applicable.

1.6.3.3 AS-BUILT/AS-INSTALLED DRAWINGS AND INFORMATION

The contractor must provide as-built/as-installed drawings and

Information to the CA not less than 2 weeks before the date of

practical completion.

1.6.3.4 TECHNICAL LITERATURE

The contractor is required to keep copies of the following on-site,

readily accessible for reference by all supervisory personnel:

* + Manufacturers’ current literature relating to all products

to by used in the works.

* + Relevant BS/ISO Codes of Practice.

The Contractor is to provide copies of the above to the Principal Designer

at least two weeks prior to practical completion for incorporation within

the health and safety file.

**1.6 EMPLOYER’S REQUIREMENTS: PROVISION, CONTENT AND USE OF DOCUMENTS (CONT’D)**

### 1.6.3 Documents provided by the contractor, subcontractors and suppliers (cont’d)

### 1.6.3.5 MAINTENANCE INSTRUCTIONS AND GUARANTEES

The contractor is to retain all copies of maintenance instructions and

guarantees delivered with any components/equipment, register such

components/equipment with the relevant manufacturer as necessary

to provide copies of such instructions/guarantees to the Principal Designer

by 2 weeks prior to practical completion. Should such instructions/guarantees

not be provided with components/equipment, the contractor is to obtain

such instructions/guarantees and comply with the procedure previously

described in this section.

1.6.3.6 DOCUMENTS REQUIRED BEFORE PRACTICAL COMPLETION

The following documents are required prior to practical completion:

* + All information required for incorporation within

the health and safety file are to be provided to

the Principal Designer by 2 weeks prior to practical

completion.

### Document and data interchange

#### ELECTRONIC DATA INTERCHANGE (EDI)

Subject to clause 1.6.1 of the contract an email shall be

an acceptable method of issuing a notice or communication under the contract.

## EMPLOYER’S REQUIREMENTS: MANAGEMENT OF THE WORKS

### Employer’s requirements – generally

#### SUPERVISION

The contractor shall: accept responsibility for co-ordination, supervision and

administration of the Works, including all subcontracts; Arrange and

monitor a programme with each Specialist, Contractor, local authority

and statutory undertaker, and obtain and supply information as necessary

for co-ordination of the work.

The Contractor's attention is drawn to the terms and requirements of the Construction

Industry Scheme concerning sub-contracting in the construction industry. The

responsibility of ascertaining whether any sub-contractor is a limited company or

holds a current tax exemption certificate from the Inland Revenue rests entirely with

the Contractor.

1.7.1.2 CONSIDERATE CONSTRUCTORS SCHEME

Not applicable

1.7.1.3 INSURANCE

The contractor shall, before starting work on-site, submit documentary

evidence and/or policies and receipts for the insurance required by the

Conditions of Contract.

1.7.1.4 INSURANCE CLAIMS

If any event occurs which may give rise to any claim or proceeding

in respect of loss or damage to the works or injury or damage to persons

or property arising out of the works, the contractor shall forthwith give

notice in writing to the Client, and the Insurers. Indemnify the Client against

any loss which may be caused by failure to give such notice.

1.7.1.5 CLIMATIC CONDITIONS

The contractor shall keep an accurate record of:

* + Daily maximum and minimum air temperatures (including overnight)
	+ Delays due to adverse weather, including description of the weather,

and the type(s) of work affected and number of hours lost.

1.7.1.6 OWNERSHIP OF MATERIALS/PRODUCTS ARISING FROM THE WORKS

Materials arising from the demolition work are to become the property of

the contractor except where otherwise stated. Remove from site as work

proceeds.

**1.7 EMPLOYER’S REQUIREMENTS: MANANGEMENT OF THE WORKS (CONT’D)**

### Programme/progress

#### PROGRAMME

The Contractor is to prepare and submit and outline programme to the CA

on the tender return date and within **two weeks** of appointment

a fully detailed Master Programme is to be provided. If no programme, to

the satisfaction of the CA, is provided within the period specified above

then one quarter of the amount due for payment will be retained until the

programme is submitted.

As a minimum the programme will be required to show: the ordering

of all operations, the critical path, float and time-risk allowances.

The Contractor is, within, **two weeks**, of the acceptance of the Master

Programme, to submit to the CA a schedule of dates on which he

will require details from the CA, including instructions for the placing

of orders.

1.7.2.2 REVISED PROGRAMME

The Contractor is to record progress on a copy of the Master Programme

and he/she shall update or redraft the Master Programme if any circumstances

arise which affect the progress of the work and submit copies of all revisions

to the CA immediately.

1.7.2.3 CONTRACTOR’S PROGRESS REPORT

The contractor shall submit a progress report to the CA 5 days prior to each

site progress meeting. Notwithstanding the contractor’s obligations under

the contract, the report must include:

* + A progress statement by reference to the master programme for

the works.

* + Details of any matters materially affecting the regular progress

of the works.

* + Any requirements for further drawings or details or instructions

to enable the CA to fulfil his obligations under the Conditions

of Contract.

1.7.2.4 CONTRACTOR’S SITE MEETINGS

The Contractor shall hold meetings with appropriate consultants and

specialists shortly before main site meetings to facilitate accurate reporting of

progress.

The contractor shall ensure that all subcontractor’s information requirements

are met and to establish their requirements for holes, chases, recesses, fixings

and the like before the work is put in hand to avoid conflict with other work.

*1.7.2.5* PHOTOGRAPHIC RECORDS

Not applicable

**1.7 EMPLOYER’S REQUIREMENTS: MANANGEMENT OF THE WORKS (CONT’D)**

### 1.7.2 Programme/progress (cont’d)

### 1.7.2.6 EARLY POSSESSION

The Client may agree to take possession of parts of the works as they

are completed, provided all necessary access, services and other

associated facilities are also complete.

1.7.2.7 NOTICE OF COMPLETION

The Contractor shall give CA at least ten working days notice of

the anticipated dates of the completion date of the whole or

parts of the Works.

1.7.2.8 EXTENSIONS OF TIME

The contractor must notify the CA as soon as is reasonably practicable

as soon as he becomes aware of any relevant events, in accordance with

the conditions of contract, that would give rise to an extension of time.

**1.7 EMPLOYER’S REQUIREMENTS: MANANGEMENT OF THE WORKS (CONT’D)**

### Cost control

#### CASH FLOW FORECAST

The Contractor is, within **2 weeks** of the acceptance of the Master Programme,

to submit to the CA a cumulative cash flow forecast for net and gross

valuations. If no cash flow is submitted within the period specified then

one quarter of the amount due for payment will be retained until the

cash flow is submitted.

#### REMOVAL/REPLACEMENT OF EXISTING WORK

The extent and location of renewal of existing work must be agreed, at least

on a provisional sum basis, with the CA before the work is started. The

contractor is to remove existing work in ways which will reasonably

minimise the amount of removal and renewal.

#### PROPOSED INSTRUCTIONS

If the CA issues details of a proposed instruction with a request for an

estimate of cost, the procedure for submission and acceptance of

the quotation shall be in accordance with Section 3 of the form

of contract.

#### MEASUREMENT OF COVERED WORK

The contractor shall give reasonable notice to the Contract Administrator

prior to covering up work which the Contract Administrator is required

to measure.

#### DAYWORK VOUCHERS

The Contractor shall give reasonable notice to the CA of the commencement

of any work for which daywork vouchers are to be submitted. Before

being delivered, each voucher must be:

* + Referenced to the instruction under which the work is

authorised.

* + Signed by the person in charge as evidence that the workmen's

names, the time spent by each, the plant and materials shown

are correct.

#### INTERIM APPLICATIONS, VALUATIONS AND PAYMENTS

At least 5 days before the due date of an interim valuation the contractor

shall submit an estimate of the gross valuation as defined by the contract,

together with all necessary supporting information. The details must

show the sub-division into the same buildings, work sections or elements

as these Specification/Schedules of Work/Bills of Quantities.

The contractor is required to submit to the Employer a VAT invoice

detailing the date for payment for the employer to progress.

#### PAYMENT FOR PRODUCTS NOT INCORPORATED INTO THE WORKS

At the time of each valuation the contractor shall disclose to the CA which of

the unfixed materials and goods on site are free from, and which are subject to,

any reservation of title inconsistent with passing of property, together with

their respective values. When requested provide evidence of freedom from

reservation of title.

**1.7 EMPLOYER’S REQUIREMENTS: MANANGEMENT OF THE WORKS (CONT’D)**

**1.7.3 Cost control (cont’d)**

#### PAYMENT FOR PRODUCTS STORED OFF-SITE

The information submitted to the CA as reasonable proof that the property in ‘listed items’

is vested in the contractor must include:

* + For items purchased from a supplier:
		- A copy of the contract of sale and a written statement

from the supplier that any conditions of the sale

relating to the passing of property have been fulfilled

and the listed items are not subject to any encumbrance

or charge.

* + For items purchased from a supply by a subcontractor or

manufactured or assembles by any subcontractor:

* + - A copy of the subcontract with the subcontractor and

a written statement from the subcontractor that any

conditions relating to the passing of property have

been fulfilled.

#### LABOUR AND EQUIPMENT RETURNS

At the beginning of each week the contractor shall provide for verification

by the CA records showing, for each day of the previous week:

* + The number and description of craftsmen, labourers and other

persons employed on or in connection with the Works, including

those employed by specialist.

* + The number, type and capacity of all mechanical and power-operated

plant employed on the Works.

* + Monitor labour with home address within 10 miles off-site through

induction procedure.

## EMPLOYER’S REQUIREMENTS: QUALITY STANDARDS AND QUALITY CONTROL

### Standards of products and executions

#### INCOMPLETE INFORMATION

If any products/materials are not fully specified, then the contractor shall

as soon as reasonably practicable after the lack of specification comes to

light shall notify the CA and request an instruction. These shall be dealt

with in accordance with the conditions of contract.

#### WORKMANSHIP SKILLS

The contractor shall use appropriately skilled and experienced operatives

for the type and quality of the work.

The contractor shall provide evidence of the skills/qualifications of

the operatives when requested.

#### QUALITY OF PRODUCTS

Good practice: Where and to the extent that materials, products and

workmanship are not fully detailed or specified they are to be

of a standard appropriate to the Works and suitable for the functions

stated in or reasonably to be inferred from the project documents, and

in accordance with good building practice.

All products are to be new unless otherwise specified.

For products specified to a British or European Standard the contractor shall

obtain certificates of compliance from manufacturers when requested by CA.

Where a choice of manufacturer or source of supply is allowed for

any particular product, the whole quantity required to complete the work

 must be of the same type, manufacture and/or source unless otherwise approved.

The Contractor shall produce written evidence of sources of supply when

requested by CA.

The Contractor shall ensure that the whole quantity of each product required

to complete the work is of consistent kind, size, quality and overall appearance.

Where consistency of appearance is desirable the contractor shall ensure

consistency of supply from the same source. Unless otherwise approved do not

use different colour batches where they can be seen together. If products are

prone to deterioration or have a limited shelf life, order in suitable quantities

to a programme and use in appropriate sequence. Do not use if there are any

signs of deterioration, setting or other unsatisfactory condition.

Materials/products to be standard commonly available of the same type,

manufacture and/or source, the whole quantity required to complete the

Works.

The contractor shall obtain approval from CA for any unavoidable change

of manufacture and/or source during the course of the Works.

**1.8 EMPLOYER’S REQUIREMENTS: QUALITY STANDARDS AND QUALITY CONTROL (CONT’D)**

**1.8.1 Standards of products and executions (cont’d)**

#### 1.8.1.3 QUALITY OF PRODUCTS (CONT’D)

The Contractor shall handle, store, prepare and use or fix each product in accordance

with its manufacturer's current printed or written recommendations/instructions.

The Contractor shall inform CA if these conflict with any other specified requirement

and submit copies to CA when requested.

The tender will be deemed to be based on the products specified and

recommendations on their use as described in the manufacturer's literature

current at date of tender.

The Contractor shall obtain confirmation from manufacturers that the

products specified and recommendations on their use have not been changed

since that time. Where such change has occurred, the Contractor shall inform CA and

not place orders for or use the affected products without further instructions.

Where British Board of Agrément certified products are used, comply with

the limitations, recommendations and requirements of the relevant valid certificates.

The contractor shall not employ on or incorporate into the works any of

the following products and impose a like obligation upon all subcontractors:

* + High alumina cement in structural elements.
	+ Woodwool slabs in permanent formwork to concrete or in

structural elements.

* + Calcium chloride in admixtures for use in reinforced concrete
	+ Asbestos as described in the Asbestos (Prohibitions) Regulations

1985 and the Asbestos Products (Safety) Regulations 1985.

* + Aggregates for use in reinforced concrete which do not comply

with British Standard Specification 882:1983 and aggregates

for use in concrete which do not comply with the provisions

of British Standard Specification 8110:1985.

* + Lead or any products containing lead for use in connection

with drinking water.

* + Urea formaldehyde in quantities which may be hazardous with

reference to the limits set out at the time of use by the Health

and Safety Executive.

* + Products which are generally composed of mineral fibres either

man made or naturally occurring which have a diameter of 3

microns or less and a length of 200 microns or less or which contain

any fibres not sealed or otherwise stabilised to ensure that

fibre migration is prevented.

* + Other products or substances generally known to be deleterious

at the time of use or to the durability of the property in the

particular circumstances in which they are being used.

In the event that any such products are specified within the specification/drawings/

schedules of works the contractor shall immediately draw to the attention

of the CA this fact and require him to issue alternative instructions in

regard thereto.

**1.8 EMPLOYER’S REQUIREMENTS: QUALITY STANDARDS AND QUALITY CONTROL (CONT’D)**

**1.8.1 Standards of products and executions (cont’d)**

#### QUALITY OF EXECUTION

The contractor shall fix, apply, install or lay products securely,

Accurately, plumb, neatly and in alignment. The contractor shall:

* + Check on-site dimensions
	+ Not use different colour batches where they can by

seen together.

* + Adjust joints open to view, so they are even and regular.
	+ Adjust location and fixing of components and products

so that joints which are to be finished with mortar or sealant

or otherwise left open to view are even and regular.

#### COMPLIANCE

The Contractor shall check all delivery tickets, labels, identification marks

and, where appropriate, the products themselves to ensure that all

products comply with the project documents.

Where different types of any product are specified, the contractor shall

check to ensure that the correct type is being used in each location.

In particular, the contractor shall check that:

* + The sources, types, qualities, finishes and colours are correct, and

match any approved samples.

* + All accessories and fixings which should be supplied with the goods

have been supplied.

* + Sizes and dimensions are correct. Where tolerances of components

are critical, measure a sufficient quantity to ensure compliance.

* + The delivered quantities are correct, to ensure that shortages do not cause

delays in the work.

* + The products are clean, undamaged and otherwise in good condition.
	+ Products which have a limited shelf-life are not out of date.

#### INSPECTIONS

Inspection or any other action by the CA must not be taken as approval

unless confirmed in writing identifying the date of inspection, part of the

work inspected, respects or characteristics which are approved, extent and

purpose of the approval and any associated conditions.

#### RELATED WORK

Should the employer require access by a third party contractor

to carry out works on the site, the contractor shall make reasonable

allowances for such requests in accordance with the contract.

**1.8 EMPLOYER’S REQUIREMENTS: QUALITY STANDARDS AND QUALITY CONTROL (CONT’D)**

**1.8.1 Standards of products and executions (cont’d)**

#### MANUFACTURER’S RECOMMENDATIONS/INSTRUCTIONS

The contractor shall comply with manufacturer’s recommendations and instructions

current at the date of invitation to contract. The contractor shall:

* + Submit details of manufacturer’s changes in instructions or

recommendations issued since the date of contract to the CA

* + Use ancillary products and accessories supplied or recommended

by the main product manufacturer

 - Comply with limitations, recommendations and requirements of relevant product

 Agrément certificates.

#### WATER FOR THE WORKS

The contractor shall be responsible for providing water for the works. The

water is to be clean and uncontaminated. If anything other than mains supply

is proposed the contractor shall provide the CA with evidence of its suitability.

If instructed, the contractor shall test the water to BS3148.

### Samples/Approvals

#### SAMPLES

The contractor shall ensure that all samples comply with all other specification

requirements and in respect of the stated or implied characteristics either to

an express approval or to match a sample expressly approved as a standard

for the purpose.

#### APPROVAL OF PRODUCT SAMPLES

Where the satisfaction of a product is specified the requirement is for a sample of

the product. The contractor shall submit a sample or other evidence of

suitability. The contractor shall not confirm orders or use the product

until CA’s satisfaction of the sample has been obtained. The Contractor shall retain

the sample in good, clean condition on site. The contractor shall ensure that the

product used in the works matches the sample that satisfied the CA.

#### APPROVAL OF WORK EXECUTED/MOCK-UPS

Where a sample of finished work is specified for approval, the requirement

for approval relates to the sample itself. The contractor shall not confirm

orders or use the product until CA’s satisfaction of the sample has

been obtained. The Contractor shall retain the sample in good,

clean condition on site. The contractor shall ensure that the

product used in the works matches the sample that satisfied the CA.

**1.8 EMPLOYER’S REQUIREMENTS: QUALITY STANDARDS AND QUALITY CONTROL (CONT’D)**

### Accuracy/Setting out

#### ACCURACY OF INSTRUMENTS

The contractor shall use instruments and methods as described in BS 5606.

#### SETTING OUT

The contractor shall check the levels and dimensions of the site against

those shown on the drawings, and record the results on a copy of the

drawings. The contractor shall notify the CA in writing of any discrepancies

and obtain instructions before proceeding.

#### APPEARANCE AND FIT

The contractor shall:

* 1. Arrange the setting out, erection, position of components and application

of finishes (working within the practical limits of the design and the specification)

to ensure that there is satisfactory fit at junctions, that there are no

practically or visually unacceptable changes in plane, line or level and that

the finished work has a true and regular appearance.

* 1. Wherever satisfactory accuracy, fit and/or appearance of the work are

likely to be critical or difficult to achieve, obtain approval of proposals or of the

appearance of the relevant aspects of the partially finished work as early as possible.

* 1. Without prejudice to the above and unless specified otherwise, tolerances will

(where applicable) be not greater than those given in BS 5606, Tables 1 and 2.

#### CRITICAL DIMENSIONS

If any dimensions on the drawings or in the specification/schedule of works

are noted as critical, the contractor shall set out and construct the works to

ensure compliance with the tolerances stated on the contract drawings.

#### LEVELS OF STRUCTURAL FLOORS

Not applicable

#### RECORD DRAWINGS

The contractor shall record details of all grid lines, setting out stations,

bench-marks and profiles on the site setting-out drawing. The contractor

shall these retain on-site throughout the contract and hand them to

the CA on completion.

### Services

#### SERVICES REGULATIONS

Any work carried out to or which affects new or existing services must

be in accordance with the Bye Laws or Regulations of the relevant

Statutory Authority.

**1.8 EMPLOYER’S REQUIREMENTS: QUALITY STANDARDS AND QUALITY CONTROL (CONT’D)**

**1.8.4 Services (cont’d)**

#### WATER REGULATIONS/BYELAWS NOTIFICATION

The contractor shall notify the water undertaker of any works carried

out to or which affects new or existing services and submit any required

plans, diagrams and details. The contractor shall allow adequate time to

receive the undertaker’s consent before starting work. The contractor

shall inform the CA immediately if consent is withheld, or is granted

subject to significant changes.

#### WATER REGULATIONS/BYELAWS CONTRACTOR’S CERTIFICATE

Not applicable

#### ELECTRICAL INSTALLATION CERTIFICATE

The contractor shall provide the necessary NICEIC certification for

all electrical works/installation to the Principal Designer/CA by

the date for practical completion. The certificate shall state as

a minimum:

* + The address of the premises
	+ A brief description of the works/new installation
	+ Any special recommendations or instructions
	+ The contractor’s name and address
	+ A statement that the installation is compliant with

Regulations 4 & 7 if the Building Regulations

* + The name and signature of the NICEIC registered

individual responsible for checking compliance

* + The date on which the installation was checked

**1.8 EMPLOYER’S REQUIREMENTS: QUALITY STANDARDS AND QUALITY CONTROL (CONT’D)**

**1.8.4 Services (cont’d)**

#### GAS, OIL, SOLID FUEL APPLIANCES INSTALLATION CERTIFICATE

Not applicable

#### MECHANICAL AND ELECTRICAL SERVICES

The contractor shall ensure that all mechanical and electrical services

have final tests and commissioning carried out so that they are in full

working order at the completion date.

### Supervision/inspection/defective work

#### SUPERVISION

In addition to the constant management and supervision of the works

provided by the contractor’s person-in-charge, all significant types of

work must be under the close control of competent trade supervisors

to ensure maintenance of satisfactory quality and progress.

#### CO-ORDINATION OF MECHANICAL AND ELECTRICAL ENGINEERING SERVICES

The site organisation staff must include one or more persons with

appropriate knowledge and experience of mechanical and electrical

engineering services to ensure compatibility between engineering

services, one with another, and each in relation to the works generally

as this is appropriate to works being carried out on site at the time.

The contractor shall submit to the CA, when requested, CVs or other

documentary evidence relating to the staff concerned.

#### OVERTIME WORKING

Whenever overtime is to be worked, give CA not less than 48 hours notice,

specifying times, types and locations of work to be done. Concealed work

executed during overtime for which notice has not been given may be

required to be opened up for inspection and reinstated at the Contractor's

expense.

**1.8 EMPLOYER’S REQUIREMENTS: QUALITY STANDARDS AND QUALITY CONTROL (CONT’D)**

**1.8.5 Supervision/inspection/defective work (cont’d)**

#### DEFECTS IN EXISTING WORK

Defects in existing work shall be notified to the CA without delay. The

contractor shall obtain instructions before proceeding with work which

may:

* + Cover up, or otherwise, hinder access to the defective

construction, or

* + Be rendered abortive by the carrying out of

remedial works

#### ACCESS FOR INSPECTIONS

The contractor shall give the CA not less than 10 days notice before

removing scaffolding or other facilities for access.

#### TESTS AND INSPECTIONS

The contractor shall agree dates and times of tests and inspections with

the CA several days in advance to enable the CA and other affected

parties to be present. On the previous working day to each such test

or inspection, the contractor shall confirm that the work or sample in

question will be ready or, if not ready, agree a new date and time.

#### AIR PERMEABILITY

Not applicable

#### CONTINUITY OF THERMAL INSULATION

Not applicable

#### RESISTANCE TO PASSAGE OF SOUND

Not applicable

#### ENERGY PERFORMANCE CERTIFICATE

Not applicable

#### PROPOSALS FOR RECTIFICATION OF DEFECTIVE PRODUCTS/EXECUTIONS

As soon as possible after any part(s) of the work or any products are

known to be not in accordance with the contract, or appear that they

may not be in accordance, the contractor shall submit proposals to

the CA for opening up, inspection, testing, making good, adjustment

of the contract sum, or removal and re-execution; such proposals

may be unacceptable to the CA and contrary instructions may be

issued.

**1.8 EMPLOYER’S REQUIREMENTS: QUALITY STANDARDS AND QUALITY CONTROL (CONT’D)**

### Supervision/inspection/defective work (cont’d)

#### MEASURES TO ESTABLISH ACCEPTABILITY

Wherever inspection or testing shows that the work, materials or

goods are not in accordance with the Contract and measures

(e.g. testing, opening up, experimental making good) are taken to

help in establishing whether or not the work is acceptable, such measures:

* + will be at the expense of the Contractor, and
	+ will not be considered as grounds for extension of time.

#### QUALITY CONTROL

Establish and maintain procedures to ensure that the Works,

including the work of all subcontractors, comply with specified

requirements. Maintain full records, keep copies on site for inspection by the PR,

and submit copies of particular parts of the records on request. The records must

include:

* + Identification of the element, item, batch or lot including

location in the Works.

* + The nature and dates of inspections by the Contractor or PR,
	+ tests and approvals.
	+ The nature and extent of any non-conforming work found.
	+ Details of any corrective action.

### Work at or after completion

#### WORK BEFORE COMPLETION

Generally the contractor shall:

* + Make good all damage consequent upon the work.
	+ Remove all temporary markings, coverings and protective

wrappings unless otherwise instructed.

* + Clean the works thoroughly inside and out including all accessible

ducts and voids, remove all splashes, deposits, efflorescence, rubbish

and surplus materials consequent upon the execution of the work.

* + Cleaning materials and methods to be as recommended by manufacturers

of products being cleaned, and to be such that there is no damage or

disfigurement to other materials or construction.

* + Touch up minor faults in newly painted/repainted work, carefully

matching colour, and brushing out edges. Repaint badly marked

areas back to suitable breaks or junctions.

* + Adjust, ease and lubricate moving parts of new work as necessary to

ensure easy and efficient operation, including doors, windows, drawers,

ironmongery, appliances, valves and controls.

#### SECURITY AT COMPLETION

The Contractor shall leave the Works secure with all accesses locked. Account

for and adequately label all keys and hand over to Client with itemised

schedule, retaining duplicate schedule signed by Client as a receipt.

**1.8 EMPLOYER’S REQUIREMENTS: QUALITY STANDARDS AND QUALITY CONTROL (CONT’D)**

**1.8.7 Work at or after completion (cont’d)**

#### MAKING GOOD/RECTIFICATION OF DEFECTS

The Contractor shall make arrangements with the Client/CA and give

reasonable notice of the precise dates for access to the various parts of

the Works for purposes of making good defects. Inform CA when remedial

works to the various parts of the Works are completed.

RESPONSE TIMES FOR RECTIFYING DEFECTS:

Clause 2.10 defects shall be made good in a reasonable time as follows:-

CATEGORY A: EMERGENCY DEFECTS

Any defects where there is:

* + a danger to residents (or third parties) health;
	+ a risk to the safety of residents (or third parties) property;
	+ a risk of serious damage to buildings;
	+ a risk of serious damage to residents (or third parties);
	+ a risk of loss of residents property, including loss by theft

and which must be attended to and work completed within 24 hours of

notification.

Examples: Gas leak, burst pipe, no lights or power, blocked toilet, insecure external

door or glazing, dangerous structure, warden alarm or door entry system failure.

An emergency defect may be reclassified as an urgent or non-urgent

defect when immediate dangers/risks have been abated.

CATEGORY B: URGENT DEFECTS

Any defects where:

* + residents’ comfort or convenience is seriously affected;
	+ the defect will cause the occupant to incur expenses

and which must be attended to and work completed within 7 calendar days

of notification.

Examples: Water leak, heating/hot water failure, electrical failure,

defective wc, extensive defective/falling plasterwork.

CATEGORY C: NON-URGENT DEFECTS

Any defects not in the above categories which are, nonetheless, giving rise

to loss of amenity to residents and which must be attended to and work

completed within 30 calendar days of notification.

Examples: Broken kitchen unit, broken internal door catch.

Note: Under certain circumstances an ‘urgent’ repair may be considered

an ‘emergency’ for example, complete failure of heating in cold weather

when the resident is elderly, infirm or there are young children in the property.

**1.8 EMPLOYER’S REQUIREMENTS: QUALITY STANDARDS AND QUALITY CONTROL (CONT’D)**

**1.8.6 Work at or after completion (cont’d)**

#### 1.8.6.3 MAKING GOOD/RECTIFICATION OF DEFECTS (CONT’D)

Respond to notification of defects as follows:

* + Confirm in writing that the notification has been received
	+ Provided programme for actioning defect
	+ Confirmation of completion of defect when remedied
	+ Feed-back statement regarding cause and effect.

#### HIGHWAY/SEWER ADOPTION

Not applicable

## EMPLOYER’S REQUIREMENTS: SECURITY, SAFETY AND PROTECTION

### Security/health and safety

#### PRE-CONSTRUCTION INFORMATION

See Appendix A.

#### EXECUTION HAZARDS

See manufacturer’s hazards list

#### PRODUCT HAZARDS

See manufacturer’s hazards list

#### CONSTRUCTION PHASE HEALTH AND SAFETY PLAN

The Construction Phase Health and Safety Plan shall be developed to comply

with the CDM regulations.

The contractor must still develop a plan ensuring that adequate welfare, security,

safe working, and other procedures as necessary will be activated on-site.

#### SECURITY

The Contractor shall adequately safeguard the site, the works, products,

materials, plant, and any existing buildings affected by the Works from

damage and theft. The Contractor shall take all reasonable precautions to

prevent unauthorised access to the site, the Works and adjoining property.

#### STABILITY

The Contractor shall accept responsibility for the stability and structural

integrity of the Works during the Contract, and support as necessary.

Prevent overloading.

#### OCCUPIED PREMISES

The contractor shall carry out the works without undue inconvenience

and nuisance and without hinder to museum staff and visitors.

The contractor is to include for making the site safe at the end of

each day. This includes, but is not limited to: covering and fencing off

of all excavations and removal of plant to the contractor’s secure compound.

Only works during normal business hours shall be permitted on the contract

unless the contractor receives an express instruction from the CA indicating

otherwise.

#### PASSES

The contractor is to set up a system of passes and ensure that only

those with a valid pass are allowed on-site or onto the contractor’s

compound area. The procedure for implementation of this system

shall be made available to the CA or Employer is requested.

#### SITE’S RULES AND REGULATIONS

The contractor must comply with the client’s site safety rules contained in the appendices.

**1.9 EMPLOYER’S REQUIREMENTS: SECURITY, SAFETY AND PROTECTION (CONT’D)**

**1.9.1 Security/health and safety (cont’d)**

#### USE OF MOBILE TELEPHONES

The Contractor shall, prior to commencement on site provide the

Contractor’s person in charge with a mobile telephone and pay all charges

reasonably incurred.

Ordinarily mobile phone usage for personal use shall not be permitted on the

site.

#### EMPLOYER’S REPRESENTATIVES SITE VISITS

The Contractor shall inform the CA in advance of all safety provisions and

procedures (including those relating to materials which may be deleterious)

which will require the compliance of the Client or his representatives when

visiting the site. The Contractor shall provide protective clothing and/or equipment for

the Client and his representatives as appropriate.

#### WORKING PRECAUTIONS/RESTRICTIONS

The contractor is to provide details to the reasonable satisfaction of the

CA and Principal Designer of the hazardous areas and any permit to

work areas.

### Protection against

#### EXPLOSIVES

Do not use

#### NOISE CONSENT BY LOCAL AUTHORITY

The contractor shall:

* + Obtain the consent of the Local Authority under Part III of the

Control of Pollution Act 1974 relating to the Works.

#### NOISE CONTROL

The contractor shall:

* + Comply generally with the recommendations of BS 5228: Part 1,

clause 9.3 for minimising noise levels during the execution of the

works,

* + Fit all compressors, percussion tools and vehicles with effective silencers

of a type recommended by manufacturers of the compressors, tools or

vehicles.

* + Not use pneumatic drills and other noisy appliances during Sundays and

outside normal working hours without consent of the CA.

* + Not use or permit employees to use radios or other audio equipment in

ways or at times which may cause nuisance.

#### POLLUTION CONTROL

The contractor shall take all reasonable precautions to prevent pollution of the site,

the Works and the general environment including streams and waterways. If

pollution occurs, inform the appropriate Authorities and the CA without delay

and provide them with all relevant information.

**1.9 EMPLOYER’S REQUIREMENTS: SECURITY, SAFETY AND PROTECTION (CONT’D)**

**1.9.2 Protection against (cont’d)**

#### PESTICIDES

The contractor shall:

* + Use only where specified or approved, and then only suitable

products as listed in the UK Pesticide Guide.

* + Where work is near water, drainage ditches or land drains, comply

with the MAFF “Guidelines for the use of herbicides on weeds in or

near water courses and lakes”.

* + Observe all precautions recommended by the manufacturer and

remove containers from site immediately they have been emptied

or are no longer required.

* + Ensure that operatives hold a BASIS Certificate of Competence, or

work under the supervision of a Certificate holder.

#### NUISANCE

The Contractor shall take all necessary precautions to prevent nuisance from

smoke, dust, rubbish, vermin and other causes.

#### ASBESTOS CONTAINING MATERIALS (ACMS)

The Contractor shall report immediately to the CA any suspected asbestos

based materials discovered during demolition/refurbishment work. The

contractor shall avoid disturbing such materials. The contractor shall agree

with the CA methods for safe removal or encapsulation.

#### ANTIQUITIES

Should the Contractor discover any antiquities at the site he shall use his best

endeavours not to disturb the object and cease work if and insofar as his

continuance would endanger the object or prevent or impede its excavation

or removal. The Contractor shall take all steps necessary to preserve the object

in the exact position and condition in which it was found. The Contractor shall

inform the CA of its discovery and precise location. The CA shall issue

instructions as to action to be taken concerning any object reported.

#### FIRE PREVENTION

The Contractor shall take all necessary precautions to prevent personal

injury, death, and damage to the Works or other property from fire.

Comply with Joint Code of Practice 'Fire Prevention on Construction Sites'

published by the Building Clients Confederation and the Loss Prevention Council.

#### SMOKING ON-SITE

The contractor is to actively prevent smoking on-site except in designated

areas which should be carefully controlled, equipped with fire fighting

equipment and receptacles for the safe disposal of smoker materials

and inspected to guard against risk.

#### BURNING ON-SITE

Burning on-site of materials arising from the work will not be permitted.

**1.9 EMPLOYER’S REQUIREMENTS: SECURITY, SAFETY AND PROTECTION (CONT’D)**

**1.9.2 Protection against (cont’d)**

####  MOISTURE

The contractor shall prevent the work from becoming wet or damp where

this may cause damage. Dry out the Works thoroughly. Control the drying out

and humidity of the Works and the application of heat to prevent:

* + Blistering and failure of adhesion.
	+ Damage due to trapped moisture.
	+ Excessive movement.

####  INFECTED TIMBER/CONTAMINATED MATERIALS

Where instructed to remove timber affected by fungal/insect attack

from the building, the contractor shall do so in a way which will minimise

the risk of infecting other parts of the building.

####  WASTE

The contractor shall:

* + Remove rubbish, debris, surplus material and spoil regularly

and keep the site and Works clean and tidy.

* + Remove all rubbish, dirt and residues from voids and cavities in the

construction before closing in.

* + Ensure that non-hazardous material is disposed of at a tip approved

by a Waste Regulation Authority.

* + Remove all surplus hazardous materials and their containers regularly for

disposal off site in a safe and competent manner, as approved by a Waste

Regulation Authority and in accordance with relevant regulations.

Retain waste transfer documentation on site.

#### ELECTROMAGNETIC INTERFERENCE

The contractor shall take all necessary precautions to avoid excessive

electromagnetic disturbance of apparatus outside the site.

#### LASER EQUIPMENT

The contractor shall take:

* + Install, use and store construction laser equipment in accordance with

BS EN 60825 and the manufacturer’s instructions.

* + Use either Class 1 or Class 2 laser equipment ensuring that the laser beam

is not set at eye level and is terminated at the end of its useful path.

* + The use of Class 3A or Class 3B laser equipment will not be permitted

without the approval of the CA and subject to the submission of a method

statement on its safe use.

#### POWER ACTUATED FIXING SYSTEMS

Not permitted

**1.9 EMPLOYER’S REQUIREMENTS: SECURITY, SAFETY AND PROTECTION (CONT’D)**

**1.9.2 Protection against (cont’d)**

####  INVASIVE SPECIES

The contractor shall prevent the spread of species (e.g. plants or animals) that

may adversely affect the site or works economically, environmentally or

ecologically. The contractor shall immediately report any suspected invasive

species discovered during the execution of the works. The contractor shall

not disturb invasive species without the instruction of the CA, but shall

agree with the CA a method for safe eradication or removal.

### Protection

#### EXISTING SERVICES

The contractor shall:

* + Notify all service authorities and/or adjacent owners of the

proposed works not less than two weeks before commencing site

operations.

* + Before starting work check positions of existing mains/services whether

or not shown on drawings and obtain/confirm relevant details from service authorities or other owners.

* + Observe service authority's recommendations for work adjacent to existing

services.

* + Adequately protect, and prevent damage to all services. Do not interfere with

their operation without consent of the service authorities or other owners.

* + If any damage to services results from the execution of the Works, notify CA

and appropriate service authority without delay. Make arrangements for

the work to be made good without delay to the satisfaction of the service

authority or other owner as appropriate. Any measures taken by the CA

to deal with an emergency will not affect the extent of the Contractor's

liability.

* + Replace any marker tapes or protective covers disturbed during site

operations to the service authority's recommendations.

#### ROADS AND FOOTPATHS

The Contractor shall adequately maintain roads and footpaths within and adjacent

to the site and keep clear of mud and debris. Any damage to roads and footpaths

caused by site traffic or otherwise consequent upon the works must be

made good to the satisfaction of the Local Authority or other owner. The

Contractor shall bear any costs arising.

#### EXISTING TOPSOIL AND SUBSOIL

The contractor shall protect existing top soil and subsoil from over compaction

in those areas which may be damaged by construction traffic, parking of

vehicles, temporary site accommodation or storage of materials and which

will require reinstatement prior to completion of the works. The contractor

shall agree the extent of reinstatement with the CA and bear any costs arising.

**1.9 EMPLOYER’S REQUIREMENTS: SECURITY, SAFETY AND PROTECTION (CONT’D)**

**1.9.3 Protection (cont’d)**

#### RETAINED TREES, SHRUBS AND GRASSED AREAS

The contractor shall:

* + Adequately protect and preserve, except those which are to be

removed.

* + Replace to approval or treat as instructed any species or areas

damaged or removed without approval.

* + Replace at his/her own expense any mature trees and shrubs which,

due to the Contractor's negligence, are uprooted, destroyed, or in the

opinion of the CA, are damaged beyond reasonable chance of survival in

their original shape.

#### AREAS OF RETAINED TREES

Unless agreed otherwise by the CA, the contractor shall not:

* + Dump spoil or rubbish, excavate or disturb topsoil, park vehicles

or plant, store materials or place temporary accommodation within

the branch spread.

* + Sever roots exceeding 25 mm in diameter.
	+ Change level of ground within an area 3 m beyond the branch spread.

#### WILDLIFE SPECIES AND HABITATS

Should the contractor discover and protected habitats or species, he shall,

upon discovery, immediately advise the CA and not proceed with anything

which may disturb the habitat or species until an instruction is received.

#### EXISTING FEATURES

The Contractor shall prevent damage to existing buildings, fences, gates,

walls, roads, paved areas and other site features which are to remain

in position during the execution of the Works.

#### EXISTING WORK

The contractor shall prevent damage to existing property undergoing

alteration or extension and make good to match existing any defects so caused.

In particular the Contract shall provide protection to the existing curtain walling

For the duration of the works.

The contractor shall remove existing work to as minimal an extent as possible

and with care to reduce the amount of making good as must as possible.

#### BUILDING INTERIORS

The Contractor shall protect building interiors exposed to weather

during the course of construction work with temporary enclosures of

sufficient size to permit execution of the work and which will remain

weathertight in severe weather.

#### EXISTING FURNITURE, FITTINGS AND EQUIPMENT

Not applicable.

**1.9 EMPLOYER’S REQUIREMENTS: SECURITY, SAFETY AND PROTECTION (CONT’D)**

**1.9.3 Protection (cont’d)**

#### ESPECIALLY VALUABLE AND VULERABLE ITEMS

There are no items which have been identified. However, should

it come to the contractor’s attention that such items exist, he is

to immediately inform the CA and await instruction prior to

proceeding.

#### ADJOINING PROPERTY

No access arrangements have been made for access to any areas of the site

other than those to which works are required.

#### ADJOINING PROPERTY RESTRICTIONS

The Contractor shall prevent trespass of workpeople and take all

reasonable precautions to prevent damage to adjoining areas.

#### EXISTING STRUCTURES

 The Contractor shall provide and maintain during the execution of the Works

all incidental shoring, strutting, needling and other supports as may be necessary

to preserve the stability of existing structures on the site or adjoining, which

may be endangered or affected by the Works.

#### MATERIALS FOR RECYCLING AND/OR REUSE

To be managed in accordance with contractor’s policies.

## EMPLOYER’S REQUIREMENTS: SPECIFIC LIMITATIONS ON METHOD, SEQUENCE AND TIMING

### General

The limitations described in this section are supplementary to limitations

described or implicit in information given in other sections or on the

drawings.

### Design constraints

Wider side remains occupied for duration of works.

### Method/sequence of work

The contractor is to submit as part of his proposals a proposed method/

sequence of work.

### Use or disposal of materials found

The contractor shall include for disposal of all debris off-site. However, the contractor

shall not dispose of any potentially valuable material without the express consent of the

Employer.

### Working hours

The working hours on the site shall be limited to normal working hours

unless specifically approved otherwise by the CA. Normal working

hours shall be defined as between the hours of 08:30 to 17:00 from

Monday to Friday. Sunday work shall not be permitted.

### Completion of any section or part of the works

Not applicable

## EMPLOYER’S REQUIREMENTS: SITE ACCOMODATION/SERVICES/ FACILITIES/TEMPORARY WORK

### Generally

#### SPOIL HEAPS, TEMPORARY WORKS AND SERVICES

The Contractor shall confine any spoils heaps etc to the confines of his

site and shall be. The Contractor shall remove when no longer required

and make good.

### Site accommodation

#### ROOM FOR MEETINGS

Progress meetings will be held on site and the Contractor shall ensure

that there are sufficient facilities on-site the accommodate such meetings.

#### SITE OFFICES

The contractor shall submit within 2 weeks of the acceptance of the tender

proposals for temporary accommodation and storage for the Works. These

proposals shall include the type of accommodation and storage, its site and the

programme for site installation and removal.

#### OFF-SITE OFFICES/ROOM FOR MEETINGS

Not applicable

#### SANITARY ACCOMODATION

The contractor shall provide and maintain in a clean condition sanitary

accommodation for the employer’s representatives, either separate or

shared with the contractor’s supervisory staff. The accommodation must

include an adequate number of appliances, wash hand basin(s) with hot

and cold water supply and with adequate heating, lighting and ventilation.

#### USE OF ACCOMMODATION/LAND NOT INCLUDED IN THE SITE

An area within the agreed site boundaries will be available for use by

the contractor. However, any requirements beyond this must be

sourced and provided by the contractor at his own cost.

#### CAR PARKING

To be confined to the Contractors compound.

**1.11 EMPLOYER’S REQUIREMENTS: SITE ACCOMMODATION/SERVICES/ FACILTIES/TEMPORARY WORK (CONT’D)**

### Services and facilities

#### LIGHTING

Not applicable

#### LIGHTING AND POWER

The Contractor is to be responsible for arrangement of his

own electricity for lighting and power. The Employer will not be

responsible for the consequences of failure or restriction in supply.

#### WATER

The Contractor shall be responsible for his own water provision during

the works. The Employer will not be responsible for the consequences

of failure or restriction in supply.

#### CONTRACTOR’S ON-SITE TELEPHONES

The Contractor shall, as soon as practicable after the start on site, provide a

telephone for joint use by the Contractor and Subcontractors and pay all charges.

The Contractor shall make arrangements (e.g. an external bell) to ensure that

incoming calls are answered promptly. The Contractor shall allow for the cost of a

modest number of calls made by those acting on behalf of the Employer.

#### MOBILE TELEPHONES

The Contractor shall, prior to commencement on site, provide the

Contractor’s person in charge with a mobile telephone and shall pay

all charges reasonably incurred.

#### TELEPHONES

Not applicable

#### FAX INSTALLATION

Not required

#### COMPUTERS

Not required

#### EMAIL AND INTERNET FACILITIES

The contractor shall ensure that the person-in-charge has access to

both email and internet facilities while on-site. However, this may be

in the form of phone with these capabilities.

#### PHOTOCOPIER

Not required

#### TEMPERATURE AND HUMIDITY

Not applicable

**1.11 EMPLOYER’S REQUIREMENTS: SITE ACCOMMODATION/SERVICES/ FACILTIES/TEMPORARY WORK (CONT’D)**

**1.11.3 Services and facilities (cont’d)**

#### USE OF PERMANENT HEATING SYSTEMS

Not applicable

#### BENEFICIAL USE OF PERMANENT INSTALLED SYSTEMS

All installed systems may be used for beneficial use, though subject to all

running costs being paid for by the contractor.

#### METER READINGS

Where to be apportioned the Contractor shall ensure that:

* + Meter readings are taken by relevant authority at

possession and/ or completion as appropriate. Copies of

readings are supplied to interested parties.

#### THERMOMETERS

The Contractor shall provide on-site and maintain in accurate

condition a maximum and minimum thermometer for measuring

atmospheric shade temperature, in an approved location.

#### SURVEYING EQUIPMENT

The contractor shall provide as required for his works.

#### PERSONAL PROTECTIVE EQUIPMENT

The contractor shall provide protective clothing and/or equipment for the

Employer and representatives as appropriate.

#### OTHER REQUIREMENTS

Not applicable

### Temporary works

#### ROADS. HARD STANDINGS AND FOOTPATHS

As required to be included within contractor’s preliminaries.

#### TEMPORARY WORKS

As required to be included within contractor’s preliminaries. However,

both the building site and contractors compound to be secure and include

boarding/fencing to the satisfaction of the CA and Principal Designer.

**1.11 EMPLOYER’S REQUIREMENTS: SITE ACCOMMODATION/SERVICES/ FACILTIES/TEMPORARY WORK (CONT’D)**

**1.11.4 Temporary works (cont’d)**

#### TEMPORARY PROTECTION MEASURES TO EXISTING TREES/VEGETATION

Not applicable

#### NAME BOARDS

Contractor’s/subcontractor’s name boards will be permitted in approved

positions and form, and subject to any required consents.

#### ADVERTISEMENTS

Advertisements will not be permitted.

#### OTHER REQUIREMENTS

Not applicable

## EMPLOYER’S REQUIREMENTS: OPERATION/MAINTENANCE OF FINISHED BUILDING

### Operation and maintenance manual

#### GENERALLY

The Building Manual (incorporating the Health and Safety File and subtitled

accordingly) is to be a comprehensive information source and guide for the Client and

end users providing a complete understanding of the building and its systems and

enabling it to be operated and maintained efficiently and safely. The Contractor

is required to obtain or prepare all the information to be included in the

Manual, produce the required number of copies of the Manual and submit

them to the CA for checking by the Principal Designer and for delivery to the Client.

The Manual is to consist of the following three parts, sub-sectioned as

appropriate:

* + PART 1: GENERAL
	+ PART 2: BUILDING FABRIC
	+ PART 3: BUILDING SERVICES

The presentation of the Manual is to be as described below (1.12.1.2)

A complete draft of the Manual must be submitted not less than two weeks

before the date for submission of the final copies of the Manual. Amend the

draft Manual in the light of any comments and resubmit to the CA. Do not

proceed with production of the final copies of the Manual until authorised to

do so by the CA.

Final copies of the Manual: Provide the CA with 2 copies at or before

the completion date.

#### CONTENT

The Building Manual (incorporating the Health and Safety File and subtitled

THE BUILDING MANUAL PART 1: GENERAL INFORMATION must include:

* + A description of the buildings.
	+ Details of ownership and all consultants and designers.
	+ Details of all Authorities plus copies of all consents and

approvals obtained.

* + Names, addresses, telephone and fax numbers of all Contractors,

specialists, contractors and manufacturers.

* + Any operational requirements and constraints of a general nature

which are not relevant to other parts of the Building Manual.

* + Where appropriate, the fire safety strategy for the building(s)

including drawings showing emergency escape routes, location of

emergency and fire fighting systems, services shut-off valves, switches, etc.

**1.12 EMPLOYER’S REQUIREMENTS: OPERATION/MAINTENANCE OF FINISHES
BUILDING (CONT’D)**

**1.12.1 Operation and maintenance manual (cont’d)**

#### 1.12.1.2 CONTENT (CONT’D)

THE BUILDING MANUAL PART 2: BUILDING FABRIC must include:

* + Design criteria including floor loadings, loading restrictions,

insulation values and other performance requirements.

* + A detailed description of the methods and materials used for

the construction of the building(s).

* + Details of construction methods and materials which may present

significant residual hazards with respect to cleaning, maintenance or

demolition.

* + As-built drawings recording details of construction, together with an index.
	+ General maintenance instructions including access provisions for

maintenance of the building fabric.

* + Copies of manufacturers current literature for all products, listed in

common arrangement order and including COSHH dated data sheets

and manufacturers recommendations for cleaning and maintenance.

* + Copies of all guarantees, warranties and maintenance agreements

offered by specialists and manufacturers.

* + Copies of all test certificates and reports required in the specification.

THE BUILDING MANUAL PART 3: BUILDING SERVICES INFORMATION must include:

* + User manuals comprising instructions and operations guide in respect of all electrical and heating installations, details of incoming services including

locations of stop taps, etc., in a form to be easily understood.

* + A full description of each of the systems installed, written to ensure

that the Client's staff fully understand the scope and facilities provided.

* + A description of the mode of operation of all systems including services

capacity and restrictions.

* + Diagrammatic drawings of each system indicating principal items of plant,

equipment, valves, aerials etc.

* + Legend for all colour-coded services.
	+ The name, address and telephone number of the manufacturer of every

item of plant and equipment together with catalogue list numbers.

* + Manufacturers' technical literature for all items of plant and equipment,

assembled specifically for the project, excluding irrelevant matter and

including detailed drawings, electrical circuit details and operating and

maintenance instructions.

* + A copy of all Test Certificates (including but not limited to electrical circuit

tests, corrosion tests, type tests, works tests, start and commissioning tests)

for the installations and plant, equipment, valves, etc., used in the installations.

* + A copy of all manufacturers' guarantees or warranties.
	+ Starting up, operating and shutting down instructions for all equipment and

systems installed.

* + Control sequences for all systems installed.
	+ Fire precautions and means of escape details.
	+ Any special cleaning maintenance requirements.

**1.12 EMPLOYER’S REQUIREMENTS: OPERATION/MAINTENANCE OF FINISHES
BUILDING (CONT’D)**

**1.12.1 Operation and maintenance manual (cont’d)**

#### 1.12.1.2 CONTENT (CONT’D)

* + Schedules of all fixed and variable equipment settings

established during commissioning.

* + Procedures for seasonal changeovers.
	+ Recommendations as to the preventative maintenance

frequency and procedures to be adopted to ensure the most

efficient operation of the systems.

* + Lubrication schedules for all lubricated items.
	+ A list of normal consumable items.
	+ A list of recommended spares to be kept in stock by the Client,

being those items subject to wear or deterioration and which may

involve the Client in extended deliveries when replacements are

required at some future date.

* + Procedures for fault finding.

### Health and safety file

#### GENERALLY

As required by the Principal Designer

#### CONTENT

As required by the Principal Designer

### Web based information management system

Not required

### Presentation of documents

#### OPERATION AND MAINTENANCE MANUAL

The Manual is to be contained in a series of A4 size, plastic covered, loose

leaf, four ring binders with hard covers, each indexed, divided and

appropriately cover titled. Selected drawings needed to illustrate or

locate items mentioned in the Manual, where larger than A4, are to

be folded and included in the binders so that they may be unfolded

without being detached from the rings. The main set(s) of as-built

drawings will form annexe(s) to the Manual.

#### HEALTH AND SAFETY FILE

As required by the Principal Designer

#### OTHER DOCUMENTS

Not required

**1.12 EMPLOYER’S REQUIREMENTS: OPERATION/MAINTENANCE OF FINISHES
BUILDING (CONT’D)**

### Other employer specific requirements

#### MAINTENANCE SERVICES

The contractor is to provide all details to the CA of any recommendations

for future maintenance of the works, either planned or reactive.

#### INFORMATION FOR COMMISSIONING SERVICES

The contractor is to provide evidence and testing and commissioning

certificates of any services as necessary.

#### TRAINING

The contractor is to ensure that all operatives/supervisors are trained

for the activities which they are carrying out. The contractor shall provide

any CVs or other training records when requested by the CA.

#### SPARE PARTS

At least 4 weeks before The Completion Date the Contractor shall

submit to the CA a schedule of spare parts that the Contractor recommends

should be obtained and kept in stock by the Client for maintenance of the

services installations. The Contractor shall state against each item the

manufacturer's current price, including packaging and delivery to sit.

#### TOOLS

Not applicable

### Other information

Not required