

**HORNIMAN MUSEUM and GARDENS**

**PLANTROOM 3 WATER WORKS 2019**

**Preliminaries and General Conditions**

**Horniman Museum & Gardens  
London**

May 2019

**The following Preliminaries as included are intended to form the Preliminaries Section of the finally agreed Contract Conditions and Contract Sum, and the Contractor is therefore advised to study and price in detail the content of this section and to raise any queries prior to submission of the Preliminary Tender. The Contractor must provide a lump sum fixed price for the following Preliminaries/General Conditions together with a fully priced breakdown.**

**It is envisaged that the value of these tendered Preliminaries items will not be subject to further financial adjustment.**

**The Contractor should not under estimate the input required of the site management team and site general and specialist attendant labour when pricing the Preliminaries.**

## **A10 PROJECT PARTICULARS**

### **110 THE PROJECT**

- Name: Horniman Museum and Gardens Plantroom 3 Water Works 2019
- Nature: New incoming water main and modification works to the existing water services installation to re-configure the existing water systems to split the systems and provide increased capacity and boosted water flow to areas of the museum
- Location: Horniman Museum 100 London Road SE233PQ
- Length of contract: 11 weeks (inc 3 weeks mobilisation) from 12<sup>th</sup> July 2019 and Completion to be 30<sup>th</sup> September 2019

### **120 EMPLOYER (CLIENT)**

- Name: The Horniman Public Museum and Public Park Trust
- Address: 100 London Road Forest Hill London SE23 3PQ
- Tel 0208 699 1872

### **130 PRINCIPAL CONTRACTOR**

- Name: The Contractor for the Plantroom 3 Water Works
- Address: TBC
- Telephone: TBC

### **140 CONTRACT ADMINISTRATOR**

- Title: Harley Haddow
- Name: Chris McLaren
- Address: 45 Great Guildford Street, London, SE1 0ES
- Tel: 0203 735 5060

### **150 CDM PD**

- Name: Purcell Architects: Cameron Miller
- Address: 15 Bermondsey Sq Tower Bridge Road London SE1
- Tel: 020 7397 7171

### **160 QUANTITY SURVEYOR**

- Title: Harley Haddow
- Name: Chris McLaren
- Address: 45 Great Guildford Street, London, SE1 0ES
- Tel: 0203 735 5060

### **190 CLERK OF WORKS**

- Name: n/a.
- Address: n/a.
- Telephone: n/a.

### **200 CONSULTANTS**

- Name: Harley Haddow: Robert Lewis
- Description: Mechanical and Electrical
- Name: Harley Haddow Ltd
- Address: 45 Great Guildford Street, London, SE1 0ES
- Tel: 0203 735 5060

## **A11 TENDER AND CONTRACT DOCUMENTS**

### **110 TENDER DRAWINGS/SPECIFICATIONS**

- The tender drawings/specifications are: as listed below
  - 4433-HAH-00-SW-DR-M-50-0100
  - 4433-HAH-00-01-DR-M-50-0100
  - 4433-HAH-00-02-DR-M-50-0100
  - 4433-HAH-00-03-DR-M-50-0100
  - 4433-HAH-00-ZZ-SC-M-53-0001
  - 4433-HAH-00-ZZ-SC-M-53-0002
  - 4433-HAH-00-ZZ-SC-M-53-0003
  - 4433-HAH-00-XX-SP-Z-70-0001 Mechanical Services Specification
  - 4433-HAH-00-XX-SH-M-50-0001 Mechanical Equipment Schedules

### **120 CONTRACT DRAWINGS/SPECIFICATIONS**

- The contract drawings: To be the Tender drawings and specifications unless otherwise agreed prior to Contract/start on site.
- Exceptions: n/a.

### **130 PRICING DOCUMENT QUANTITIES DRAWINGS**

- The drawings/specifications from which the Pricing Document has been prepared is the tender/contract drawings and specifications.
- Exceptions: n/a.

### **160 PRECONSTRUCTION INFORMATION**

- The Preconstruction information is described in these preliminaries and other tender documents.

### **180 OTHER DOCUMENTS**

- Inspection: Drawings and other documents relating to the Contract but not included in the tender documents may be seen by appointment during normal office hours at the office of the and Head of Estates.

## **A12 THE SITE/ EXISTING BUILDINGS**

### **110 THE SITE**

- Description: The proposed works are situated at The Horniman Museum and Gardens. The site comprises the external area of the site, plantroom 3 and various pipework systems in the museum.
- The safety of the general public and the buildings other occupiers and visitors are paramount at all times and the Principal Contractor will be deemed to have allowed for whatever steps are required to permit the works to be carried out safely.

### **120 EXISTING BUILDINGS ON/ ADJACENT TO THE SITE**

- Description: The Tendering /Principal Contractor should verify as far as it is reasonable to do so the accuracy of the information provided. The existing buildings on the site have been the subject to change and adaption over the years and accurate records of locations of live services both above and below ground and other dangers, may not available. Contractors shall therefore pay the greatest attention to satisfying themselves by whatever means are appropriate as to all details of the existing buildings and their environments.

### **140 EXISTING SERVICES**

- Drawings: (Information if shown is indicative only): It should be noted that the exact locations of some services are uncertain.

160 EXISTING BUILDINGS AND ENVIRONS

- Information: Included in the tender documents where relevant. Tendering Contractors should be aware that undetected contamination may be present on site.

170 SITE INVESTIGATION

- Report: N/A

180 HEALTH AND SAFETY FILE

- Availability for inspection at the Head of Estates office by appointment during normal office hours.

200 ACCESS TO THE SITE

- Description: Access to the site shall in strict accordance with the Horniman Museum Rules for Visiting Contractors – included in the Tender Information – with all deliveries completed and vehicles off site by 10:00hrs.
- Tendering Contractors' attention is drawn to the restrictions and local bylaws relating to the use of the public carriageway and pathways in the proximity of the site.

210 PARKING

- No parking is available on or adjacent the site.

220 USE OF THE SITE

- General: Do not use the site for any purpose other than carrying out the Works.

230 SURROUNDING LAND/ BUILDING USES

- General: Note all surrounding buildings will remain in use throughout the duration of the works.

240 HEALTH AND SAFETY HAZARDS

- General: The nature and condition of the site/ existing plant and equipment cannot be fully and certainly ascertained before it is decommissioned and dismantled.
- Information: The accuracy and sufficiency of this information is not guaranteed by the Employer or the Employer's representative. Ascertain if any additional information is required to ensure the safety of all persons and the Works.
- Site staff: Draw to the attention of all personnel working on the site the nature of any possible contamination and the need to take appropriate precautionary measures.

250 SITE VISIT

- Before tendering: Ascertain the nature of the site, access thereto and all local conditions and restrictions likely to affect the execution of the Works.
- Arrangements for visit: Arranged for 17<sup>th</sup> June via the Head of Estates Office, Tim Hopkins (thopkins@horniman.ac.uk)
- Telephone: 0208 291 8680

**A13 DESCRIPTION OF THE WORKS**

110 PREPARATORY WORK BY OTHERS

- Works: Carried out under a separate contract and completed before the start of work on site for this Contract.
- Description: None.

120 THE WORKS

- Description: The works are briefly described above and in the enclosed documents and comprise a new supplementary incoming water main and modification works to the existing water services installation to re-configure the existing water systems to split the systems and provide increased capacity and boosted water flow to areas of the museum plus testing and commissioning etc
- Elements of the works will be Contractors Designed Portion.

130 WORK BY OTHERS CONCURRENT WITH THE CONTRACT

- Description: None intended

140 COMPLETION WORK BY OTHERS

- Description: ditto.

**A20 PROPOSED FORM OF CONTRACT**

- The contract: JCT Intermediate Building Contract with Contractor's Design (ICD), 2016 Edition as issued by the Joint Contracts Tribunal, incorporating all published Amendments as issued by the Joint Contract Tribunal at the date of tender.
- Requirement: Allow for the obligations, liabilities and services described therein against the following headings:

**ARTICLES OF AGREEMENT**

The Articles of Agreement are to be made between The Horniman Public Museum and Public park Trust (the Employer) and the contractor awarded the building contract (the Contractor).

**RECITALS**

First Recital: The first recital will state that the Employer wishes to have carried out installation of a new water main and modification works to the existing water services installation at Horniman Museum, 100 London Road, Forest Hill, London, SE23 3PQ

Second Recital: The recital will state that the Works include the design and construction of:

1. Control systems
2. Bracketry
3. Support systems

Third Recital: The recital will state that the drawings are numbered/listed in the preliminaries at clause A11/110

Fourth Recital: The recital will state that the Employer has supplied to the Contractor the Work Schedules

Fifth Recital: The recital will state that the Contractor has priced the Work Schedules (as priced, 'the Priced Document'), the total of such pricing being the Contract Sum stated in Article 2 ('Pricing Option A')

Sixth Recital: The extent of application is as identified in the Contract Particulars

Seventh Recital: To be agreed between the parties

Eighth Recital: The extent of application is as identified in the Contract Particulars

Ninth Recital: Deleted

Tenth Recital: The extent of application is as identified in the Contract Particulars

Eleventh Recital: Not applicable

Twelfth Recital: Deleted

Thirteenth Recital: The extent of application is as identified in the Contract Particulars

## **ARTICLES**

The headings to the Articles of Agreement are hereafter set out and after proper examination of each article in its entirety by the Contractor they are to allow hereunder such sum or sums as they may consider necessary in respect of any or all of the articles.

Article 1	Contractor's Obligations
Article 2	Contract Sum
Article 3	Contract Administrator
Article 4	Quantity Surveyor
Article 5	Principal Designer
Article 6	Principal Contractor
Article 7	Adjudication
Article 8	Arbitration
Article 9	Legal proceedings

## **PART 1: GENERAL**

The Contract Particulars will be completed as follows: -

	<u>Clause</u>	
Employer's Requirements	Fourth Recital	As identified in the drawings numbered/listed in the preliminaries at clause A11/110
Contractor's Proposals	Sixth Recital	To be agreed
CDP Analysis	Sixth Recital	As identified at item 2.1.2
Construction Industry Scheme (CIS)	Eighth Recital and clause 4.5	Employer at the Base Date is not a 'contractor' for the purposes of CIS
CDM Regulations	Tenth Recital	The project is notifiable
Description of Sections	Eleventh Recital	Not applicable
Framework agreement	Twelfth Recital	Not applicable
Collaborative working	Thirteenth Recital and Schedule 5	Supplemental Provision 1 applies
Health and safety	Thirteenth Recital and Schedule 5	Supplemental Provision 2 applies
Cost savings and value improvements	Thirteenth Recital and Schedule 5	Supplemental Provision 3 applies

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Sustainable development and environmental considerations	Thirteenth Recital and Schedule 5	Supplemental Provision 4 applies
Performance indicators and monitoring	Thirteenth Recital and Schedule 5	Supplemental Provision 5 applies
Notification and negotiation of disputes	Thirteenth Recital and Schedule 5	Supplemental Provision 6 applies  Employer's nominee: To be agreed  Contractor's nominee: To be agreed
Arbitration	Article 8	Article 8 and clauses 9.3 to 9.8 (Arbitration) do not apply
Base Date	1.1	May 2019
BIM Protocol	1.1	Not applicable
Date for Completion of the works	1.1	30 <sup>th</sup> September 2019
Addresses for service of notices etc.	1.7	To be agreed
Date of Possession of the site	2.4	5 <sup>th</sup> August 2019
Deferment of possession of the site	2.5	Clause 2.5 applies Maximum period of deferment is 6 weeks
Liquidated damages	2.23.2	£1,000.00 per week
Sections: Section Sums	2.29	Not applicable
Rectification period	2.30	12 Months
Contractor's Designed Portion: limit of Contractor's liability etc.	2.34.3	Not applicable
Fluctuations provision	4.3 and 4.9	No Fluctuations Provision applies
Advance payment	4.7	Clause 4.7 does not apply
Advance payment Bond	4.7	An advance payment bond is not required

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Interim payments – due dates	4.8.1	The first interim valuation date is: One month from commencement and thereafter the same date in each month or the nearest Business Day in that month
Interim payments – percentages of value – where the works have not achieved Practical Completion	4.9.1	95 per cent
Interim payments – percentages of value – where the works have achieved Practical Completion	4.9.1	97½ per cent
Listed items – uniquely identified	4.10.4	Not applicable
Listed items – not uniquely identified	4.10.5	Not applicable
Contractor's Insurance – Injury to persons or property	6.4.1	£ 5,000,000.00
Insurance – liability of Employer	6.5.1	Insurance may be required  Minimum amount of indemnity for any one occurrence or series of occurrences arising out of one event £10,000,000
Insurance of the Works – Insurance Options	6.7 and Schedule 1	Schedule 1: Insurance Option C applies
Percentage to cover professional fees	6.7 and Schedule 1	20 per cent
Option A - Annual renewal date of insurance	6.7 and Schedule 1	Not applicable
Option C - Paragraph C.1	6.7 and Schedule 1	Applies
Terrorism Cover- details of the required cover	6.10 and Schedule 1	Pool cover is required
Joint Fire Code	6.15	The Joint Fire Code does not apply
Joint Fire Code – Works are a 'Large Project'	6.15	Not applicable



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Joint Fire Code – Amendments /revisions	6.18	Not applicable
Contractor's designed Portion (CDP) – Level of cover	6.19	£1,000,000
Contractor's designed Portion (CDP) – Cover for pollution and contamination claims	6.19	Not applicable
Contractor's designed Portion (CDP) – Expiry of required period of CDP Professional Indemnity	6.19	12 years.
Performance bond	7.2.1	Is not required
Guarantee from the Contractor's parent company	7.2.2	Is not required
Collateral warranties	7.3	Collateral warranties in the form of SCWa/E will be required from any Sub-Contractors undertaking an element of design
Period of suspension	8.9.2	2 months
Period of suspension	8.11.1.1 to 8.11.1.5	2 months
Nominator of Adjudicator	9.2.1	President or a Vice-President or Chairman or a Vice Chairman of The Royal Institution of Chartered Surveyors
Appointer of Arbitrator	9.4.1	President or a Vice-President or Chairman or a Vice Chairman of The Royal Institution of Chartered Surveyors

**ATTESTATION**

The Contract is to be executed “as a Deed”.

## **CONDITIONS**

The Section headings of the Conditions of contract are hereafter set out. The Contractor has allowed for such sum or sums as he requires in respect of any or all of the clauses included within the Sections including the agreed amendments.

Section No. 1	Definitions and Interpretation
“ “ 2	Carrying out the works
“ “ 3	Control of the Works
“ “ 4	Payment
“ “ 5	Variations
“ “ 6	Injury, damage and insurance
“ “ 7	Assignment, Performance Bonds and Guaranteed and Collateral Warranties
“ “ 8	Termination
“ “ 9	Settlement of disputes
Schedule No. 1	Insurance Options
“ “ 2	Named Sub-Contractors
“ “ 3	Forms of Bonds
“ “ 4	Fluctuations – Contribution, levy and tax fluctuations
“ “ 5	Supplemental Provisions
“ “ 6	Design submission procedure

## **A30 TENDERING/ SUBLETTING/ SUPPLY**

### **MAIN CONTRACT TENDERING**

- 110 SCOPE
  - General: These conditions are supplementary to those stated in the Invitation to Tender and on the form of tender.
- 145 TENDERING PROCEDURE
  - General: In accordance with JCT Practice Note 6 (Series 2) 'Main Contract Tendering'.
  - Errors: alternative 2 is to apply.
- 150 PURCHASER'S AND TENANT'S WARRANTY
  - N/A
- 151 FUNDER'S WARRANTY
  - The Agreement; N/A
- 155 COLLATERAL WARRANTY
  - The Agreement: Not required.
- 160 EXCLUSIONS

- Inability to tender: Immediately inform if any parts of the work as defined in the tender documents cannot be tendered.
- Relevant parts of the work: Define those parts, stating reasons for the inability to tender.

170 ACCEPTANCE OF TENDER

- The Employer and Employer's representatives:
  - Offer no guarantee that any tender will be recommended for acceptance or be accepted.
  - Will not be responsible for any cost incurred in the preparation of any tender.

190 PERIOD OF VALIDITY

- Period: After submission or lodgement, keep tender open for consideration (unless previously withdrawn) for not less than 3 Months.
- Date for possession/ commencement: See section A20.

195 CONTRACTOR'S DESIGN

- Scope: Undertake and take full responsibility for the design of the following parts of the Works: Controls and other associated plant and equipment as defined elsewhere in the Tender Documents.

**PRICING/ SUBMISSION OF DOCUMENTS**

210 PRELIMINARIES IN THE SPECIFICATION

- Measurement rules: Preliminaries/ General Conditions have not been prepared in accordance with SMM7.

220 PRICING OF PRELIMINARIES

- Charges: If the Contractor requires interim payments to include fixed and time related charges for specific items in the Preliminaries, those charges must be clearly shown against the items.

240 PRICING OF PERFORMANCE SPECIFIED WORK

- Scope: Tenders must include for all associated and ancillary work shown or clearly apparent as being necessary to meet the requirements for the Performance Specified Work and its completion and proper integration with the Works generally.
- Quantities: Where provided, these are indicative only.
- Price: Deemed to include for all costs. Errors in measurement or calculation will be the Contractor's responsibility.

250 PRICING DOCUMENTS

- Alterations: Do not alter or qualify the priced documents without written consent. Tenders containing unauthorised alterations or qualifications may be rejected.
- Measurements: Where not stated, ascertain from the drawings.
- Deemed included: Costs relating to items, which are not priced, will be deemed to have been included elsewhere in the tender.
- Submit: with tender

300 QUANTITIES IN THE PRICING DOCUMENT

- Quantities: Where included in the priced document, these have not been prepared in accordance with SMM7 only where and to the extent stated.
- Other items, descriptions and measurements not prepared in accordance with SMM7: Must be priced taking account of the information given elsewhere in the tender documents, including for all associated and ancillary work shown or clearly apparent as being necessary for the complete and proper execution of the work.

310 TENDER

- General: Tenders must include for all work shown or described in the tender documents as a whole or clearly apparent as being necessary for the complete and proper execution of the Works.

350 PC AND PROVISIONAL SUMS

- Contractor's profit on PC Sums: Included in Preliminaries sections A51 and A52, not in the pricing document.
- Provisional sums and items: Included in Preliminaries sections A53, A54 and A55 not in

the pricing document.

- Submit: A copy of sections A51-A55 (as applicable), priced to include profit, attendance and percentage adjustments should be submitted with tender.

360 PRICED ACTIVITY SCHEDULE

- Submit: N/A

410 FLUCTUATIONS – NOT APPLICABLE

440 SCHEDULE OF RATES

- Content: to include hourly rates for all labourers
- Fully priced copy: Submit with tender

470 RISK ANALYSIS

- Form: N/A
- Content: N/A

480 PROGRAMME

- Programme of work: Prepare a summary showing the sequence and timing of the principal parts of the Works and periods for planning and design. Itemize any work which is excluded.
- Submit: 2 copies with tender

490 INFORMATION RELEASE SCHEDULE

- Compatibility with programme: At the same time as submitting the proposed programme or summary, confirm that it is compatible with the Information Release Schedule.
- Alternative proposals: If any part of the programme is not compatible with the Schedule submit alternative proposals and reasons for varying the times for release of information.

500 TENDER STAGE METHOD STATEMENTS

- Method statements: Prepare, describing how and when the following is to be carried out:
- Statements: Submit with Tender

510 ALTERNATIVE METHOD TENDERS

- General: In addition to and at the same time as tendering for the Works as defined in the tender documents, alternative methods of construction/ installation may be submitted for consideration. Alternatives, which would involve significant changes to other work, may not be considered.
- Alternative tenders: Such alternatives will be deemed to be alternative tenders and each must include a complete and precise statement of the effects on cost and programme.
- Safety method statement: Carry out a health and safety risk assessment for each alternative and where appropriate provide a safety method statement suitable for incorporation in the Health and Safety Plan.
- Full technical data: Submit for each alternative together with details of any consequential amendments to the design and/ or construction of other parts of the Works.
- Submit: With Tender

515 ALTERNATIVE TIME TENDERS

- General: In addition to and at the same time as tendering based upon the date or period specified in section A20, an alternative tender based upon a different date for completion or period may be submitted.
- Date for completion: If any such tender is accepted the date for completion inserted in the Contract will be the date stated in the alternative tender or determined from the period stated in the alternative tender.

520 DESIGN DOCUMENTS

- Scope: Include the following in the Contractor's Proposals:
  - Design drawings: As the Employers requirements.
  - Technical information: All details relating to the mechanical and electrical installations including internal and external drainage, below and above ground.

530 SUBSTITUTE PRODUCTS

- Details: If products of different manufacture to those specified are proposed, submit details

with the tender giving reasons for each proposed substitution. Substitutions, which have not been notified at tender stage, may not be considered.

- Compliance: Substitutions accepted will be subject to the verification requirements of clause A31/200.

540 QUALITY CONTROL RESOURCES

- Statement: Describe the organisation and resources to control the quality of the Works, including the work of subcontractors.
- QA staff: Identify in the statement the number and type of staff responsible for quality control, with details of their qualifications and duties.
- Submit: with tender

550 HEALTH AND SAFETY INFORMATION

- Content: Describe the organisation and resources to safeguard the health and safety of operatives, including those of subcontractors, and of any person whom the Works may affect.
- Include:
  - A copy of the contractor's health and safety policy document, including risk assessment procedures.
  - Accident and sickness records for the past five years.
  - Records of previous Health and Safety Executive enforcement action.
  - Records of training and training policy.
  - The number and type of staff responsible for health and safety on this project with details of their qualifications and duties.
- Submit: with tender

570 OUTLINE CONSTRUCTION PHASE HEALTH AND SAFETY PLAN

- Content: Submit the following information within one week of request:
- Method statements on how risks from hazards identified in the pre-tender health and safety plan and other hazards identified by the contractor will be addressed.
- Details of the management structure and responsibilities.
- Arrangements for issuing health and safety directions.
- Procedures for informing other contractors and employees of health and safety hazards.
- Selection procedures for ensuring competency of other contractors, the self-employed and designers.
- Procedures for communications between the project team, other contractors and site operatives.
- Arrangements for cooperation and coordination between contractors.
- Procedures for carrying out risk assessment and for managing and controlling the risk.
- Emergency procedures including those for fire prevention and escape.
- Arrangements for ensuring that all accidents, illness and dangerous occurrences are recorded.
- Arrangements for welfare facilities.
- Procedures for ensuring that all persons on site have received relevant health and safety information and training.
- Arrangements for consulting with and taking the views of people on site.
- Arrangements for preparing site rules and drawing them to the attention of those affected and ensuring their compliance.
- Monitoring procedures to ensure compliance with site rules, selection and management procedures, health and safety standards and statutory requirements.
- Review procedures to obtain feedback.

**SUBLETTING/ SUPPLY**

630 DOMESTIC SUBCONTRACTS

- General: Comply with the Construction Industry Board 'Code of Practice for the selection of subcontractors'.
- List: Provide details of all subcontractors and the work for which they will be responsible.
- Submit: with tender

640 'LISTED' DOMESTIC SUBCONTRACTORS

- General: The work listed below and described in the Contract Documents must be carried out by persons identified in a list as provided for in Contract clause 19.3 and clause A30/645:

**645 'LISTED' DOMESTIC SUBCONTRACTORS**

- Additional persons: Under the provisions of Contract clause 19.3, make written application and, if requested, submit (in an approved form) evidence of the suitability of such additional person(s). Wherever possible, submissions for addition of person(s) must be made, and consent obtained, before return of the tender. When any submission for addition of person(s) is made with the tender the consequences, if any, to the tender price compared to the use of the listed persons are to be made clear or the tender will be treated as qualified.
- Extent of list: If less than three persons named in the list are able and willing to carry out the relevant work so that Contract Clause 19.3.2.2 becomes operative, immediately notify for decision whether or not names shall be agreed for addition to the list.
- Agreement: Before the start of the work to which the list relates enter into a binding subcontract agreement and confirm that this has been done, giving the name of the selected subcontractor.

**670 'NAMED' SUBCONTRACTORS FOR CONTRACTOR'S DESIGN**

- Listed work: Described and set out in the Employer's Requirements to be executed by the following person(s) as Named Subcontractor(s) in accordance with Supplementary Provision S4.
- 'Named' person: TBC
- Work to be executed: TBC

**720 WORK FOR WHICH THE CONTRACTOR REQUIRES TO TENDER**

- Contract Clause 35.2: The Contractor will not be allowed to tender for the following item(s): Not Applicable

**A31 PROVISION, CONTENT AND USE OF DOCUMENTS**

**DEFINITIONS AND INTERPRETATIONS**

**110 DEFINITIONS**

- Meaning: Terms, derived terms and synonyms used in the preliminaries/ general conditions and specification are as stated therein or in the appropriate British Standard or British Standard glossary.

**120 COMMUNICATION**

- Definition: Includes advise, inform, submit, give notice, instruct, agree, confirm, seek or obtain information, consent or instructions, or make arrangements.
- Format: In writing to the person named in clause A10/140 unless specified otherwise.
- Response: Do not proceed until response has been received.

**130 PRODUCTS**

- Definition: Materials, both manufactured and naturally occurring, and goods, including components, equipment and accessories, intended for the permanent incorporation in the Works.
- Includes: Goods, plant, materials, site materials and things for incorporation into the Works.

**135 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.

**160 TERMS USED IN SPECIFICATION**

- Remove: Disconnect, dismantle as necessary and take out the designated products or work and associated accessories, fastenings, supports, linings and bedding materials. Dispose of unwanted materials. Excludes taking out and disposing of associated pipework, wiring, ductwork or other services.
- Fix: Unload, handle, store, place and fasten in position including all labours and use of site equipment.

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### Plantroom 3 Water Works

- Supply and fix: Includes all labour and site equipment for unloading, handling, storing and execution. All products to be supplied and fixed unless stated otherwise.
- Keep for reuse: Do not damage designated products or work. Clean off bedding and jointing materials. Stack neatly, adequately protect and store until required by the Employer or for use in the Works as instructed.
- Make good: Execute local remedial work to designated work. Make secure, sound and neat. Excludes redecoration and/ or replacement.
- Replace: Supply and fix new products matching those removed. Execute work to match original new state of that removed.
- Repair: Execute remedial work to designated products. Make secure, sound and neat. Excludes redecoration and/ or replacement.
- Refix: Fix removed products.
  
- Ease: Adjust moving parts of designated products or work to achieve free movement and good fit in open and closed positions.
- Match existing: Provide products and work of the same appearance and features as the original, excluding ageing and weathering. Make joints between existing and new work as inconspicuous as possible.
- System: Equipment, accessories, controls, supports and ancillary items, including installation, necessary for that section of the work to function.

### 170 MANUFACTURER AND PRODUCT REFERENCE

- Definition: When used in this combination:
  - Manufacturer: The firm under whose name the particular product is marketed.
  - Product reference: The proprietary brand name and/ or reference by which the particular product is identified.
- Currency: References are to the particular product as specified in the manufacture's technical literature current on the date of the invitation to tender.

### 200 SUBSTITUTION OF PRODUCTS

- Products: If an alternative product to that specified is proposed, obtain approval before ordering the product.
- Reasons: Submit reasons for the proposed substitution.
- Documentation: Submit relevant information, including:
  - manufacturer and product reference;
  - cost;
  - availability;
  - relevant standards;
  - performance;
  - function;
  - compatibility of accessories;
  - proposed revisions to drawings and specification;
  - compatibility with adjacent work;
  - appearance;
  - copy of warranty/ guarantee.
- Alterations to adjacent work: If needed, advise scope, nature and cost.
- Manufacturers' guarantees: If substitution is accepted, submit before ordering products.

### 210 CROSS REFERENCES

- Accuracy: Check remainder of the annotation or item description against the terminology used in the section or clause referred to.
- Related terminology: Where a numerical cross-reference is not given the relevant sections and clauses of the specification will apply.
- Relevant clauses: Clauses in the referred to specification section dealing with general matters, ancillary products and execution also apply.
- Discrepancy or ambiguity: Before proceeding, obtain clarification or instructions.

### 220 REFERENCED DOCUMENTS

- Conflicts: Specification prevails over referenced documents.

### 230 EQUIVALENT PRODUCTS

- Inadvertent omission: Wherever products are specified by proprietary name the phrase 'or equivalent' is to be deemed included.

**240 SUBSTITUTION OF STANDARDS**

- Products specified to British Standard or European Standard: Substitution may be proposed of products complying with a grade or category within a national standard of another Member State of the European Community or an international standard recognised in the UK.
- Before ordering: Submit notification of all such proposals.
- Documentary evidence: Submit for verification when requested as detailed in clause A31/200. Any submitted foreign language documents must be accompanied by certified translations into English.

**250 CURRENCY OF DOCUMENTS**

- Currency: References to published documents are to the editions, including amendments and revisions, current on the date of the Invitation to tender.

**260 SIZES**

- General dimensions: Products are specified by their co-ordinating sizes.
- Timber: Cross section dimensions shown on drawings 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**

**410 ADDITIONAL COPIES OF THE DRAWINGS/ DOCUMENTS**

- Additional copies: Issued N/A

**440 DIMENSIONS**

- Scaled dimensions: Do not rely on.

**450 MEASURED QUANTITIES**

- Ordering products and constructing the Works: The accuracy and sufficiency of the measured quantities is not guaranteed.
- Precedence: The specification and drawings shall override the measured quantities.

**460 THE SPECIFICATION**

- Coordination: All sections must be read in conjunction with Main Contract Preliminaries/ General conditions.

**470 DIVERGENCE FROM THE STATUTORY REQUIREMENTS**

- Divergence: Between the drawings or specification and the requirements of the Building Regulations, other Statutes, statutory undertakers and other regulatory authorities.
- Action: Inform immediately.

**DOCUMENTS PROVIDED BY CONTRACTOR/ SUBCONTRACTORS/ SUPPLIERS**

**510 DESIGN AND PRODUCTION INFORMATION**

- General: Complete the design and detailing of parts of the Works as specified.
- Provide:
  - Production information based on the drawings, specification and other information.
  - Liaison to ensure coordination of the work with related building elements and services.
- Master programme: Make reasonable allowance for completing design/ production information, submission (including to the Planning Supervisor), comment, inspection, amendment, resubmission and re-inspection.
- Design/ production information: Submit two copies, one can be returned with comments. Ensure that any necessary amendments are made without delay.
- Contractor's changes to Employer's Requirements: Support request for substitution or change with all relevant information.
- Employer's amendments to Employer's Requirements: If considered to involve a change, which has not already been acknowledged as a change, notify without delay (maximum period 7 days), and do not proceed until instructed. Claims for extra cost, if made after it has been carried out, may not be allowed.
- Final version of design/ production information: Submit 1 copy with tender

**530 PERFORMANCE SPECIFIED WORK: CONTRACTOR'S STATEMENT**



- General: Submit proposals in accordance with the following requirements:
  - Performance Specified Work: As Employers requirements
  - Information required: As Employers requirements
  - Date for submission: As Employers requirements

540 PERFORMANCE SPECIFIED WORK: CONTRACTOR'S PROPOSALS

- Master programme: Make reasonable allowance for completing performance specified work, submission (including to the Planning Supervisor), comment, inspection, amendment, resubmission and re-inspection.
- Proposals: Submit two copies, one could be returned with comments and this will be deemed to be a direction, notice or instruction under the Contract. Ensure that any necessary amendments are made without delay and resubmit unless it is confirmed that it is not required.
- Request for substitution or variation: Submit, supported by all relevant information, if proposals differ from the performance requirements or require changes at the interface with adjacent work.
- Employer's amendments to Performance Specified Work: If considered to involve a variation, which has not already been acknowledged as a variation, notify without delay (maximum period 7 days), and do not proceed until instructed. Claims for extra cost, if made after it has been carried out, may not be allowed.
- Submit: Two copies of final version of proposals.

550 NOMINATED SUBCONTRACTOR'S/ SUPPLIERS: DESIGN AND PRODUCTION INFORMATION

- Scope: Design/ production information during the Contract is required:
  - Type of work: TBC
  - Subcontractor/ Supplier: TBC

555 SUBMISSION OF INFORMATION

- Master programme: Make reasonable allowance, based on information in sections A51 or A52, for completing design/ production information, checking, submission (including requirements under health and safety legislation), comment, inspection, amendment, resubmission and reinspection.
- Information from Subcontractors/Suppliers:
  - Obtain in time to meet the programme and in accordance with conditions of nomination where applicable.
  - Check dimensions are correct, account is taken of all related work, and construction is practicable.
  - Note any comments on one copy of the design/ production information, then submit with the required number of additional unmarked copies. Such checking will not relieve the consultant designer or the Subcontractors/ Suppliers of their respective responsibilities for design, co-ordination and documentation.
- Inspection and comments: May be marked on one copy and returned to Contractor. This will not relieve the Subcontractors/ Suppliers of their responsibility for design and documentation. Ensure that any necessary amendments are made without delay and resubmit unless it is confirmed that it is not required.
- Final version of information: Distribute copies to all affected parties and keep one copy on site.
  - Submit with tender

600 CONTRACTOR'S DESIGN INFORMATION

- Contractor's designed work: Include: the sub-contractors technical drawings as and when appropriate, and narrative of proposals.

610 PRODUCTION INFORMATION

- Contractor/ Domestic subcontractor provide: shop drawings, specifications, warranties, data sheets and the like.
- Submit:
  - For comment and make any necessary amendments.
  - Sufficient copies of final version for distribution to all affected parties.

620 AS BUILT DRAWINGS AND INFORMATION

- General: Provide the following Drawings/ information:
  - for all works.

Submit: At least two weeks before date for completion

**630 TECHNICAL LITERATURE**

- Information: Keep on site for reference by all supervisory personnel:
  - Manufacturers' current literature relating to all products to be used in the Works.
  - Relevant British Standards.

**640 MAINTENANCE INSTRUCTION AND GUARANTEES**

- Components and equipment: Obtain or retain copies, register with manufacturer and hand over on or before completion of the Works.
- Emergency call out services: Provide subcontractors telephone numbers for use after completion.

**DOCUMENT/ DATA INTERCHANGE**

**850 ELECTRONIC DATA INTERCHANGE (EDI)**

- Data: Types and classes of communication: N/A
- Parties: Between: N/A
  - Requirements: N/A

**A32 MANAGEMENT OF THE WORKS  
GENERALLY**

**110 SUPERVISION**

- General: Accept responsibility for coordination, supervision and administration of the Works, including subcontracts.
- Coordination: Arrange and monitor a programme with each subcontractor, supplier, local authority and statutory undertaker, and obtain and supply information as necessary for coordination of the work.

**115 CONSIDERATE CONSTRUCTORS SCHEME**

- Registration: does not apply.

**120 INSURANCE**

- Documentary evidence: Before starting work on site submit details, and/ or policies and receipts for the insurances required by the Conditions of Contract.

**130 INSURANCE CLAIMS**

- Notice: 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, immediately give notice to the Employer, the person named in clause A10/140 and the Insurers.
- Failure to notify: Indemnify the Employer against any loss, which may be caused by failure to give such notice.

**140 OWNERSHIP**

- Alteration/ clearance work: Materials arising become the property of the Contractor except where otherwise stated. Remove from site as work proceeds.

**PROGRAMME/ PROGRESS**

**210 PROGRAMME**

- Master programme: When requested and before starting work on site, submit in an approved form a master programme for the Works, which must include details of:
  - Design, production information and proposals provided by the Contractor/ Subcontractors/ Suppliers, including inspection and checking (see section A31).
  - Planning and mobilization by the Contractor.
  - Earliest and latest start and finish dates for each activity and identification of all critical activities.
  - Running in, adjustment, commissioning and testing of all engineering services and installations
  - Work resulting from instructions issued in regard to the expenditure of provisional sums (see section A54)
  - Work by or on behalf of the Employer and concurrent with the Contract (see section A50). The nature and scope of which, the relationship with preceding and following work and any relevant limitations are suitably defined in the Contract Documents.

Horniman Museum and Gardens  
Plantroom 3 Water Works

- Exclusions: Where and to the extent that the programme implications for work which is not so defined are impossible to assess, the Contractor should exclude it and confirm this when submitting the programme.
  - Submit: 2 copies with tender
- 230 SUBMISSION OF PROGRAMME
- Further information: Submission of the programme will not relieve the Contractor of the responsibility to advise of the need for further drawings or details or instructions in accordance with the Contract.
- 240 COMMENCEMENT OF WORK
- Notice: Before the proposed date for commencement of work on site give minimum notice of 2 weeks
- 250 MONITORING
- Progress: Record on a copy of the programme kept on site.
  - Avoiding delays: If any circumstances arise which may affect the progress of the Works submit proposals or take other action as appropriate to minimize any delay and to recover any lost time.
- 255 NOTIFICATION OF COMPENSATION EVENT
- Content: Notwithstanding the Contractor's obligations under the Contract written notice must also be given of all other causes which apply concurrently.
- 260 SITE MEETINGS
- General: Site meetings will be held to review progress and other matters arising from administration of the Contract.
  - Frequency: to be advised
  - Location: on site
  - Accommodation: Ensure availability at the time of such meetings.
  - Attendees: Attend meetings and inform subcontractors and suppliers when their presence is required.
  - Chairperson (who will also take and distribute minutes): Contract Administrator
- 265 CONTRACTOR'S PROGRESS REPORT
- General: Submit a progress report at least 1 day before the site meeting.
  - Content: 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.
    - Subcontractors' and suppliers' progress reports.
    - Any requirements for further drawings or details or instructions to fulfil any obligations of the Conditions of Contract.
- 270 CONTRACTOR'S SITE MEETINGS
- General: Hold meetings with appropriate subcontractors and suppliers shortly before main site meetings to facilitate accurate reporting of progress.
- 285 EARLY POSSESSION/ TAKE OVER OF PARTS OF THE WORKS BY THE EMPLOYER
- Possession/ take over of parts of the Works: As completed, provided all necessary access, services and other associated facilities are also complete.
- 290 NOTICE OF COMPLETION
- Requirement: Give notice of the anticipated dates of completion of the whole or parts of the Works.
  - Associated works: Ensure necessary access, services and facilities are complete.
  - Period of notice (minimum): 1 weeks

**CONTROL OF COST**

- 410 CASH FLOW FORECAST – NOT REQUIRED
- 420 REMOVAL/ REPLACEMENT OF EXISTING WORK

## Horniman Museum and Gardens

### Plantroom 3 Water Works

- Extent and location: Agree before commencement.
- Execution: Carry out in ways that minimize the extent of work.

#### 430 PROPOSED INSTRUCTIONS

- Estimates: If a proposed instruction requests an estimate of cost, submit without delay and in any case within seven days.
- Include:
  - A detailed breakdown of the cost, including any allowance for direct loss and expense.
  - Details of any additional resources required.
  - Details of any adjustments to be made to the programme for the Works.
  - Any other information as is reasonably necessary to fully assess the implications of issuing such an instruction.
- Inability to comply: Inform immediately if it is not possible to comply with any of the above requirements.

#### 440 MEASUREMENT

- Covered work: Give notice before covering work required to be measured.

#### 450 DAYWORK VOUCHERS

- Not applicable

#### 460 INTERIM VALUATIONS

- Applications: Include details of amounts due under the Contract together with all necessary supporting information.
- Submission: At least seven days before established dates.

#### 470 PRODUCTS NOT INCORPORATED INTO THE WORKS

- Ownership: At the time of each valuation, supply details of those products not incorporated into the Works which are subject to any reservation of title inconsistent with passing of property as required by the Conditions of Contract, together with their respective values.
- Evidence: When requested, provide evidence of freedom of reservation of title.

#### 475 LISTED PRODUCTS STORED OFF SITE

- Evidence of Title: Submit reasonable proof that the property in 'listed items' is vested in the Contractor.
- Include for products 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 products are not subject to any encumbrance or charge.
- Include for products purchased from a supplier by a subcontractor or manufactured or assembled by any subcontractor:
  - Copies 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.

#### 480 LABOUR AND EQUIPMENT RETURNS

- Daily records: Provide at the beginning of each week for verification.
- Records must show:
  - The number and description of craftsmen, labourers and other persons employed on or in connection with the Works, including those employed by subcontractors.
  - The number, type and capacity of all mechanical and power-operated equipment employed in constructing the Works.

**A33 QUALITY STANDARDS/ CONTROL**

**STANDARDS OF PRODUCTS AND EXECUTIONS**

**110 INCOMPLETE DOCUMENTATION**

- General: Where and to the extent that products or work are not fully documented, they are to be:
  - Of a kind and standard appropriate to the nature and character of that part of the Works where they will be used.
  - Suitable for the purposes stated or reasonably to be inferred from the project documents.
  - Contract documents: Omissions or errors in description and/ or quantity shall not vitiate the Contract nor release the Contractor from any obligations or liabilities under the Contract.

120 WORKMANSHIP SKILLS

- Operatives: Appropriately skilled and experienced for the type and quality of work.
- Registration: With Construction Skills Certification Scheme.
- Evidence: Operatives must produce evidence of skills/ qualifications when requested.

130 QUALITY OF PRODUCTS

- Generally: New. (Proposals for recycled products may be considered).
- Supply of each product: From the same source or manufacturer.
- Whole quantity of each product required to complete the Works: Consistent in kind, size, quality and overall appearance.
- Tolerances: Where critical, measure a sufficient quantity to determine compliance.
- Deterioration: Prevent. Order in suitable quantities to a programme and use in appropriate sequence.

135 QUALITY OF EXECUTION

- Generally: Fix, apply, install or lay products securely, accurately, plumb, neatly and in alignment.
- Colour batching: Do not use different colour batches where they can be seen together.
- Dimensions: Check on-site dimensions.
- Finished work: Not defective, e.g. not damaged, disfigured, dirty, faulty, or out of tolerance.
- Location and fixing of products: Adjust joints open to view so they are even and regular.

140 COMPLIANCE

- Compliance with proprietary specifications: Retain on site evidence that the proprietary product specified has been supplied.
- Compliance with performance specifications: Submit evidence of compliance, including test reports indicating:
  - Properties tested.
  - Pass/ fail criteria.
  - Test methods and procedures.
  - Test results.
  - Identity of testing agency.
  - Test dates and times.
  - Identities of witnesses.
  - Analysis of results.

150 INSPECTIONS

- Products and executions: Inspection or any other action must not be taken as approval unless confirmed in writing referring to:
  - Date of inspection.
  - Part of the work inspected.
  - Respects or characteristics which are approved.
  - Extent and purpose of the approval.
  - Any associated conditions.

160 RELATED WORK

- Details: Provide all trades with necessary details of related types of work. Before starting each new type or section of work ensure previous related work is:
  - Appropriately complete.
  - In accordance with the project documents.
  - To a suitable standard.
  - In a suitable condition to receive the new work.
- Preparatory work: Ensure all necessary preparatory work has been carried out.

170 MANUFACTURER'S RECOMMENDATIONS/ INSTRUCTIONS

- General: Comply with manufacturer's printed recommendations and instructions current on the date of the Invitation to tender.
- Changes to recommendations or instructions: Submit details.
- Ancillary products and accessories: Use those supplied or recommended by main product manufacturer.
- Agrément certified products: Comply with limitations, recommendations and requirements of relevant valid certificates.

**180 WATER FOR THE WORKS**

- Mains supply: Clean and uncontaminated.
- Other: Do not use until:
  - Evidence of suitability is provided.
  - Tested to BS EN 1008 if instructed.

**SAMPLES/ APPROVALS**

**210 SAMPLES**

- Products or executions: Comply with all other specification requirements and in respect of the stated or implied characteristics either:
  - To an express approval.
  - To match a sample expressly approved as a standard for the purpose.

**220 APPROVAL OF PRODUCTS**

- Submissions, samples, inspections and tests: Undertake or arrange to suit the Works programme.
- Approval: Relates to a sample of the product and not to the product as used in the Works. Do not confirm orders or use the product until approval of the sample has been obtained.
- Complying sample: Retain in good, clean condition on site. Remove when no longer required.

**230 APPROVAL OF EXECUTION**

- Submissions, samples, inspections and tests: Undertake or arrange to suit the Works programme.
- Approval: Relates to the stated characteristics of the sample. (If approval of the finished work as a whole is required this is specified separately). Do not conceal, or proceed with affected work until compliance with requirements is confirmed.
- Complying sample: Retain in good, clean condition on site. Remove when no longer required.

**ACCURACY/ SETTING OUT GENERALLY**

**310 ACCURACY OF INSTRUMENTS**

- Accuracy in measurement: Use instruments and methods described in BS 5606, Appendix A:
  - Linear dimensions: as standard
  - Angular dimensions: as standard
  - Verticality: as standard
  - Levels: as standard

**320 SETTING OUT**

- General: Submit details of methods and equipment to be used in setting out the Works.
- Levels and dimensions: Check and record the results on a copy of drawings. Notify discrepancies and obtain instructions before proceeding.
- Inform: When complete and before commencing construction.

**330 APPEARANCE AND FIT**

- Tolerances and dimensions: If likely to be critical to execution or difficult to achieve, as early as possible either:
  - Submit proposals; or
  - Arrange for inspection of appearance of relevant aspects of partially finished work.
- General tolerances (maximum): To BS 5606, tables 1 and 2.

**340 CRITICAL DIMENSIONS**

- Critical dimensions: Set out and construct the Works to ensure compliance with the tolerances stated.
- Location: Detailed on tender drawings.

**360 RECORD DRAWINGS**

- Site setting out drawing: Record details of all grid lines, setting-out stations, benchmarks and profiles. Retain on site throughout the contract and hand over on completion.

**SERVICES GENERALLY**

**410 SERVICES REGULATIONS**

- New or existing services: Comply with the Byelaws or Regulations of the relevant

420 WATER REGULATIONS/ BYELAWS NOTIFICATION

- Requirements: Notify Water Undertaker of any work carried out to or which affects new or existing services and submit any required plans, diagrams and details.
- Consent: Allow adequate time to receive Undertaker's consent before starting work. Inform immediately if consent is withheld or is granted subject to significant conditions.

430 WATER REGULATIONS/ BYELAWS CONTRACTOR'S CERTIFICATE

- On completion of the work: Submit (copy where also required to the Water Undertaker) a certificate including:
  - The address of the premises.
  - A brief description of the new installation and/ or work carried out to an existing installation.
  - The Contractor's name and address.
  - A statement that the installation complies with the relevant Water Regulations or Byelaws.
  - The name and signature of the individual responsible for checking compliance.
  - The date on which the installation was checked

440 GAS INSTALLATION CERTIFICATE

- NOT REQUIRED

450 MECHANICAL AND ELECTRICAL SERVICES

- Final tests and commissioning: Carry out so that services are in full working order at completion of the Works.

**SUPERVISION/ INSPECTION/ DEFECTIVE WORK**

510 SUPERVISION

- General: 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.
- Replacement: Give maximum possible notice before changing person in charge or site agent.

520 COORDINATION OF ENGINEERING SERVICES

- Suitability: 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 and the Works generally.
- Evidence: Submit when requested CVs or other documentary evidence relating to the staff concerned.

530 OVERTIME WORKING

- Not applicable. Working hours are to be agreed with The Horniman Museum. Standard working hours for contractors at the museum are 7am – 6pm no weekends. Any work within the public areas of the museum must be completed before 10am. All deliveries and vehicle traffic through the gardens should be before 10am.

540 DEFECTS IN EXISTING WORK

- Undocumented defects: When discovered, immediately give notice. Do not proceed with affected related work until response has been received.
- Documented remedial work: Do not execute work which may:
  - Hinder access to defective products or work; or
  - Be rendered abortive by remedial work.

550 ACCESS FOR INSPECTION

- Removal: Before removing scaffolding or other facilities for access, give notice of not less than 2 weeks.

560 TESTS AND INSPECTIONS

- Timing: Agree and record dates and times of tests and inspections to enable all affected parties to be represented.
- Confirmation: One working day prior to each such test or inspection. If sample or test is not ready, agree a new date and time.



- Records: Submit a copy of test certificates and retain copies on site.

**570 AIR PERMEABILITY**

- Method: Pressure test to CIBSE TM 23.
- Requirement: Air leakage not to exceed N/A m<sup>3</sup>/h/m<sup>2</sup> at an internal to external pressure difference of N/A Pascals.
- Compliance: Submit test results.

**580 CONTINUITY OF THERMAL INSULATION**

- Method: Infra-red thermography inspection to BRE Report 176.
- Compliance: Submit inspection report.

**590 RESISTANCE TO PASSAGE OF SOUND**

- Method: Noise test required for external plant
- Compliance: industry standard

**610 PROPOSALS FOR RECTIFICATION OF DEFECTIVE PRODUCTS/EXECUTIONS**

- Proposals: Immediately any execution or product is known, or appears, to be not in accordance with the Contract, submit proposals for opening up, inspection, testing, making good, adjustment of the Contract Sum, or removal and re-execution.
- Acceptability: Such proposals may be unacceptable and contrary instructions may be issued.

**620 MEASURES TO ESTABLISH ACCEPTABILITY**

- General: 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.
  - Will not be considered as grounds for extension of time.

**630 QUALITY CONTROL**

- Procedures: Establish and maintain to ensure that the Works, including the work of subcontractors, comply with specified requirements.
- Records: Maintain full records, keep copies on site for inspection, and submit copies on request.
  - Content of records:
    - Identification of the element, item, batch or lot including location in the Works.
    - Nature and dates of inspections, tests and approvals.
    - Nature and extent of nonconforming work found.
    - Details of corrective action.

**WORK AT OR AFTER COMPLETION**

**710 WORK BEFORE COMPLETION**

- General: Make good all damage consequent upon the Works.
  - Temporary markings, coverings and protective wrappings: Remove unless otherwise instructed.
- Cleaning: Clean the Works thoroughly inside and out, including all accessible ducts and voids. Remove all splashes, deposits, and efflorescence, rubbish and surplus materials.
- Cleaning materials and methods: As recommended by manufacturers of products being cleaned, and must not damage or disfigure other materials or construction.
- COSHH dated data sheets: Obtain for all materials used for cleaning and ensure they are used only as recommended by their manufacturers.
- Minor faults: Touch up in newly painted work, carefully matching colour and brushing out edges. Repaint badly marked areas back to suitable breaks or junctions.
- Moving parts of new work: Adjust, ease and lubricate as necessary to ensure easy and efficient operation, including doors, windows, drawers, ironmongery, appliances, valves and controls.

**720 SECURITY AT COMPLETION**

- General: Leave the Works secure with, where appropriate, all accesses closed and locked.
- Keys: Account for and adequately label all keys and hand over to Employer with itemised schedule, retaining duplicate schedule signed by Employer as a receipt.

**730 MAKING GOOD DEFECTS**

- Remedial work: Arrange access with the Architects.
- Rectification: Give reasonable notice for access to the various parts of the Works.
- Completion: Notify when remedial works have been completed.

**740 HIGHWAY/ SEWER ADOPTION**

- Work to be adopted under the Highways Act, Section 38, or the Roads (Scotland) Act, Section 16 to 18, or the Water Industry Act, Section 104: Description: N/A.
- Work for adoption must be:
  - Completed by the Contractor to the satisfaction of the Highway/ Sewer Authorities before the certificate stating the Works are complete is issued.
  - Subject to a Defects Liability/ Rectification Period of 12 months (see Appendix to the Contract/ Contract particulars).
    - Maintained during the Defects Liability/ Rectification Period, including making good of damage due to reasonable wear and tear occurring during the Period and cleaning at the end of the Period, all to the satisfaction of the Highway/ Sewer Authorities

**A34 SECURITY/ SAFETY/**

**PROTECTION SECURITY, HEALTH**

**AND SAFETY**

**110 PRE CONSTRUCTION INFORMATION PACK**

- Refer to Employers Requirements

**120 EXECUTION HAZARDS**

- Common hazards: Not listed. Control by good management and site practice.
- Significant hazards: The design of the project includes the following:
  - As noted in the pre tender health and safety plan

**130 PRODUCT HAZARDS**

- Hazardous substances: Site personnel levels must not exceed occupational exposure standards and maximum exposure limits stated in the current version of HSE document EH40: Occupational Exposure Limits.
- Common hazards: Not listed. Control by good management and site practice.
- Significant hazards: Specified construction materials include the following:
  - As noted in the pre tender health and safety plan

**140 CONSTRUCTION PHASE HEALTH AND SAFETY PLAN**

- Submission: Present to the Employer/ Client not less than 2 days before date of possession.
- Confirmation: Do not start construction work until the Employer has confirmed in writing that the Construction Phase Health and Safety Plan include the procedures and arrangements required by CDM Regulation 15(4).
- Content: Develop the plan from and draw on the Outline Construction Phase Health and Safety Plan, clause A30/570, and the Pre-tender Health and Safety Plan.

**150 SECURITY**

- Protection: Safeguard the site, the Works, products, materials, and any existing buildings affected by the Works from damage and theft.
- Access: Take all reasonable precautions to prevent unauthorized access to the site, the Works and adjoining property.

**160 STABILITY**

- Responsibility: Maintain the stability and structural integrity of the Works during the Contract.
- Design loads: Obtain details, support as necessary and prevent overloading.

**170 OCCUPIED PREMISES**

- Extent: Existing buildings will be occupied and/ or used during the Contract as follows: Noted in the pre tender health and safety plan.
- Works: Carry out without undue inconvenience and nuisance and without danger to occupants and users.

- Overtime: If compliance with this clause requires certain operations to be carried out during overtime, and such overtime is not required for any other reason, the extra cost will be paid to the Contractor, provided that such overtime is authorized in advance.
- 180 PASSES
  - Controlled areas: Passes will be required for access to all areas
  - Authorised persons: Submit a list of the names of all persons requiring passes together with any other related information reasonably required.
  - Return of passes: When requested or on completion of the work to which the pass relates.
- 190 OCCUPIER'S RULES AND REGULATIONS
  - Compliance: Conform to the occupier's rules and regulations affecting the site.
  - Copies: Included with Tender information
- 200 MOBILE TELEPHONES
  - Use: Not permitted in the following areas:
    - N/A
- 210 EMPLOYER'S REPRESENTATIVES SITE VISITS
  - Safety: Submit details in advance, to the Employer or the person identified in clause A10/140, of safety provisions and procedures (including those relating to materials, which may be deleterious), which will require their compliance when visiting the site.
  - Protective clothing and/ or equipment: Provide and maintain on site for the Employer and the person stated in clause A10/140 and other visitors to the site.
- 220 WORKING PRECAUTIONS/ RESTRICTIONS
  - Hazardous areas: Operatives must take precautions as follows:
    - Work area: Working at Heights at the end of the cantilevered section of the building
    - Procedures: Scaffolding, handrails, guards, fall arrest system
  - Permit to work: Operatives must comply with procedures in the following areas:
    - Work area: N/A
    - Procedures: N/A
- PROTECT AGAINST THE FOLLOWING**
- 310 EXPLOSIVES
  - Use: Not permitted
- 320 NOISE CONSENT BY LOCAL AUTHORITY
  - Consent: Granted by the Local Authority under Part III of the Control of Pollution Act relating to the Works providing the following conditions are met:
    - Noisy trades must be scheduled / agreed in advance with the Architect.
    - Noisy works will be restricted to certain times (comply with the Local Authority rules).
- 330 NOISE CONTROL
  - Standard: Comply generally with the recommendations of BS 5228-1, clause 9.3 to minimize noise levels during the execution of the Works.
  - Noise levels from the Works: Maximum level: N/A dB(A) when measured from N/A.
  - Equipment: Fit compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles.
  - Restrictions: Do not use:
    - Pneumatic drills and other noisy appliances without consent.
    - Radios or other audio equipment or permit employees to use in ways or at times that may cause nuisance.
- 340 POLLUTION
  - Prevention: Protect the site, the Works and the general environment including streams and waterways against pollution.
  - Contamination: If pollution occurs inform immediately, including to the appropriate Authorities and provide relevant information.
- 350 PESTICIDES

- Use: Only where specified or approved, and then only suitable products listed on [www.pesticides.gov.uk](http://www.pesticides.gov.uk).
  - Restrictions: Work near water, drainage ditches or land drains must comply with the 'Guidelines for the use of herbicides on weeds in or near watercourses and lakes'.
  - Containers: Comply with manufacturer's disposal recommendations. Remove from site immediately empty or no longer required.
  - Competence: Operatives must hold a BASIS Certificate of Competence, or work under supervision of a Certificate holder.
- 360 NUISANCE
- Duty: Prevent nuisance from smoke, dust, rubbish, vermin and other causes.
  - Surface water: Prevent hazardous build-up on site, in excavations and to surrounding areas and roads.
- 370 ASBESTOS CONTAINING MATERIALS
- Duty: Report immediately any suspected materials discovered during execution of the Works.
    - Do not disturb.
    - Agree methods for safe removal or encapsulation.
- 380 FIRE PREVENTION
- Duty: Prevent personal injury or death, and damage to the Works or other property from fire.
  - Standard: Comply with Joint Code of Practice 'Fire Prevention on Construction Sites', published by the Construction Confederation and The Fire Protection Association (The 'Joint Fire Code').
- 390 SMOKING ON SITE
- Smoking on site: Not permitted.
- 410 MOISTURE
- Wetness or dampness: Prevent, where this may cause damage to the Works.
  - Drying out: Control humidity and the application of heat to prevent:
    - Blistering and failure of adhesion.
    - Damage due to trapped moisture.
    - Excessive movement.
- 420 INFECTED TIMBER
- Removal: Where instructed to remove timber affected by fungal/ insect attack from the building, minimize the risk of infecting other parts of the building.
- 430 WASTE
- Includes: Rubbish, debris, spoil, containers and surplus material.
  - Minimize: Keep the site and Works clean and tidy.
  - Remove: Daily and dispose of site in a safe and competent manner:
    - Non-hazardous material: In a manner approved by the Waste Regulation Authority.
    - Hazardous material: As directed by the Waste Regulation Authority and in accordance with relevant regulations.
  - Voids and cavities in the construction: Remove rubbish, dirt and residues before closing in.
  - Waste transfer documentation: Retain on site.
- 440 ELECTROMAGNETIC INTERFERENCE
- Duty: Prevent excessive electromagnetic disturbance to apparatus outside the site.
- 450 LASER EQUIPMENT
- Construction laser equipment: Install, use and store in accordance with BS EN 60825-1 and the manufacturer's instructions.
  - Class 1 or Class 2 laser equipment: Ensure laser beam is not set at eye level and is terminated at the end of its useful path.
  - Class 3A and Class 3B laser equipment: Do not use without approval and subject to submission of a method statement on its safe use.
- 460 POWER ACTUATED FIXING SYSTEMS
- Use: Not permitted.

**510 EXISTING SERVICES**

- Confirmation: Notify all service authorities, statutory undertakers and/ or adjacent owners of proposed works not less than one week before commencing site operations.
- Identification: Before starting work, check and mark positions of mains/ services. Where positions are not shown on drawings obtain relevant details from service authorities, statutory undertakers or other owners.
- Work adjacent to services:
  - Comply with service authority's/ statutory undertaker's recommendations.
  - Adequately protect, and prevent damage to services: Do not interfere with their operation without consent of service authorities/ statutory undertakers or other owners.
- Identifying services:
  - Below ground: Use signboards, giving type and depth;
  - Overhead: Use headroom markers.
- Damage to services: If any results from execution of the Works:
  - Immediately give notice and notify appropriate service authority/ statutory undertaker.
  - Make arrangements for the work to be made good without delay to the satisfaction of service authority/ statutory undertaker or another owner as appropriate.
  - Any measures taken to deal with an emergency will not affect the extent of the Contractor's liability.
- Marker tapes or protective covers: Replace, if disturbed during site operations, to service authority's/ statutory undertakers recommendations.

**520 ROADS AND FOOTPATHS**

- Duty: Maintain roads and footpaths within and adjacent to the site and keep clear of mud and debris.
- Damage caused by site traffic or otherwise consequent upon the Works: Make good to the satisfaction of the Employer, Local Authority or other owner.

**560 EXISTING FEATURES**

- Protection: Prevent damage to existing buildings, fences, gates, walls, roads, paved areas and other site features, which are to remain in position during execution of the Works. The contractor should make good to the appropriate standard all holes etc including mainlining the fire rating to existing compartments etc
- Special requirements: All listed elements as noted on the Architects drawings.
- Carry out an initial condition survey highlighting any area of the installation to be retained or the building areas which are deemed damaged or not in good operation. Survey to be carried out and issued prior to the works commencing.

**570 EXISTING WORK**

- Protection: Prevent damage to existing property undergoing alteration or extension.
- Removal: Minimum amount necessary.
- Replacement work: To match existing.

**580 BUILDING INTERIORS**

- Protection: Prevent damage during course of the works.

**600 EXISTING FURNITURE, FITTINGS AND EQUIPMENT**

- Protection: Prevent damage or move as necessary to enable the Works to be executed. Reinstall in original positions.

**610 ESPECIALLY VALUABLE/ VULNERABLE ITEMS**

- Protection: Ensure provision and maintenance of special protective measures to prevent damage to the following:
  - All listed elements are stated elsewhere in the Tender information

**620 ADJOINING PROPERTY**

- Permission: n/a

**625 ADJOINING PROPERTY RESTRICTIONS**

- Precautions:

- Prevent trespass of workpeople and take precautions to prevent damage to any property not forming part of the works.

630 EXISTING STRUCTURES

- Duty: Check proposed methods of work for effects on adjacent structures inside and outside the site boundary.

**A35 SPECIFIC LIMITATIONS ON METHOD/ SEQUENCE/ TIMING**

110 SCOPE

- General: The limitations described in this section are supplementary to limitations described or implicit in information given in other sections or on the drawings.

120 DESIGN CONSTRAINTS

- N/A

130 METHOD/ SEQUENCE OF WORK

- Specific Limitations: Include the following in the programme:
  - Include in the programme.

140 SCAFFOLDING

- Standing scaffolding: Make available to subcontractors at all times.

160 USE OR DISPOSAL OF MATERIALS

- Specific limitations: in accordance with local by laws

170 WORKING HOURS

- Specific limitations: normal working hours in accordance with the Horniman Museum and Gardens requirements and restrictions. Working hours are to be agreed with The Horniman Museum. Standard working hours for contractors at the museum are 7am – 6pm no weekends. Any work within the public areas of the museum must be completed before 10am. All deliveries and vehicle traffic through the gardens should be before 10am.

180 COMPLETION IN SECTIONS OR IN PARTS

- General: n/a
- Remainder of the Works: n/a

**A36 FACILITIES/ TEMPORARY WORK/**

**SERVICE GENERALLY**

**ACCOMMODATION**

210 ROOM FOR MEETINGS

- Facilities: Use of Horniman Museum and Gardens accommodation by arrangement

220 SITE OFFICES

- Accommodation: Use of Horniman Museum and Gardens public toilet areas

270 ACCOMMODATION/ LAND NOT INCLUDED IN THE SITE

- General: Material storage is available via contractor's unsecured car park are in the Horniman Museum. Security of the space is entirely the responsibility of the contractor

280 EXISTING ACCOMMODATION

- Restrictions on use: Temporary accommodation is prohibited in the following:
  - Anywhere apart from the site of the works or as agreed with the Employer.

290 CAR PARKING

- Drop off spaces available. No parking spaces.

**TEMPORARY WORKS**

- Employer's Specific Requirements: Provide: as tender documents

## **SERVICES AND FACILITIES**

### **420 LIGHTING AND POWER**

- Supply: Electricity from the Employer's mains may be used for the Works.

### **430 WATER**

- Supply: The Employer's mains may be used for the Works as follows:
- Continuity: The Employer will not be responsible for the consequences of failure or restriction in supply.

### **440 TELEPHONES**

- Temporary on-site telephone: Provide as soon as practicable after the Date of Possession for joint use by the Contractor and Subcontractors and pay all charges.

### **440 MOBILE TELEPHONES**

- Direct communication: As soon as practicable after the Date of Possession provide the Contractor's person in charge with a mobile telephone.

### **470 E-MAIL FACILITY**

- General: As soon as practicable after the Date of Possession provide a suitable e-mail facility on site,

### **530 BENEFICIAL USE OF INSTALLED SYSTEMS**

- Permanent systems: Unless specific permission is given by the Employer and installer, do not use for any purpose other than running in, testing and commissioning.
- Other uses: If permission is given for any other use of a system before the Works are accepted as complete, it must be subject to a separate written agreement between the parties and in accordance with the recommended procedures given in NJCC Guidance Note 10.

### **570 PERSONAL PROTECTIVE EQUIPMENT**

- General: Provide all that required for the safe carrying out of the works.

## **A37 OPERATION/ MAINTENANCE OF THE FINISHED BUILDING**

### **GENERALLY**

### **110 THE BUILDING MANUAL (O&Ms)**

- Purpose: The Building Manual (incorporating the Health and Safety File) is to be a comprehensive information source and guide for the Employer and end users providing a complete understanding of the building and its systems to enable efficient and safe operation and maintenance.
- Compilation: see requirements elsewhere in the Tender Documents.

### **120 THE HEALTH AND SAFETY FILE**

- Purpose: To provide information about the equipment or materials used, which might affect the health or safety of anyone if construction works, (including cleaning, maintenance, alterations, refurbishment and demolition) is carried out.

### **210 INFORMATION FOR COMMISSIONING OF SERVICES**

- General: Submit relevant drawings and preliminary performance data to enable Employer's staff to familiarise themselves with the installation.
- Time of submission: At commencement of commissioning.

### **220 TRAINING**

- Objective: Before Completion, explain and demonstrate to the Employer's maintenance staff the purpose, function and operation of the installations including items and procedures listed in the Building Manual.
- Operating time: Include a minimum of 0.5 days

**230 SPARE PARTS**

- General: Before Completion submit a priced schedule of spare parts that the Contractor recommends should be obtained and kept in stock by the Employer for maintenance of the services installations.

**250 TOOLS**

- General: Provide tools and portable indicating instruments for the operation and maintenance of all services plant and equipment (except any installed under Named Subcontracts) together with suitable means of identifying, storing and securing.

**A40 CONTRACTOR'S GENERAL COST ITEMS: MANAGEMENT AND STAFF**

**110 MANAGEMENT AND STAFF**

- Cost significant items: The Contractor is to provide management, trades supervision, engineering services, programming, production, information coordination, QS support and the like.

**A41 CONTRACTOR'S GENERAL COST ITEMS: SITE ACCOMMODATION**

**110 SITE ACCOMMODATION**

- Details: Site accommodation required or made/ not made available by the Employer: See section A36.

**A42 CONTRACTOR'S GENERAL COST ITEMS: SERVICES AND FACILITIES**

**110 POWER**

**120 LIGHTING**

**130 FUELS**

**140 WATER**

**150 TELEPHONE AND ADMINISTRATION**

**160 SAFETY, HEALTH AND WELFARE**

- See clause A34/210.

**170 STORAGE OF MATERIALS**

**180 RUBBISH DISPOSAL**

- See clause A34/430.

**190 CLEANING**

- See clause A33/710.

**200 DRYING OUT**

- See clause A34/410.

**210 PROTECTION OF WORK IN SECTIONS**

**220 SECURITY**

- See clause A34/150.

**230 MAINTAIN PUBLIC AND PRIVATE ROADS**

- See clause A34/520.



240 SMALL PLANT AND TOOLS

250 OTHERS

Allow for all site labour and general expenses, allow for compliance with statutory regulations and provide notification to relevant local authorities.

300 GENERAL ATTENDANCE ON NOMINATED SUBCONTRACTORS

See section A51.

310 ADDITIONAL SERVICES AND FACILITIES ITEMS

A43 CONTRACTOR'S GENERAL COST ITEMS: MECHANICAL PLANT

110 LIFTING EQUIPMENT

120 HOISTS

130 PERSONNEL TRANSPORT

140 TRANSPORT

200 ADDITIONAL MECHANICAL PLANT

**A44 CONTRACTOR'S GENERAL COST ITEMS: TEMPORARY WORKS**

110 TEMPORARY WORKS

Details: Temporary works required or made/ not made available by the Employer: See section A36.

A50 WORK/ PRODUCTS BY/ ON BEHALF OF THE EMPLOYER

110 WORK BY/ PRODUCTS PROVIDED BY/ON BEHALF OF EMPLOYER

Title: NONE ANTICIPATED.

A51 NOMINATED SUBCONTRACTORS

110 NOMINATED SUBCONTRACTORS – NONE ANTICIPATED

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A52 NOMINATED SUPPLIERS DITTO

