# **Collections Store, Explosion Museum**

19 March 2019

Rev T1

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# A JCT 2016 Minor Works Building Contract

# A10 PROJECT PARTICULARS

# **A10 PROJECT PARTICULARS**

# 110 THE PROJECT

- Name: Upgrade of Collections Store.
- Nature: Building and M&E works.
- · Location: Explosion.
- · Length of contract: 6 weeks.

# 120 EMPLOYER (CLIENT)

- Name: National Museum of the Royal Navy.
- · Address: HM Naval Base (PP66), Portsmouth PO1 3NH.
- · Contact: Nick Hewitt.
- Telephone: 02392 891370.
- E-mail: Nick.Hewitt@NMRN.org.uk.

# 130 PRINCIPAL CONTRACTOR (CDM)

- · Name: tbc.
- · Address: tbc.
- · Contact: tbc.
- Telephone: tbc.
- E-mail: tbc.

# 140 ARCHITECT/ CONTRACT ADMINISTRATOR

- Name: Pritchard Architecture.
- Address: Porters Lodge, College Road, HM Naval Base, PO1 3LJ.
- · Contact: Giles Pritchard.
- Telephone: 07775 906815.
- E-mail: giles@pritchardarchitecture.co.uk.

# 150 PRINCIPAL DESIGNER

- · Name: Pritchard Architecture.
- Address: Porters Lodge, College Road, HM Naval Base, PO1 3LJ.
- · Contact: Giles Pritchard.
- Telephone: 07775 906815.
- E-mail: giles@pritchardarchitecture.co.uk.

# A11 TENDER AND CONTRACT DOCUMENTS

# **A11 TENDER AND CONTRACT DOCUMENTS**

# 110 TENDER DRAWINGS

• The tender drawings are: As attached drawing issue sheet.

# 120 CONTRACT DRAWINGS

• The Contract Drawings: The same as the tender drawings.

# 160 PRECONSTRUCTION INFORMATION

• Format: The Preconstruction information is described in these preliminaries in Section A34. It refers to information given elsewhere in the preliminaries and other tender documents.

# A12 THE SITE/ EXISTING BUILDINGS

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#### 110 THE SITE

• Description: The Collections Store is located in the Explosion Museum, a Grade II listed building. The building is operated as a museum open to the public.

# 120 EXISTING BUILDINGS ON/ ADJACENT TO THE SITE

· Description: Other museum buildings and redudant buildings.

# 140 EXISTING UTILITIES AND SERVICES

- Drawings: (Information shown is indicative only): Refer to on site building manual.
- Other information: None.

#### 180 HEALTH AND SAFETY FILE

- Availability for inspection: The Health and Safety File for the site/building may be seen by appointment during normal office hours at: Explosion Museum.
- Other documents: -.
- Arrangements for inspection: Contact client.

# 200 ACCESS TO THE SITE

- · Description: Refer to site set up drawing.
- · Limitations: -.

# 210 PARKING

• Restrictions on parking of the Contractor's and employees' vehicles: Contractors vehicles to be parked in the museum car park.

# 220 USE OF THE SITE

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

# 230 SURROUNDING LAND/ BUILDING USES

- · General: Adjacent or nearby uses or activities are as follows:
  - Museum.

# 240A HEALTH AND SAFETY HAZARDS

- General: The nature and condition of the site/ building cannot be fully and certainly ascertained before it is opened up.
- Information: The accuracy and sufficiency of this information is not guaranteed. 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

- Assessment: 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: Refer to ITT documents.

# A13 DESCRIPTION OF THE WORK

# A13 DESCRIPTION OF THE WORK

# 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: To achieve the security requirements within the existing collections store on the first floor of Explosion Museum it is proposed to fit new sash locks to the existing windows and upgrade the current fixings on the security grilles to security type bolts. Alongside this the existing modern door will be replaced with a set of double security doors from the Royal Marines Museum. To improve the environmental conditions within the store it is proposed to install an air conditioning unit on the wall at high level internally.

To create the collections workspace it is proposed to build a new timber boarded partition to match the existing modern glazed and timber screen at the top of the stairs. This screen will also be relocated to create a corridor with direct access to the new collections workspace. The door removed from the collections store will be installed as a secondary door to ensure there are two safe means of escape in the event of a fire. New lighting, power and data will be installed, this will be surface fixed, following wall and ceiling junctions to minimise visual impact except where these are located on the new partitions and can be concealed and flush mounted. As per the collections store an air conditioning unit will be installed.

# 130 WORK BY OTHERS CONCURRENT WITH THE CONTRACT

Description: None.

# 140 COMPLETION WORK BY OTHERS

• Description: Installation of storage racks.

# A20 JCT MINOR WORK BUILDING CONTRACT (MW)

# A20 JCT MINOR WORK BUILDING CONTRACT (MW)

#### JCT MINOR WORKS BUILDING CONTRACT

- The Contract: JCT Minor Works Building Contract 2016 Edition.
- Requirement: Allow for the obligations, liabilities and services described.

# THE RECITALS

# First - THE WORKS AND THE CONTRACT ADMINISTRATOR

- The work comprises: Security upgrade to collections store and creation of a new collections workspace.
- Architect/ Contract Administrator: See clause A10/140.

# Second - CONTRACT DOCUMENTS

• Contract drawings: As listed in clause A11/120.

Contract documents: The following have been prepared which show and describe the work to be done Work schedules.

#### Third - PRICED DOCUMENTS

• Documents to be priced or provided by the Contractor: Work schedules.

#### **ARTICLES**

#### 3 - ARCHITECT/ CONTRACT ADMINISTRATOR

Architect/ Contract Administrator: See clause A10/140.

# 4 and 5 - PRINCIPAL DESIGNER/ PRINCIPAL CONTRACTOR

- Principal Designer: See clause A10/150.
- Principal Contractor: See clause A10/130.

## **CONTRACT PARTICULARS**

Fourth Recital and Schedule 2 - BASE DATE

Base date: 10th April 2019.

# Fourth Recital and clause 4.2 - CONSTRUCTION INDUSTRY SCHEME (CIS)

• Employer at the Base Date is a 'contractor' for the purposes of the CIS.

# Fifth Recital - CDM REGULATIONS

• The project is not notifiable.

# Seventh Recital and Schedule 3 - SUPPLEMENTAL PROVISIONS

- Collaborative working: Supplemental Provision 1 does not apply.
- · Health and safety: Supplemental Provision 2 applies.
- Cost savings and value improvements: Supplemental Provision 3 does not apply.
- Sustainable development and environmental considerations: Supplemental Provision 4 doe s not apply.
- Performance indicators and monitoring: Supplemental Provision 5 does not apply.
- Notification and negotiation of disputes: Supplemental Provision 6 does not apply. Where Supplemental Provision 6 applies, the respective nominees of the parties are:
  - Employer's nominee: -.
  - Contractor's nominee:

Or such replacement as each party may notify to the other from time to time.

# Article 7 - ARBITRATION

Article 7 and Schedule 1 apply.

# Clause 2.2 - COMMENCEMENT AND COMPLETION

- Works commencement date: 6th May 2019.
- · Date for Completion: 6 weeks later.

# Clause 2.8 - LIQUIDATED DAMAGES

• At the rate of £1000 per calendar week or pro-rata thereto.

# Clause 2.10 - RECTIFICATION PERIOD

· Period: Three months from the date of practical completion.

# Clause 4.3 - INTERIM PAYMENTS

- · Interim Valuation Dates:
  - The first Interim Valuation Date is: One month after commencement.
  - Thereafter at intervals of: Monthly.
- Payments due prior to practical completion:
  - Percentage of total value of the work etc.: 95 per cent.
- Payments becoming due on or after practical completion:
  - Percentage of the total amount to be paid: 97½ per cent.

# Clause 4.3 and 4.8 - FLUCTUATIONS PROVISION

- The following fluctuations provision applies: No fluctuations provision applies.
- Where Schedule 2 applies, the percentage addition (paragraph 13) is -.

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

• Period: Three months from the date of practical completion.

# Clause 5.3 - CONTRACTOR'S PUBLIC LIABILITY INSURANCE - INJURY TO PERSONS OR PROPERTY

- The required level of cover for any one occurrence or series of occurrences arising out of one event:
  - Not less than: £10m.

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

- Clause 5.4B applies.
- Where clause 5.4A or 5.4B applies, percentage to cover professional fees: 15 per cent.
- Where clause 5.4C applies, insurance arrangements details of the required policy or policies: -.

#### 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

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**SECTION 6: TERMINATION** 

**SECTION 7: SETTLEMENT OF DISPUTES** 

# **EXECUTION**

• The Contract: Will be executed under hand.

# CONTRACT GUARANTEE BOND

• Contract Guarantee Bond: Not required.

# A30 TENDERING/ SUBLETTING/ SUPPLY

# 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 NBS Guide to Tendering for Construction Projects.
- · Errors: Alternative 1 is to apply.

# 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

- Acceptance: No guarantee is offered that any tender will be recommended for acceptance or be accepted, or that reasons for non acceptance will be given.
- · Costs: No liability is accepted 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 90 days.
- Date for possession/ commencement: See section A20.

# PRICING/ SUBMISSION OF DOCUMENTS

# 210 PRELIMINARIES IN THE SPECIFICATION

• The Preliminaries/ General conditions sections (A10-A56 inclusive) must not be relied on as complying with SMM7/ NRM2.

# 250 PRICED 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.

# 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.

# 440 SCHEDULE OF RATES

- Schedule of rates (unpriced): Included with the tender documents. The Contractor may insert additional items. All items must be fully priced.
- Fully priced copy: Submit with the tender.

#### 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.

# 550 HEALTH AND SAFETY INFORMATION

- Content: Describe the organization 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 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: Within one week of request.

# 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-construction information 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.

#### 599 FREEDOM OF INFORMATION

- Records: Retain, make available for inspection and supply on request information reasonably required to allow response to requests made under the provisions of the Freedom of Information Act.
- Determination: Submit requests received. Do not supply information to anyone other than the project participants without express written permission.
- · Confidentiality: Maintain at all times.

# **SUBLETTING/SUPPLY**

# A31 PROVISION, CONTENT AND USE OF DOCUMENTS

# 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: Apparatus, appliances, machinery, vehicles or things of whatsoever nature required in or about the construction for the execution and 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.
- Excludes: Products and equipment or anything intended to form or forming part of the permanent works.

# 140 DRAWINGS

- Definitions: To BSRIA BG 6 A design framework for building services. Design activities and drawing definitions.
- · CAD data: In accordance with BS 1192.

# 145 CONTRACTOR'S CHOICE

• Meaning: Selection delegated to the Contractor, but liability to remain with the specifier.

# 155 SUBMIT PROPOSALS

• Meaning: Submit information in response to specified requirements.

#### 160 TERMS USED IN SPECIFICATION

- Remove: Disconnect, dismantle as necessary and take out the designated products or
  work and associated accessories, fixings, supports, linings and bedding materials. Dispose
  of unwanted materials. Excludes taking out and disposing of associated pipework, wiring,
  ductwork or other services.
- Fix: Receive, unload, handle, store, protect, place and fasten in position and disposal of
  waste and surplus packaging including all labour, materials and site equipment for that
  purpose.
- Supply and fix: As above, but including supply of products to be fixed. 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/ Purchaser 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 person or legal entity under whose name or trademark the particular product, component or system is marketed
  - Product reference: the proprietary brand name and/ or identifier by which the particular product, component or system is described.
- Currency: References are to the particular product as specified in the manufacturer'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

- Specification to British Standard or European Standard: Substitution may be proposed 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 substitutions.
- 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 AND INFORMATION

 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 THE EMPLOYER**

# 410A ADDITIONAL COPIES OF DRAWINGS/ DOCUMENTS

· Additional copies: to be issued electronically only

# 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.

# DOCUMENTS PROVIDED BY CONTRACTOR/ SUBCONTRACTORS/ SUPPLIERS

# 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, EN or ISO Standards.

# 640 MAINTENANCE INSTRUCTIONS AND GUARANTEES

- Components and equipment: Obtain or retain copies, register with manufacturer and hand over on or before completion of the Works.
- Information location: In Building Manual.
- Emergency call out services: Provide telephone numbers for use after completion. Extent of cover: twenty four hours seven days a week.

# A32 MANAGEMENT OF THE WORKS

# 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.

#### 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 CLIMATIC CONDITIONS

- · Information: Record accurately and retain:
  - Daily maximum and minimum air temperatures (including overnight).
  - Delays due to adverse weather, including description of the weather, types of work affected and number of hours lost.

# 150 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: Immediately when requested and before starting work on site submit in an approved form a master programme for the Works, which must include details of:
  - Planning and mobilisation by the Contractor
  - Subcontractor's work.
  - 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.
  - Work by others concurrent with the Contract.
- · Submit one copy.

# 245 START OF WORK ON SITE

 Notice: Before the proposed date for start of work on site give minimum notice of two weeks.

# 250A 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.

# 260 SITE MEETINGS

- General: Site meetings will be held to review progress and other matters arising from administration of the Contract.
- · Frequency: Every two weeks.
- · 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): Architect.

## 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): Two weeks.

# 310 EXTENSIONS OF TIME

- Notice: When a notice of the cause of any delay or likely delay in the progress of the works is given under the contract, written notice must also be given of all other causes which apply concurrently.
- Details: As soon as possible submit:
  - Relevant particulars of the expected effects, if appropriate, related to the concurrent causes
  - An estimate of the extent, if any, of the expected delay in the completion of the Works beyond the date for completion.
  - All other relevant information required.

# **CONTROL OF COST**

# 420 REMOVAL/ REPLACEMENT OF EXISTING WORK

- 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.

# 440 MEASUREMENT

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

# 450 DAYWORK VOUCHERS

- Before commencing work: Give reasonable notice to person countersigning daywork vouchers.
- Content: Before delivery each voucher must be:
  - Referenced to the instruction under which the work is authorised.
  - Signed by the Contractor's person in charge as evidence that the operatives' names, the time daily spent by each and the equipment and products employed are correct.
- Submit: By the end of the week in which the work has been executed.

# 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.

# A33 QUALITY STANDARDS/ CONTROL

# 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 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: Without defects, 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**

# 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.

# 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 Statutory Authority.

# 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.

# 435 ELECTRICAL INSTALLATION CERTIFICATE

- Submit: When relevant electrical work is completed.
- Original certificate: To be lodged in the Building Manual.

#### 445 SERVICE RUNS

- General: Provide adequate space and support for services, including unobstructed routes and fixings.
- Ducts, chases and holes: Form during construction rather than cut.
- Coordination with other works: Submit details of locations, types/ methods of fixing of services to fabric and identification of runs and fittings.

# 450 MECHANICAL AND ELECTRICAL SERVICES

- Final tests and commissioning: Carry out so that services are in full working order at completion of the Works.
- Building Regulations notice: Copy to be lodged in the Building Manual.

#### SUPERVISION/ INSPECTION/ DEFECTIVE WORK

#### 525 ACCESS

- Extent: Provide at all reasonable times access to the Works and to other places of the Contractor or subcontractors where work is being prepared for the Contract.
- · Designate: Architect.

# 530 OVERTIME WORKING

- Notice: Prior to overtime being worked, submit details of times, types and locations of work to be done.
  - Minimum period of notice: Two days.
- Concealed work: If executed during overtime for which notice has not been given, it may be required to be opened up for inspection and reinstated at the Contractor's expense.

#### 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.

# 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.

# 610 DEFECTIVE PRODUCTS/ EXECUTIONS

- Proposals: Immediately any work 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.

#### **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, 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 together with an itemized schedule, retaining duplicate schedule signed as a receipt.

# 730 MAKING GOOD DEFECTS

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

# A34 SECURITY/ SAFETY/ PROTECTION

# A34 SECURITY/ SAFETY/ PROTECTION

# **SECURITY, HEALTH AND SAFETY**

#### 120 EXECUTION HAZARDS

- Common hazards: Not listed. Control by good management and site practice.
- Significant hazards: The design of the project includes the following:
  - Hazard: -.
  - Precautions assumed: -.
  - Specification reference: -.
  - Drawing reference: -.

# 140 CONSTRUCTION PHASE HEALTH AND SAFETY PLAN

- Submission: Present to the Employer/ Client no later than Not later than two weeks before commencement of work on site..
- Confirmation: Do not start construction work until the Employer has confirmed in writing that the Construction Phase Health and Safety Plan includes the procedures and arrangements required by the CDM Regulations.
- 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/ Preconstruction information.

# 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.
- · Special requirements: -.

#### 160 STABILITY

- Responsibility: Maintain the stability and structural integrity of the Works and adjacent structures 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: Mus eum will be open to the public.
- 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 allowed, provided that such overtime is authorized in advance.

# 200 MOBILE TELEPHONES AND PORTABLE ELECTRONIC EQUIPMENT

- · Restrictions on use:
  - None.

#### PROTECT AGAINST THE FOLLOWING

#### 340 POLLUTION

- Prevention: Protect the site, the Works and the general environment including the atmosphere, land, streams and waterways against pollution.
- Contamination: If pollution occurs inform immediately, including to the appropriate Authorities and provide relevant information.

#### 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.

# 371 DANGEROUS OR HAZARDOUS SUBSTANCES

- Duty: Report immediately suspected materials discovered during execution of the Works.
  - Do not disturb.
  - Agree methods for safe removal or remediation.

#### 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 Construction Industry Publications and The Fire Protection Association (The 'Joint Fire Code').

# 390 SMOKING ON SITE

· Smoking on site: Not permitted.

#### 400 BURNING ON SITE

- Burning on site: Permitted subject to compliance with relevant regulations. Ensure fires:
  - Do not contain plastics, flammable liquids or other hazardous materials likely to generate dark or toxic smoke or toxic residues.
  - Are not situated within 10 metres of any tree canopy, shrubs, buildings, structures, combustible materials, etc or a public highway.
  - Are not lit if there is a danger of sparks reaching adjacent flammable areas, e.g. heathland, forests or ripe cereal crops.
  - Do not produce drifting smoke where it may be hazardous, e.g. across highways.
  - Will not interfere with amenity enjoyment of a site.
  - Are never left unattended.
  - Are extinguished at the end of each working day.

#### 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.

#### 430 WASTE

- Includes: Rubbish, debris, spoil, surplus material, containers and packaging.
- General: Minimize production. Prevent accumulations. Keep the site and Works clean and tidy.
- Handling: Collect and store in suitable containers. Remove frequently and dispose off 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.
- Recyclable material: Sort and dispose at a Materials Recycling Facility approved by the Waste Regulation Authority.
- · 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.

# PROTECT THE FOLLOWING

# 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 utilities/ 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 other 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.

# 570 EXISTING WORK

- Protection: Prevent damage to existing work, structures or other property during the course of the work.
- · Removal: Minimum amount necessary.
- · Replacement work: To match existing.

# 580 BUILDING INTERIORS

• Protection: Prevent damage from exposure to the environment, including weather, flora, fauna, and other causes of material degradation during the course of the work.

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# 625 ADJOINING PROPERTY RESTRICTIONS

- · Precautions:
  - Prevent trespass of workpeople and take precautions to prevent damage to adjoining property.
  - Pay all charges.
  - Remove and make good on completion or when directed.
- Damage: Bear cost of repairing damage arising from execution of the Works.

# 630 EXISTING STRUCTURES

- Duty: Check proposed methods of work for effects on adjacent structures inside and outside the site boundary.
- Supports: During execution of the Works:
  - Provide and maintain all incidental shoring, strutting, needling and other supports as may be necessary to preserve stability of existing structures on the site or adjoining, that may be endangered or affected by the Works.
  - Do not remove until new work is strong enough to support existing structure.
  - Prevent overstressing of completed work when removing supports.
- Adjacent structures: Monitor and immediately report excessive movement.
- Standard: Comply with BS 5975 and BS EN 12812.

# 640 MATERIALS FOR RECYCLING/ REUSE

- Duty: Sort and prevent damage to stated products or materials, clean off bedding and jointing materials and other contaminants.
- Storage: Stack neatly and protect until required by the Employer or for use in the Works as instructed.

# A35 SPECIFIC LIMITATIONS ON METHOD/ SEQUENCE/ TIMING

# A35 SPECIFIC LIMITATIONS ON METHOD/ SEQUENCE/ TIMING

- 130 METHOD/ SEQUENCE OF WORK
  - Specific Limitations: Include the following in the programme:
    - None.
- 160 USE OR DISPOSAL OF MATERIALS
  - Specific limitations: None.
- 170 WORKING HOURS
  - Specific limitations: 8.30am to 5.00pm.

# A36 FACILITIES/ TEMPORARY WORK/ SERVICES

# A36 FACILITIES/ TEMPORARY WORK/ SERVICES

# **GENERALLY**

# 110 SPOIL HEAPS, TEMPORARY WORKS AND SERVICES

- · Location: Give notice and details of intended siting.
- Maintenance: Alter, adapt and move as necessary. Remove when no longer required and make good.

# **ACCOMMODATION**

# 230 TEMPORARY ACCOMMODATION

- Accommodation made available by the Employer: The following may be used for the duration of the Contract without charge provided that:
  - It is used solely for the purposes of carrying out the Works.
  - The use to which it is put does not involve undue risk of damage.
  - Any temporary adaptations are approved by or on behalf of the Employer before being carried out.
  - It is vacated on completion of the Works or determination of the Contract.
  - When vacated, its condition is at least equivalent to its condition at the start of the Contract.
- Description: Existing meeting room.
- Available services and facilities: Meeting room.

#### **TEMPORARY WORKS**

# 310 ROADS

- Permanent roads, hard standings and footpaths on the site: The following may be used, subject to clause A34/520:
  - Details: Existing roads.
  - Restrictions on use: None.
  - Protective or remedial measures: None.

# 340 NAME BOARDS/ ADVERTISEMENTS

• Name boards/ advertisements: Not permitted.

# **SERVICES AND FACILITIES**

#### 410 LIGHTING

• Finishing work and inspection: Provide temporary lighting, the intensity and direction of which closely resembles that delivered by the permanent installation.

# 420A LIGHTING AND POWER

- Supply: Electricity from the existing mains may be used for the Works as follows:
  - Metering: Free of charge.

# 430A WATER

- Supply: The existing mains may be used for the Works as follows:
  - Metering: Free of charge.

# 520 USE OF PERMANENT HEATING SYSTEM

- Permanent heating installation: May be used for drying out the Works/ services and controlling temperature and humidity levels.
- Installation: If used:
  - Take responsibility for operation, maintenance and remedial work.
  - Arrange supervision by and indemnification of the appropriate Subcontractors.
  - Pay costs arising.

# A37 OPERATION/ MAINTENANCE OF THE FINISHED WORKS

# A37 OPERATION/ MAINTENANCE OF THE FINISHED WORKS

# **GENERALLY**

#### 110 THE BUILDING MANUAL

- · Responsibility: The Contractor
- Content: Obtain and provide comprehensive information for owners and users of the
  completed Works. Include an overview of the main design principles and describe key
  components and systems within the finished Works, so affording a complete understanding
  of the Works, including all buildings and their systems to enable efficient and safe
  operation and maintenance.
- Specific requirements: None.
- Format: Hard and electronic copes.
- · Number of copies: 2.
- Delivery to: Architect. by (date) draft 2 weeks prior to completion.

# 155 CONTENT OF THE BUILDING MANUAL

- General: Details of the property, the parties, fire safety strategy, operational requirements and constraints of a general nature.
- Building fabric: Design criteria, maintenance details, product details, and environmental and trafficking conditions.
- Building services: Description and operation of systems, diagrammatic drawings, record drawings, identification of services, product details, equipment settings, maintenance schedules, consumable items, spares and emergency procedures.
- Documentation: Guarantees, warranties, maintenance agreements, test certificates and reports.

### 160 PRESENTATION OF BUILDING MANUAL

- Format: A4 size, plastics 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, to be folded and accommodated in the binders so that they may be unfolded without being detached from the rings.
- As-built drawings: The main sets may form annexes to the Manual.

# A54 PROVISIONAL WORK/ ITEMS

# **A54 PROVISIONAL WORK/ ITEMS**

# 110 PROVISIONAL SUMS FOR DEFINED WORK

- Item: Iornmongery.
- Description of work: Supply and fit of ironmongery not already allowed for.
- Provisional Sums: Include £500.
- · Allow for general attendance.

# 110A PROVISIONAL SUMS FOR DEFINED WORK

- Item: Additional M&E works.
- Description of work: Additional M&E works.
- Provisional Sums: Include £2,000.
- · Allow for general attendance.

# 110B PROVISIONAL SUMS FOR DEFINED WORK

- · Item: Additional repairs.
- · Description of work: Repairs as necessary.
- Provisional Sums: Include £500.
- · Allow for general attendance.

# 590 CONTINGENCIES

• Provisional sum: Include: £5,000.