

Gleeds

# STW Upgrade

NTBS4278 STW Upgrade

01-11-2024

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## A10 Project particulars

### Clauses

#### 110 The Project

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1. Name: STW Upgrade
2. Nature: Replacing kiosks and upgrading control panels
3. Location: College of Policing, Ryton on Dunsmore
4. Timescale for construction work: 4 weeks

#### 120 Employer (client)

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1. Name: College of Policing
2. Address: Leamington Road, Ryton On Dunsmore, CV8 3EN
3. Contact: Mark Derham
4. Telephone: 07919 277438
5. Email: mark.derham@college.police.uk

#### 140 Project Manager (herein referred to as 'PM')

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1. Name: Gleeds Cost Management Ltd
2. Address: 1st Floor, 11 Station Street, Nottingham, NG2 3AJ
3. Contact: Adam Nickerson
4. Telephone: 07718 804323
5. Email: adam.nickerson@gleeds.com

Ω End of Section

# A11

## Tender and contract documents

### Clauses

#### 110 Tender documents

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1. The tender documents are
  - 1.1. The Specification, comprising preliminaries, reference specification, contract data and activity schedule.
  - 1.2. Drawings numbered: NTBS4278-01
  - 1.3. Additional documents: Schedule of Works Builders

#### 120 Contract drawings

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1. The contract drawings: The same as the tender drawings.

#### 160 Pre-construction information

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1. Format: The pre-construction information is described in these Preliminaries in section A34. It refers to information given elsewhere in the Preliminaries, specification, drawings and associated documents.

#### 180 Other documents

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1. 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 .....
2. The documents include: Health & Safety File

Ω End of Section

## A12

# The site/ existing buildings

### Clauses

#### 110 The site

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1. **Description:** Private Sewerage Treatment Plant owned by the College, located on Leamington Road

#### 180 Health and safety file

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1. **Availability for inspection:** The health and safety file for the site/ building may be seen by appointment during normal office hours at: Mitie FM Offices.

#### 200 Access to the site

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1. **Description:** via the Gatehouse entrance to the site from Leamington Road
2. **Limitations:** Contractors are required to have Baseline clearances to work on site unaccompanied. These will be obtained via the College Vetting Service
3. **Access for inspections:** Provide access at reasonable times for both on-site and off-site work.

#### 210 Parking

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1. **Restrictions on parking of the Contractor's and employees' vehicles:** Vehicles parked within designated parking spaces

#### 220 Use of the site

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

#### 250 Site visit

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1. **Assessment:** Ascertain the nature of the site, access thereto and all local conditions and restrictions likely to affect the execution of the Works.
2. **Arrangements for visit:** Contact the Project Manager to arrange a site visit on the agreed date stated

Ω End of Section

## A13 Description of the work

### Clauses

#### 120 The works

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1. Description: Replacement of GRP kiosks, refurbishment of stairs and control panel upgrades.

Ω End of Section

## A20

# Engineering and construction contract (ECC)

### Clauses

#### NEC3 ECC priced contract with activity schedule

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- The conditions of contract: The core clauses and the conditions for main option A, dispute resolution option W2 and secondary options indicated, for the NEC3 Engineering and Construction Contract (April 2013).
- Requirement: Refer to Contract Data for specific requirements

#### Core Clauses - No Amendments

##### 1. General - No Amendments

##### 3. Time - No Amendments

##### 4. Testing and defects - No Amendments

##### 5. Payment - No Amendments

##### 6. Compensation Events - No Amendments

##### 8. Risks and insurance - No Amendments

#### Optional Statements - No Amendments

#### Secondary option clauses - No Amendments

#### Project Bank Account - No Amendments

Ω End of Section

## A30

# Tendering/ subletting/ supply

### Main contract tendering

#### 110 Scope

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1. **General:** These conditions are supplementary to those stated in the Invitation to Tender and on the form of tender.

#### 145 Tendering procedure

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1. **General:** In accordance with the principles of: NBS Guide to Tendering for Construction Projects.
2. **Arithmetical errors:** Pricing document is dominant.

#### 160 Exclusions

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

#### 170 Acceptance of tender

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1. **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.
2. **Costs:** No liability is accepted for any cost incurred in the preparation of any tender.

#### 190 Period of validity

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1. **Period:** After submission or lodgement, keep tender open for consideration (unless previously withdrawn) for not less than 13 weeks.
2. **Date for possession/ commencement:** Refer to Contract Data

### Pricing/ submission of documents

#### 210 Preliminaries in the specification

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1. The Preliminaries/ General conditions sections (A10-A56 inclusive) have been prepared in accordance with SMM7/ NRM2.

#### 215 Tender documents

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1. **Alterations and qualifications:** Do not alter or qualify tender documents without written consent. Tenders containing unauthorised alterations or qualifications may be rejected.

#### 220 Pricing of preliminaries

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1. **Charges:** When pricing Preliminaries, identify separately for each item where, for the purpose of valuing the work, the charge for that item is considered to be:
  - 1.1. **Fixed:** (i.e. where the charge for the item does not depend on duration).
  - 1.2. **Time related:** (i.e. where the charge for the item is dependent on duration).

#### 240 Pricing of performance specified work

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1. **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.
2. **Quantities:** Where provided, these are indicative only.



3. **Price:** Deemed to include for all costs. Errors in measurement or calculation will be the Contractor's responsibility.

## 250 Priced documents

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

## 310 Tender

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1. **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.

## 360 Priced activity schedule

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1. **Submit:** With tender

## 480 Programme

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1. **First programme of work:** prepare a summary showing the sequence and timing of the principal parts of the works, periods for planning and design, and itemising any work which is excluded.
2. **Submit:** with the tender

## 490 Information release schedule

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1. **Compatibility with programme:** At the same time as submitting the proposed programme or summary, confirm that it is compatible with the Information Release Schedule.
2. **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.

## 510 Alternative method tenders

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1. **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.
2. **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.
3. **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.
4. **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.
5. **Submit:** With tender

## 515 Alternative time tenders

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1. **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.
2. **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.

### 530 Substitute products

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1. **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.
2. **Compliance:** Substitutions accepted will be subject to the verification requirements of clause A31/200.

### Subletting/ supply - No Amendments

Ω End of Section

## A31

# Provision, content and use of documents

## Definitions and interpretations

### 110 Definitions

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1. **Meaning:** Terms, derived terms and synonyms used in the preliminaries/ general conditions and specification are as stated here or in the appropriate referenced document.

### 120 Communication

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

### 130 Products

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

### 135 Site equipment

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1. **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.
2. **Includes:** Construction appliances, vehicles, consumables, tools, temporary works, scaffolding, cabins and other site facilities.
3. **Excludes:** Products and equipment or anything intended to form or forming part of the permanent works.

### 140 Drawings

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1. **Definitions:** To BSRIA BG 6, 'A design framework for building services: Design activities and drawing definitions'.
2. **CAD data:** In accordance with ISO 19650.

### 145 Contractor's choice

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

### 150 Contractor's Design

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1. **Meaning:** Design to be carried out or completed by the Contractor and supported by appropriate contractual arrangements, to correspond with specified requirements.

### 155 Submit proposals

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1. **Meaning:** Submit information in response to specified requirements.

### 160 Terms used in specification

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1. **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 removal and disposal of associated pipework, wiring, ductwork or other services.

2. **Remediate:** Action or measures taken to lessen, clean up, remove or mitigate the existence of hazardous materials; in accordance with standards, or requirements as may be set out by statutes, rules, regulations or specification.
3. **Fix:** Receive, unload, handle, store, protect, place and fasten in position; dispose of waste and surplus packaging. To include all labour, materials and site equipment for that purpose.
4. **Supply and fix:** As above, but including supply of products, components or systems to be fixed, together with everything necessary for their fixing. All products, components or systems are to be supplied and fixed unless stated otherwise.
5. **Keep for reuse:** Do not damage designated products or work. Clean off bedding and jointing materials. Stack neatly, protect adequately and store until required by the employer/ purchaser, or until required for use in the works as instructed.
6. **Keep for recycling:** As 'keep for reuse', but relates to a naturally occurring material rather than a manufactured product.
7. **Make good:** Execute local remedial work to designated work. Make secure, sound and neat. Excludes redecoration and/ or replacement.
8. **Replace:** Supply and fix new products matching those removed. Execute work to match original new state of that removed.
9. **Repair:** Execute remedial work to restore something to its original working state. Make secure, sound and neat. Excludes redecoration and/ or replacement.
10. **Refix:** Fix removed products.
11. **Ease:** Adjust moving parts of designated products, or work to achieve free movement and good fit in open and closed positions.
12. **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.
13. **System:** Equipment, accessories, controls, supports and ancillary items (including installation) necessary for that section of the work to function.

## 170 Manufacturer and product reference

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1. **Definition:** When used in this combination:
  - 1.1. **Manufacturer:** the person or legal entity under whose name or trademark the particular product, component or system is marketed
  - 1.2. **Product reference:** the proprietary brand name and/ or identifier by which the particular product, component or system is described.
2. **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

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1. **Products:** If an alternative product to that specified is proposed, obtain approval before ordering the product.
2. **Reasons:** Submit reasons for the proposed substitution.
3. **Documentation:** Submit relevant information, including:
  - 3.1. manufacturer and product reference;
  - 3.2. cost;
  - 3.3. availability;
  - 3.4. relevant standards;
  - 3.5. performance;
  - 3.6. function;
  - 3.7. compatibility of accessories;
  - 3.8. proposed revisions to drawings and specification;

- 3.9. compatibility with adjacent work;
- 3.10. appearance;
- 3.11. copy of warranty/ guarantee.
- 4. Alterations to adjacent work: If needed, advise scope, nature and cost.
- 5. Manufacturers' guarantees: If substitution is accepted, submit before ordering products.

## 210 Cross references

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

## 220 Referenced documents

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- 1. **Conflicts:** Specification prevails over referenced documents.

## 230 Equivalent products

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

## 240 Substitution of standards

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- 1. **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.
- 2. **Before ordering:** Submit notification of all such substitutions.
- 3. **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

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

## 260 Sizes

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- 1. **General dimensions:** Products are specified by their co-ordinating sizes.
- 2. **Timber:** Cross section dimensions shown on drawings are:
  - 2.1. Target sizes as defined in BS EN 336 for structural softwood and hardwood sections.
  - 2.2. Finished sizes for non-structural softwood or hardwood sawn and further processed sections.

## Documents provided on behalf of employer

### 410 Additional copies of drawings/ documents

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- 1. **Additional copies:** Issued free of charge.

### 440 Dimensions

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- 1. **Scaled dimensions:** Do not rely on.

## 460 The specification

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

## Documents provided by contractor/ subcontractors/ suppliers

### 510 Design and production information

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1. **Master programme:** Make reasonable allowance for completing design/ production information, submission (including information relevant to the CDM Regulations), comment, inspection, amendment, resubmission and reinspection.
2. **Design/ production information:** Submit two copies; one can be returned with comments. Ensure that any necessary amendments are made without delay
3. **Contractor's changes to employer's requirements:** Support any request for substitution with relevant information.
4. **Employer's amendments to employer's requirements:** If considered to involve a change which has not already been acknowledged, notify without delay (maximum period seven days) and do not proceed until instructed. Claims for extra cost, if made after it has been carried out, may not be allowed.
5. **Final version of design/ production information**
  - 5.1. **Format:** Electronic
  - 5.2. **Submit:** within one week of request

### 600 Contractor's Design information

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1. **General:** Complete the design and detailing of parts of the Works as specified.
2. **Provide**
  - 2.1. Production information based on the drawings, specification and other information.
  - 2.2. Liaison to ensure coordination of the work with related building elements and services.
3. **Master programme:** Make reasonable allowance for completing design/ production information, submission (including information relevant to the CDM Regulations), comment, inspection, amendment, resubmission and reinspection.
4. **Information required:**
  - 4.1. **Format:** Detailed design
  - 4.2. **Number of copies:** electronic
5. **Submit:** Within one week of request.

## Document/ data interchange - No Amendments

Ω End of Section

## A32 Management of the works

### Generally

#### 110 Supervision

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1. **General:** Accept responsibility for coordination, supervision and administration of the Works, including subcontracts.
2. **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

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1. **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

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1. **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/ client, the person administering the Contract on their behalf and the Insurers.
2. **Failure to notify:** Indemnify the employer/ client against any loss, which may be caused by failure to give such notice.

#### 140 Climatic conditions

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

#### 150 Ownership

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1. **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

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1. **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:
  - 1.1. Design, production information and proposals provided by the contractor/ subcontractors/ suppliers, including inspection and checking (see section A31).
  - 1.2. Planning and mobilization by the contractor.
  - 1.3. Earliest and latest start and finish dates for each activity and identify all critical activities.
  - 1.4. Running in, adjustment, commissioning and testing of all engineering services and installations
  - 1.5. Work resulting from instructions issued in regard to the expenditure of provisional sums (see section A54)
  - 1.6. 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.

2. **Exclusions:** Where and to the extent that the programme implications for work which is not so defined are impossible to assess, exclude it and confirm this when submitting the programme.
3. **Further information:** Submission of programme will not relieve the contractor of responsibility to advise of the need for further drawings or details or instructions in accordance with the contract.
4. Submit one copy.

## **215 Revised Programme**

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1. **Format and content:** Compatible with master programme.
2. **Revised programme interval:** Described in the contract data part one.
3. **Number of copies:** one
4. **Special requirements:** N/A

## **230 Submission of programme**

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1. **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.

## **255 Notification of compensation event**

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1. **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**

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1. **General:** Site meetings will be held to review progress and other matters arising from administration of the Contract.
2. **Frequency:** Every month
3. **Location:** on-site
4. **Accommodation:** Ensure availability at the time of such meetings.
5. **Attendees:** Attend meetings and inform subcontractors and suppliers when their presence is required.
6. **Chairperson (who will also take and distribute minutes):** Project Manager

## **265 Contractor's progress report**

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1. **Content:** Notwithstanding the Contractor's obligations under the Contract the report must include:
  - 1.1. A progress statement by reference to the master programme for the Works.
  - 1.2. Details of any matters materially affecting the regular progress of the Works.
  - 1.3. Subcontractors' and suppliers' progress reports.
  - 1.4. Any requirements for further drawings or details or instructions.

## **270 Contractor's site meetings**

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1. **General:** Hold meetings with appropriate subcontractors and suppliers shortly before main site meetings to facilitate accurate reporting of progress.

## **285 Early takeover**

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1. **Takeover of parts of the works:** As completed, provided that all necessary access, services and other associated facilities are also complete.

## **290 Notice of completion**

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1. **Requirement:** Give notice of the anticipated dates of completion of the whole or parts of the Works.



2. **Associated works:** Ensure necessary access, services and facilities are complete.
3. **Period of notice (minimum):**

### Control of cost

#### **420 Removal/ replacement of existing work**

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

#### **430 Quotations for proposed instructions or compensation events**

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1. **Include**
  - 1.1. A detailed breakdown of the cost including any allowance for direct loss and expense.
  - 1.2. Details of any additional resources required.
  - 1.3. Details of any adjustments to be made to the programme for the Works.
  - 1.4. Any other information as is reasonably necessary to fully assess the implications of issuing such an instruction.
2. **Inability to comply:** Inform immediately if it is not possible to comply with any of the above requirements.

Ω End of Section

## A33

# Quality standards/ control

### Standards of products and executions

#### 110 Incomplete documentation

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1. **General:** Where and to the extent that products or work are not fully documented, they are to be:
  - 1.1. Of a kind and standard appropriate to the nature and character of that part of the Works where they will be used.
  - 1.2. Suitable for the purposes stated or reasonably to be inferred from the project documents.
2. **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

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1. **Operatives:** Appropriately skilled and experienced for the type and quality of work.
2. **Registration:** With Construction Skills Certification Scheme.
3. **Verification:** When requested, operatives must produce evidence of skills/ qualifications.

#### 130 Quality of products

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

#### 135 Quality of execution

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

#### 140 Evidence of Compliance

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1. **Proprietary products:** Retain on site evidence that the proprietary product specified has been supplied.
2. **Performance specification:** Submit evidence of compliance, including test reports indicating:
  - 2.1. Properties tested.
  - 2.2. Pass/ fail criteria.
  - 2.3. Test methods and procedures.
  - 2.4. Test results.
  - 2.5. Identity of testing agency.
  - 2.6. Test dates and times.
  - 2.7. Identities of witnesses.
  - 2.8. Analysis of results.

## 150 Inspections

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

## 160 Related work

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1. **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:
  - 1.1. Appropriately complete.
  - 1.2. In accordance with the project documents.
  - 1.3. To a suitable standard.
  - 1.4. In a suitable condition to receive the new work.
2. **Preparatory work:** Ensure all necessary preparatory work has been carried out.

## 170 Manufacturer's recommendations/ instructions

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1. **General:** Comply with manufacturer's printed recommendations and instructions current on the date of the Invitation to tender.
2. **Exceptions:** Submit details of changes to recommendations or instructions.
3. **Execution:** Use ancillary products and accessories supplied or recommended by main product manufacturer.
4. **Products:** Comply with limitations, recommendations and requirements of relevant valid certificates.

## 180 Water for the works

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

## Samples/ approvals

### 210 Samples

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

### 220 Approval of products

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1. **Submissions, samples, inspections and tests:** Undertake or arrange to suit the Works programme.
2. **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.
3. **Complying sample:** Retain in good, clean condition on site. Remove when no longer required.

## 230 Approval of execution

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1. **Submissions, samples, inspections and tests:** Undertake or arrange to suit the Works programme.
2. **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.
3. **Complying sample:** Retain in good, clean condition on site. Remove when no longer required.

## Accuracy/ setting out generally

## 330 Appearance and fit

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

## Services generally

## 410 Services regulations

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1. **New or existing services:** Comply with the Byelaws or Regulations of the relevant Statutory Authority.

## 420 Water regulations/ byelaws notification

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1. **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.
2. **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

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

## 435 Electrical installation certificate

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

## 440 Gas, oil and solid fuel appliance installation certificate

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1. **Before the completion date stated in the Contract:** Submit a certificate stating:
  - 1.1. The address of the premises.
  - 1.2. A brief description of the new installation and/ or work carried out to an existing installation.
  - 1.3. Any special recommendations or instructions for the safe use and operation of appliances and flues.

- 1.4. The Contractor's name and address.
- 1.5. A statement that the installation complies with the appropriate safety, installation and use regulations.
- 1.6. The name, qualification and signature of the competent person responsible for checking compliance.
- 1.7. The date on which the installation was checked.
2. Certificate location:

#### **445 Service runs**

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1. **General:** Provide adequate space and support for services, including unobstructed routes and fixings.
2. **Ducts, chases and holes:** Form during construction rather than cut.
3. **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**

---

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

### **Supervision/ inspection/ defective work**

#### **510 Supervision**

---

1. **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.
2. **Evidence:** Submit, including details of the person proposed, their relevant skills training and knowledge; practical experience; qualifications; membership or registration with professional bodies; employment history, work related assessments and management structure.
3. **Submittal date:**
4. **Replacement:** Give maximum possible notice before changing person in charge or site agent.

#### **520 Coordination of engineering services**

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1. **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.
2. **Evidence:** Submit when requested CVs or other documentary evidence relating to the staff concerned.

#### **540 Defects in existing work**

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

#### **550 Access for inspection**

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1. **Removal:** Before removing scaffolding or other facilities for access, give notice of not less than one week.

## 560 Tests and inspections

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1. **Timing:** Agree and record dates and times of tests and inspections to enable all affected parties to be represented.
2. **Confirmation:** One working day prior to each such test or inspection. If sample or test is not ready, agree a new date and time.
3. **Records:** Submit a copy of test certificates and retain copies on site.

## 580 Continuity of thermal insulation

---

1. **Record and report:** Confirm that work to new, renovated or upgraded thermal elements has been carried out to conform to specification. Include:
  - 1.1. The address of the premises.
  - 1.2. The Contractor's name and address.
  - 1.3. The name, qualification and signature of the competent person responsible for checking compliance.
  - 1.4. The date on which the installation was checked.
2. **Submit:** Before completion of the Works.
3. **Copy:** To be lodged in the building manual.

## 610 Proposals for rectification of defective products/ executions

---

1. **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.
2. **Acceptability:** Such proposals may be unacceptable and contrary instructions may be issued.

## 620 Measures to establish acceptability

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1. **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:
  - 1.1. Will be at the expense of the Contractor.
  - 1.2. Will not be considered as grounds for revision of the completion date.

## 630 Quality control

---

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

## Work at or after completion

### 710 Work before completion

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1. **General:** Make good all damage consequent upon the Works.
2. **Temporary markings, coverings and protective wrappings:** Remove unless otherwise instructed.
3. **Cleaning:** Clean the Works thoroughly inside and out, including all accessible ducts and voids. Remove all splashes, deposits, efflorescence, rubbish and surplus materials.

4. **Cleaning materials and methods:** As recommended by manufacturers of products being cleaned, and must not damage or disfigure other materials or construction.
5. **COSHH dated data sheets:** Obtain for all materials used for cleaning and ensure they are used only as recommended by their manufacturers.
6. **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.
7. **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**

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1. **General:** Leave the Works secure with, where appropriate, all accesses closed and locked.
2. **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**

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1. **Remedial work:** Arrange access with Project Manager.
2. **Rectification:** Give reasonable notice for access to the various parts of the Works.
3. **Completion:** Notify when remedial works have been completed.

Ω End of Section

## A34 Security/ safety/ protection

### Security, health and safety

#### 110 Pre-construction information

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1. **Location:** Integral with the project Preliminaries, including but not restricted to the following sections:
  - 1.1. **Description of project:** Sections A10 and A11.
  - 1.2. **Client's consideration and management requirements:** Sections A12, A13 and A36.
  - 1.3. **Environmental restrictions and on-site risks:** Section A12, A35 and A34.
  - 1.4. **Significant design and construction hazards:** Section A34.
  - 1.5. **The health and safety file:** Section A37.

#### 140 Construction phase health and safety plan

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1. **Submission:** Present to the employer/ client no later than 2 weeks prior to commencement.
2. **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.
3. **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/ pre-construction information.

#### 150 Security

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

#### 170 Occupied premises

---

1. **Extent:** Existing buildings will be occupied and/ or used during the contract as follows: Buildings will remain in occupation.
2. **Works:** Carry out without undue inconvenience and nuisance and without danger to occupants and users.
3. **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.

#### 210 Safety provisions for site visits

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1. **Safety:** Submit details in advance of safety provisions and procedures (including those relating to materials, which may be deleterious), which will require their compliance when visiting the site.
2. **Protective clothing and/ or equipment:** Provide and maintain on site for visitors to the-site.

### Protect against the following

#### 360 Nuisance

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1. **Duty:** Prevent nuisance from smoke, dust, rubbish, vermin and other causes.
2. **Surface water:** Prevent hazardous build-up on-site, in excavations and to surrounding areas and roads.



### 370 Asbestos containing materials

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1. **Duty:** Report immediately any suspected materials discovered during execution of the works.
  - 1.1. Do not disturb.
  - 1.2. Agree methods for safe removal or encapsulation.

### 371 Dangerous or hazardous substances

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1. **Duty:** Report immediately suspected materials discovered during execution of the works.
  - 1.1. Do not disturb.
  - 1.2. Agree methods for safe removal or remediation.

### 380 Fire prevention

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1. **Duty:** Prevent personal injury or death, and damage to the Works or other property from fire.
2. **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').

### 410 Moisture

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1. **Wetness or dampness:** Prevent, where this may cause damage to the Works.
2. **Drying out:** Control humidity and the application of heat to prevent:
  - 2.1. Blistering and failure of adhesion.
  - 2.2. Damage due to trapped moisture.
  - 2.3. Excessive movement.

### 430 Waste

---

1. **Waste:** Includes rubbish, debris, spoil, containers and packaging, and surplus material requiring disposal.
2. **Requirement:** Minimize production and prevent accumulation of waste. Keep the site and works clean and tidy. Clean out voids and cavities in the construction before closing.
3. **Disposal:** Collect and store in suitable containers. Remove from site and dispose of in a safe and competent manner, as approved and directed by the waste regulation authority.
4. **Recyclable material:** Sort and dispose of at a materials recycling facility approved by the waste regulation authority.
5. **Documentation:** Retain on-site.

### 440 Electromagnetic interference

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1. **Duty:** Prevent excessive electromagnetic disturbance to apparatus outside the site.

### Protect the following

### 510 Existing services

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1. **Confirmation:** Notify all service authorities, statutory undertakers and/ or adjacent owners of proposed works not less than one week before commencing site operations.
2. **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.
3. **Work adjacent to services**
  - 3.1. Comply with service authority's/ statutory undertaker's recommendations.
  - 3.2. **Adequately protect, and prevent damage to services:** Do not interfere with their operation without consent of service authorities/ statutory undertakers or other owners.

4. Identifying services
  - 4.1. Below ground: Use signboards, giving type and depth;
  - 4.2. Overhead: Use headroom markers.
5. Damage to services: If any results from execution of the Works:
  - 5.1. Immediately give notice and notify appropriate service authority/ statutory undertaker.
  - 5.2. Make arrangements for the work to be made good without delay to the satisfaction of service authority/ statutory undertaker or other owner as appropriate.
  - 5.3. Any measures taken to deal with an emergency will not affect the extent of the Contractor's liability.
6. Marker tapes or protective covers: Replace, if disturbed during site operations, to service authority's/ statutory undertakers recommendations.

## 520 Roads and footpaths

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

## 555 Wildlife species and habitats

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1. General: Safeguard the following: .....
2. Protected habitats and species: Upon discovery immediately advise. Do not proceed until instruction is received.
3. Education: Ensure that employees and visitors to the site receive suitable instruction and awareness training.

## 570 Existing work

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

## 580 Building interiors

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

## 600 Existing furniture, fittings and equipment

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1. Protection: Prevent damage or move as necessary to enable the Works to be executed. Reinstate in original positions.
2. Extent: Before work in each room starts, the following will be removed:
  - 2.1. ....

## 630 Existing structures

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1. Duty: Check proposed methods of work for effects on adjacent structures inside and outside the site boundary.
2. Supports: During execution of the Works:
  - 2.1. 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.
  - 2.2. Do not remove until new work is strong enough to support existing structure.

- 2.3. Prevent overstressing of completed work when removing supports.
3. **Adjacent structures:** Monitor and immediately report excessive movement.
4. **Standard:** Comply with BS 5975 and BS EN 12812.

#### **640 Materials for recycling/ reuse**

---

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

Ω End of Section

## A36 Facilities/ temporary work/ services

### Generally - No Amendments

#### Accommodation

##### 230 Temporary accommodation

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1. Accommodation made available by the Employer: The following may be used for the duration of the Contract without charge provided that:
  - 1.1. It is used solely for the purposes of carrying out the Works.
  - 1.2. The use to which it is put does not involve undue risk of damage.
  - 1.3. Any temporary adaptations are approved by or on behalf of the Employer before being carried out.
  - 1.4. It is vacated on completion of the Works or determination of the Contract.
  - 1.5. When vacated, its condition is at least equivalent to its condition at the start of the Contract.
2. Description: Contractor able to use existing WC welfare facilities on site. Contractor to provide office/storage as required to undertake the works.
3. Available services and facilities: Toilet facilities.

#### Temporary works

##### 340 Name boards/ advertisements

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1. Name boards/ advertisements: Not permitted.

#### Services and facilities

##### 410 Lighting

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

##### 440 Mobile telephones

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1. Direct communication: As soon as practicable after the start on site:
  - 1.1. provide the Contractor's person in charge with a mobile telephone.
  - 1.2. pay all charges reasonably incurred.

Ω End of Section

## A37

# Operation/ maintenance of the finished works

## Generally

### 110 The building manual

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1. **Purpose:** The Manual is to be a comprehensive information source and guide for owners and users of the completed Works. It should provide an overview of the main design principles and describe key components and systems to enable proper understanding, efficient and safe operation and maintenance.
2. **Scope**
  - 2.1. **Part 1: General:** Content as clause 120.
  - 2.2. **Part 2: Fabric:** Content as clause 130.
  - 2.3. **Part 3: Services:** Content as clause 140.
  - 2.4. **Part 4: The Health and Safety File:** Content as clause 150.
  - 2.5. **Part 5: Building User Guide:** Content as clause 151.
3. **Responsibility:** The Building Manual is to be produced by the Contractor and must be complete no later than 2 weeks after Completion.
4. **Information provided by others:** Details: N/A.
5. **Compilation**
  - 5.1. Prepare all information for Contractor designed or performance specified work including as-built drawings.
  - 5.2. Obtain or prepare all other information to be included in the Manual.
6. **Reviewing the Manual:** Submit a complete draft. Amend in the light of any comments and resubmit. Do not proceed with production of the final copies until authorized.
7. **Final copies of the Manual**
  - 7.1. **Number of copies:** 2
  - 7.2. **Format:** Hard Copy and Electronic
  - 7.3. **Latest date for submission:** 2 weeks before the date for completion stated in the contract.
8. **As-built drawings and schedules**
  - 8.1. **Number of copies:** 2
  - 8.2. **Format:** Hard Copy and Electronic

### 115 The Health and Safety File

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1. **Responsibility:** the Principal Designer
2. **Content:** Obtain and provide the following information: O&M manual.
3. **Format:** Hard Copy and Electronic
4. **Delivery to:** Project Manager By (date): 2 weeks after Completion.

### 120 Content of the building manual part 1: General

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1. **Content:** Obtain and Provide the following, including all relevant details not included in other parts of the manual:
2. **Index:** list the constituent parts of the manual, together with their location in the document.
3. **The Works**
  - 3.1. Description of the buildings and facilities.
  - 3.2. Ownership and tenancy, where relevant

- 3.3. Health and Safety information – other than that specifically required by the Construction (Design and Management) Regulations.
4. The Contract
  - 4.1. Names and addresses and contact details of all significant consultants, contractors, subcontractors, suppliers and manufacturers.
  - 4.2. Overall design criteria.
  - 4.3. Environmental performance requirements
  - 4.4. Relevant authorities, consents and approvals.
  - 4.5. Third party certification, such as those made by “competent” persons in accordance with the Building Regulations
5. Operational requirements and constraints of a general nature
  - 5.1. Maintenance contracts and contractors.
  - 5.2. Fire safety strategy for the buildings and the site. Include drawings showing emergency escape and fire appliance routes, fire resisting doors location of emergency alarm and fire fighting systems, services, shut off valves switches, etc.
  - 5.3. Emergency procedures and contact details in case of emergency.
  - 5.4. Other specific requirements:
6. Description and location of other key documents.
7. Timescale for completion:

## **140 Content of the building manual part 3: Building services**

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1. **Content:** Obtain and Provide the following, including all relevant details not included in other parts of the manual:
2. Detailed design criteria and description of the systems, including
  - 2.1. Services capacity, loadings and restrictions
  - 2.2. Services instructions.
  - 2.3. Services log sheets.
  - 2.4. Manufacturers' instruction manuals and leaflets index.
  - 2.5. Fixtures, fittings and component schedule index.
3. Detailed description of methods and materials used.
4. As-built drawings for each system recording the construction, together with an index, including
  - 4.1. Diagrammatic drawings indicating principal items of plant, equipment and fittings
  - 4.2. Record drawings showing overall installation
  - 4.3. Schedules of plant, equipment, valves, etc. describing location, design performance and unique identification cross referenced to the record drawings.
  - 4.4. Identification of services – a legend for colour coded services.
5. Product details, including for each item of plant and equipment
  - 5.1. Name, address and contact details of the manufacturer.
  - 5.2. Catalogue number or reference
  - 5.3. Manufacturer's technical literature, including detailed operating and maintenance instructions.
  - 5.4. Information and guidance concerning dismantling, repair, renovation or decommissioning.
6. **Operation:** A description of the operation of each system, including:
  - 6.1. Starting up, operation and shutting down
  - 6.2. Control sequences
  - 6.3. Procedures for seasonal changeover

- 6.4. Procedures for diagnostics, troubleshooting and faultfinding.
7. Guarantees, warranties and maintenance agreements – obtain from manufacturers, suppliers and subcontractors.
8. Commissioning records and test certificates list for each item of plant, equipment, valves, etc. used in the installations – including
  - 8.1. Electrical circuit tests.
  - 8.2. Corrosion tests.
  - 8.3. Type tests.
  - 8.4. Work tests.
  - 8.5. Start and commissioning tests.
9. **Equipment settings:** Schedules of fixed and variable equipment settings established during commissioning.
10. **Preventative maintenance:** Recommendations for frequency and procedures to be adopted to ensure efficient operation of the systems
11. **Lubrication:** Schedules of all lubricated items
12. **Consumables:** A list of all consumable items and their source.
13. **Spares:** A list of recommended spares to be kept in stock, being those items subject to wear and tear or deterioration and which may involve an extended delivery time when replacements are required.
14. Emergency procedures for all systems, significant items of plant and equipment.
15. Annual maintenance summary chart.
16. **Other specific requirements:**
17. **Timescale for completion:**

## **160 Presentation of building manual**

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1. **Format:** A4 size, plastics covered, loose leaf, four ring binders with hard covers, each indexed, divided and appropriately cover titled.
2. **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.
3. **As-built drawings:** The main sets may form annexes to the Manual.

## **210 Information for commissioning of services**

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1. **General:** Submit relevant drawings and preliminary performance data to enable the building user's staff to familiarise themselves with the installation.
2. **Time of submission:** At commencement of commissioning.

## **220 Training**

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1. **Objective:** Before Completion, explain and demonstrate to designated maintenance staff the purpose, function and operation of the installations including items and procedures listed in the Building Manual.
2. **Level of training** General use of systems.
3. **Time allowance:** Include a minimum of two days.

Ω End of Section



Specification created using NBS Chorus