

A1 THE PROJECT GENERALLY

A10 PROJECT PARTICULARS

110 THE PROJECT: Boiler and Heating System Replacement Works
Contract: DFRA152
Name: As above
Nature: Installation of new boiler and heating system
Location: Glossop Fire Station, Whitfield Park, Glossop, Derbyshire
SK13 8LG
Timescale for completion of the construction work: 4 weeks

120 EMPLOYER:
Derbyshire Fire & Rescue Service
Old Hall
Burton Road
Littleover
Derby DE23 6EH

127 PRINCIPAL CONTRACTOR: TBA

141 CONTRACT ADMINISTRATOR: (hereinafter referred to as 'CA'):
Head of Property
Derbyshire Fire & Rescue Service
c/o Assets Department
Derbyshire Constabulary
Butterley Hall Tel: 0300 122 8934
Ripley
Derbyshire DE5 3RS

147 CDM-CO-ORDINATOR
Head of Property
Derbyshire Fire & Rescue Service
c/o Assets Department
Derbyshire Constabulary
Butterley Hall Tel: 0300 122 8934
Ripley
Derbyshire DE5 3RS

150 QUANTITY SURVEYOR:
Head of Property
Derbyshire Fire & Rescue Service
c/o Assets Department
Derbyshire Constabulary
Butterley Hall Tel: 0300 122 8934
Ripley
Derbyshire DE5 3RS

160 STRUCTURAL ENGINEER

N/A

161 MECHANICAL ENGINEER:
Engineering Services Design Ltd
22 Nicolas Street
Chester CH1 2NX

190 CLERK OF WORKS:
Head of Property
Derbyshire Fire & Rescue Service
c/o Assets Department
Derbyshire Constabulary
Butterley Hall
Ripley
Derbyshire DE5 3RS

Tel: 0300 122 8934

A11 TENDER AND CONTRACT DOCUMENTS

110 THE TENDER DRAWINGS are:
M2605(56)001
M2605(50)001
M2605(56)002
M2605(58)001
M2605(62)001

120 THE CONTRACT DRAWINGS will be the same as the tender drawings.

160 THE PRE-CONSTRUCTION INFORMATION is a separate document prepared by the CDM Co-Ordinator. And included with the tender documents.

A12 THE SITE/EXISTING BUILDINGS

110 THE SITE: : Glossop Fire Station, Whitfield Park, Glossop, Derbyshire
SK13 8LG

130 DEMOLITION. N/A

140 EXISTING MAINS/SERVICES:
• Drawings: N/A
• Information shown is indicative only N/A

160 SOILS AND GROUND WATER INFORMATION N/A.

170 SITE INVESTIGATION: N/A

171 SITE INVESTIGATION: N/A

- 185 HEALTH AND SAFETY FILE: An existing health and safety file is not available.
- 200 ACCESS TO THE SITE:
The site is to be accessed via driveway off A624 Charlestown Road
- 210 PARKING
Parking of the Contractors' and employees' vehicles will be restricted to the area of the site. Care should be taken to ensure parking of contractor's vehicles does not cause disruption to the adjoining owners and operational use of the site.
- 220 USE OF THE SITE:
- Do not use the site for any purpose other than carrying out the Works.
- 230 SURROUNDING LAND/BUILDING USES: Residential properties adjoin the site to the east. Woodland adjoins the site to the south and west.
- 240 RISKS TO HEALTH AND SAFETY:
- The nature and condition of the site/building cannot be fully and certainly ascertained before it is opened up. However the risks that are or may be present are detailed in the Pre-Construction Information.
 - The accuracy and sufficiency of this information is not guaranteed by the Employer or the CA and the Contractor must ascertain if any additional information is required to ensure the safety of all persons and the Works.
 - 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.
- 280 SITE VISIT: Before tendering, ascertain the nature of the site, access thereto and all local conditions and restrictions likely to affect the execution of the Works.
- 290 SITE VISIT contact the Contract Administrator.
- 299 CONTRACT GUARANTEE BOND
The Contractor will be required to give security by a bond with a Bank or Insurance Company approved by the employer for a sum equal to one tenth of the amount of the Contract Sum for securing the due and completed performance of the Contract and of all obligations to which the Contractor may be liable under the terms of the Contract, or which the Employer may sustain about or concerning the Contract. The Bond is to remain in full (i.e. not a diminishing bond). The Bond will be terminated following the issue of the Architects Certificate of Practical Completion. The Contractor shall nominate the Bank or Insurance Company which will stand security of the Bond and is to insert this name and the premium required on the Form of Tender.

A13 DESCRIPTION OF THE WORK

- 110 PREPARATORY WORK BY OTHERS: Asbestos removal works
- 120 THE WORK – as described above
- 140 WORK BY OTHERS CONCURRENT WITH THE CONTRACT is described in section A50 of the tender documents. N/A
- 150 COMPLETION WORK BY OTHERS:

A20 THE CONTRACT

910 MINOR WORKS BUILDING CONTRACT WITH CONTRACTOR’S DESIGN: The form of contract will be the JCT Minor Works Building Contract with contractor’s design (MWD2011) 2011 Edition.

THE RECITALS

1st Recital

The work comprises
Architect/Contract Administrator: See section A10.
The reference to Architect will be deleted.

2nd Recital

The works include the design and construction of
1) Replacement Boilers and Heating system
2) N/A
3) N/A

3rd and 4th Recitals

The references to Specification will be deleted.
The references to Schedule of Rates will be deleted

THE ARTICLES

Article 3

Architect/Contract Administrator: See section A10. The reference to Architect will be deleted.

Article 4

CDM Co-Ordinator: See section A10.

Article 5

Article 6

Article 7

Arbitration: Article 7 will be deleted.

Article 8

CONTRACT PARTICULARS

Fifth Recital and Schedule 2 (paragraphs 1.1, 1.2, 1.5, 1.6, 2.1 and 2.2)
Base Date – 10 days prior to the date of the return tenders

Fifth Recital and clause 4.2 – Construction Industry Scheme (CIS).
Employer at the base date is a ‘contractor’ for the purposes of the CIS.

Sixth Recital - CDM Regulations.
The project is not notifiable.

Seventh Recital – Framework Agreement
The Seventh Recital will be deleted.

Eighth Recital and Schedule 3 – Supplementary Provisions
Collaborative working - Paragraph 1 applies/does not apply.
Health and safety - Paragraph 2 applies/does not apply.
Cost savings and value improvements - Paragraph 3 applies/does not apply.
Sustainable development and environmental considerations - Paragraph 4 applies/does not apply.
Performance indicators and monitoring - Paragraph 5 applies/does not apply.
Notification and negotiation of disputes - Paragraph 6 does not apply.

Article 7 – Arbitration.
Article 7 and Schedule 1 will be deleted.

1.1 – CDM Planning Period
Shall mean the period of two weeks ending on the Date of Commencement.

2.3 – Date for Commencement of the Works.
The Date for Commencement of the Works will be Monday 19 September 2016

2.3 – Date for Completion.
The Date for Completion will be Friday 14 October 2016

2.9 – Liquidated Damages.
At the rate of £500 per week or part thereof.

2.11 – Rectification Period.
12 months from the date of practical completion.

4.3 – Percentage of the total value of works etc.
95 per cent.

4.4 – Percentage of the total amount to be paid to the Contractor.
97 ½ per cent.

4.8.1 – Supply of documentation for computation of amount to be finally certified.
Three months.

4.11 and Schedule 2 – Contribution, legal and tax charges.
This clause will be deleted.

4.11 and Schedule 2 (paragraph 13) – Percentage addition for Fluctuations Option.
This clause will be deleted.

5.3.2 – Contractor's insurance: injury to persons or property – insurance cover (for any one occurrence or series of occurrences arising out of one event).
£5,000,000.00

5.4A, 5.4B and 5.4C – Insurance of the Works etc. – alternative provisions
Clause 5.4A applies.

5.4A.1 and 5.4B.1.2. – Percentage to cover professional fees
15 per cent.

7.2 – Adjudication.
Nominator of Adjudicator will be the President or a Vice-President of
Chairman or a Vice-Chairman of the Royal Institution of Chartered
Surveyors.

Schedule 1 (paragraph 2.1) – Arbitration.
Schedule 1 will be deleted.

ATTESTATION: The Contract will be executed as a deed.

CONDITIONS:

Section 1 – Definitions and Interpretation.

Section 2 – Carrying out the Works.

Section 3 – Control of the Works.

Section 4 – Payment.
Clause 4.3, line 13; delete '14 days' and insert '28 days'
Clause 4.4, line 10; delete '14 days' and insert '28 days'.
Clause 4.8.2, line 1; delete '14 days' and insert '28 days'.
Clause 4.11 will be deleted.

Section 5 – Injury, Damage and Insurance.

Section 6 – Termination.

Section 7 – Settlement of Disputes.
Clause 7.3 will be deleted.

SCHEDULES

Schedule 1 – Arbitration
Schedule 1 will be deleted.

Schedule 2 – Fluctuations Option – Contribution, levy and tax changes
Schedule 2 will be deleted

Schedule 3 – Supplemental Provisions.

**A21 RACIAL DISCRIMINATION AND THE PROMOTION OF RACE
EQUALITY**

920 The contractor shall not:

- (a) discriminate directly or indirectly, or by way of victimisation or harassment, against any person on grounds of colour, race, nationality, or ethnic or national origins contrary to Part II (Discrimination in the Field of Employment) of the Race Relations Act 1976, as amended (The Act); and or
- (b) discriminate directly or indirectly or by way of victimisation or harassment against any person on grounds of colour, race, nationality, or ethnic or national origins contrary to Part III of the Act (Discrimination in Other Fields); and/or
- (c) contravene Part IV of the Act (Other unlawful Acts)

921 Where in connection with this Agreement the Contractor, its agents or subcontractors, or the Contractor staff are required to carry out work on the Authority’s premises or alongside the Authorities employees on any other premises, the contractor shall comply with the authorities own employment policy and codes of practice relating to racial discrimination and equal opportunities; copies are available for inspection from the Contract Administrator.

922 The contractor shall:

monitor the representation among Contractor Staff of persons of different racial groups (which shall mean groups classified as ‘ethnic groups’ in the most recent official census by the Office of National Statistics or successor body), having regard to the Authority’s procedures for monitoring representation among its own employees;

where it appears to the Contractor in relation to particular work of the Contractor staff, either that the Contractor Staff includes no members of a particular racial group doing that work or that members of that racial group are under-represented amongst Contractor staff doing that work in comparison to their representation in the Contractor Staff as a whole or in the population from which Contractor Staff are normally recruited, undertake the following actions as may be appropriate and reasonably practicable:

- (a) the placing and use of job advertisements to reach members of such racial groups and to encourage their applications;
- (b) the use of employment agencies and careers offices in areas where members of such racial groups live and work;
- (c) the promotion of recruitment and training schemes for school-leavers and/or unemployed persons intended to reach members of such racial groups; and
- (d) the provision of appropriate training and the encouragement of members of Contractor Staff from such racial groups to apply for promotion or transfer to do work in which such racial groups are under-represented.

- 923 Where the contractor commits a breach of Clauses 921 or 922 which amounts to a failure to meet Services Levels the provisions of clause 920 shall apply.
- 924 The Contractor shall notify the Contract Administrator forthwith in writing as soon as it becomes aware of any investigation of or proceedings brought against the Contractor under the Act.
- 925 Where any investigation is undertaken by a person or body empowered to conduct such investigation and/or proceedings are instituted in connection with any matter relating to the Contractor’s performance of this Agreement being in contravention of the Act, the Contractor will, free of charge:
- (a) provide any information requested in the timescale allotted;
 - (b) attend any meetings as required and permit Contractor staff to attend
 - (c) promptly allow access to and investigation of any documents or data deemed to be relevant;
 - (d) allow itself and any Contractor Staff to appear as witness in any ensuing proceedings; and
 - (e) cooperate fully and promptly in every way required by the person or body conducting such investigation during the course of that investigation.
- 926 Where any investigation is conducted or proceedings are brought under the act which arise directly or indirectly out of any act or omission of the Contractor, its agents or sub-contractors, or the Contractor Staff, and where there is a finding against the Contractor in such investigation or proceedings, the Contractor shall indemnify the Authority with respect to all its costs, charges and expenses (including legal and administrative expenses) arising out of or in connection with any such investigation or proceedings and such other financial redress to cover any payment the Authority may have been ordered or required to pay to a third party.
- 927 In the event that the contractor enters in to any Subcontract in connection with this Agreement, it shall impose obligations on its Subcontractors in terms substantially similar to those on it pursuant to this clause.

A30 TENDERING/SUBLETTING/SUPPLY

MAIN CONTRACT TENDERING

- 110 SCOPE: These conditions are supplementary to those stated in the invitation to tender and on the Form of Tender.
- 120 TENDERING PROCEDURE
- General: Comply with the provisions of JCT Tendering Practice Note 2012.
- 161 EXCLUSIONS: If the Contractor cannot tender for any part(s) of the work as defined in the tender documents the CA must be informed as soon as

possible, defining the relevant part(s) and stating the reasons for the inability to tender.

- 170 ACCEPTANCE OF TENDER: The Employer and the Employer's representatives:
- Offer no guarantee that the lowest or any tender will be recommended for acceptance or accepted.
 - Will not be responsible for any cost incurred in the preparation of any tender.
- 190 PERIOD OF VALIDITY: Tenders must remain open for consideration (unless previously withdrawn) for not less than 90 days from the date fixed for the submission or lodgement of tenders. Information on the date for possession/commencement is given in section A20.
- 315 PROJECTS WITHOUT QUANTITIES: 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.
- 320 PRICING OF WORK SCHEDULES: Alterations and qualifications to the works schedules must not be made without the written consent of the CA. Tenders containing unauthorised alterations or qualifications may be rejected. Costs relating to items in the work schedules, which are not priced, will be deemed to have been included elsewhere in the tender.
- 331 THE PRICED WORK SCHEDULES must be submitted within one week of request.
- 341 ERRORS IN THE PRICED DOCUMENTS
- Errors: JCT tendering Practice Note 2012, Alternative 1 paragraphs 66 and 67.
- 450 A SCHEDULE OF RATES (unpriced) is included with the tender documents. The Contractor may insert additional items. A fully priced copy must be submitted within one week of request.
- 517 ALTERNATIVE TIME TENDERS:
- In addition to and at the same time as tendering based upon the date or period specified in section A20, the Contractor may submit an alternative tender based upon a different date for completion or period.
 - 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.
- 535 SUBSTITUTE PRODUCTS: If the Contractor wishes to substitute products of different manufacture to those specified, details must be submitted with the tender giving reasons for each proposed substitution. Substitutions, which have not been notified at tender stage, may not be considered. Substitutions sanctioned by the CA will be subject to the verification requirements of clause A31/200.
- 551 HEALTH AND SAFETY INFORMATION: A statement must be submitted with the tender describing the organisation and resources which the

contractor proposes and undertakes to provide to safeguard the health and safety of operatives, including those of subcontractors and of any person who may be affected by the works, including:

- A copy of the contractors health and safety policy document, including risk assessments procedures.
- Accident and illness 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.

A31 PROVISION, CONTENT AND USE OF DOCUMENTS

DEFINITIONS AND INTERPRETATIONS

130 IN WRITING: When required to advise, notify, inform, instruct, agree, confirm, obtain information, obtain approval or obtain instructions do so in writing.

140 APPROVAL (and words derived therefrom) means the approval in writing of the CA unless specified otherwise.

145 SUBMIT (and words derived therefrom) means to the CA unless other instructed.

180 CROSS-REFERENCES TO THE SPECIFICATION:

- Where a numerical cross-reference to a specification section or clause is given on drawings or in any other document the Contractor must verify its accuracy by checking the remainder of the annotation or item description against the terminology used in the referred to section or clause.
- Where a numerical cross-reference is not given the relevant section(s) and clause(s) of the specification will apply, cross-reference thereto being by means of related terminology.
- Where a cross-reference for a particular type of work, feature, material or product is given, relevant clause(s) elsewhere in the referred to specification section dealing with general matters, ancillary products and workmanship also apply.
- The Contractor must, before proceeding, obtain clarification or instructions in relation to any discrepancy or ambiguity which may be discovered.

190 REFERENCED DOCUMENTS:

- Where and to the extent that this specification conflicts with referenced documents, this specification prevails.

200 SUBSTITUTION OF PRODUCTS:

- Where the substitution of a product different to that specified is permitted, before ordering the product inform the CA of the reasons for the substitution. When requested, submit for verification documentary evidence that the alternative product is equivalent in respect of material, safety, reliability, function, compatibility with adjacent construction, availability of compatible accessories and appearance. Submit certified English translations of any foreign language documents.

- Any proposal for use of an alternative product must also include proposals for substitution of compatible accessory products and variation of details as necessary, with evidence of equivalent durability, function and appearance of the construction as a whole.
 - If substitution is approved, and before ordering products, provide revised drawings, specification and manufacturer’s guarantees.
- 201 EQUIVALENT PRODUCTS: Wherever products are specified by proprietary name and the phrase 'or equivalent' is not included, it is to be deemed included.
- 220 CURRENCY OF DOCUMENTS:
- References to standards, type approval certificates, catalogues, codes of practice and the like are to the editions revisions, versions and amendments current at
 - References to BSI documents are to the versions and amendments listed in the BSI Standards Catalogue, including updates, current at May 2009
- 270 SIZES: Unless otherwise stated:
- Products are specified by their co-ordinating sizes.
 - Cross section dimensions of timber shown on drawings are nominal sizes before any required planing.
- 280 FIX ONLY means all labours in unloading, handling, storing and fixing in position, including use of all plant.
- 290 SUPPLY AND FIX: Unless stated otherwise all items given in the schedule of work and/or on the drawings are to be supplied and fixed complete.

TERMS USED IN REFURBISHMENT/ALTERATION

- 311 REMOVE means disconnect, dismantle as necessary and remove the stated element, work or component and all associated accessories, fastenings, supports, linings and bedding materials , and dispose of unwanted materials, It does not include removing associated pipework, wiring, ductwork or other services.
- 321 KEEP FOR REUSE means:
- During removal prevent damage to the stated components or materials, and clean off bedding and jointing materials.
 - Stack neatly, adequately protect and store until required by the Employer or for use in the Works as instructed.
- 331 REPLACE means:
- Remove the stated existing components, features and finishes.
 - Provide and fit in lieu new components, features or finishes which, unless specified otherwise, must match those which have been removed.
 - Make good as necessary.
- 341 REPAIR means carry out local remedial work to components, features and finishes as found in the existing building. Resecure or refix as necessary and leave in a sound and neat condition. It does not include:
- Replacement or components or parts of components

– Redecoration.

351 MAKE GOOD means carry out local remedial work to components, features and finishes which have been disturbed by other, previous work under this Contract and leave in a sound and neat condition. It does not include:

- Replacement of components or parts of components.
- Redecoration.

The meaning of the term shall not be limited by this definition where used in connection with the defects liability provisions of the Contract.

361 EASE means make minor adjustments to moving parts of the stated component to achieve good fit in both open and closed positions and ensure free movement in relation to fixed surrounds. Make good as necessary.

371 TO MATCH EXISTING means use products, materials and methods to match closely all visual characteristics and features of the existing work, with joints between existing and new work as inconspicuous as possible, all to approval of appearance.

DOCUMENTS PROVIDED ON BEHALF OF EMPLOYER

410 ADDITIONAL COPIES OF DRAWINGS: Two copies of drawings (not counting any certified copy of the Contract Drawings) will be issued to the Contractor free of charge. Additional copies will be issued on request but will be charged to the Contractor.

430 ADDITIONAL COPIES OF WORK SCHEDULES: After execution of the Contract, two copies of the Work Schedules will be issued to the Contractor in accordance with the Contract. Additional copies will be issued on request, if available, but will be charged to the Contractor.

440 DIMENSIONS: The accuracy of dimensions scaled from the drawings is not guaranteed. Obtain from the CA any dimensions required but not given in figures on the drawings nor calculable from figures on the drawings.

460 THE SPECIFICATION: All sections of the specification must be read in conjunction with Main Contract Preliminaries/General conditions.

DOCUMENTS PROVIDED BY CONTRACTOR

711 TECHNICAL LITERATURE: The Contractor is required to keep copies of the following on site, readily accessible for reference by all supervisory personnel:

- Manufacturers' current literature relating to all products to be used in the Works.

720 MAINTENANCE INSTRUCTIONS AND GUARANTEES:

- Retain copies delivered with components and equipment (failing which, obtain), register with manufacturer as necessary and hand over to CA on or before Practical Completion.
- Notify CA of telephone numbers for emergency services by Sub-Contractors after completion.

A32 MANAGEMENT OF THE WORKS

- 115 CONSIDERATE CONSTRUCTORS SCHEME:
- Registration: Before starting work register the site and pay the appropriate fee:
 - Address: Considerate Constructors Scheme Office, P O Box 75, Great Amwell, Ware, Hertfordshire. SG12 9UY
 - Tel. 01992 550050
 - Fax. 01992 550041
 - Web. www.ccscheme.org.uk
 - E-mail. enquiries@ccscheme.org.uk
 - Standard: Comply with the scheme's Code of Considerate Practice.
- 120 INSURANCES: Before starting work on site submit documentary evidence and/or policies and receipts for the insurance required by the Conditions of Contract.
- 130 INSURANCE CLAIMS: If any event occurs which may give rise to any claim or proceeding in respect of loss or damage to the Works or injury or damage to persons or property arising out of the Works, forthwith give notice in writing to the Employer, the CA and the Insurers. Indemnify the Employer against any loss which may be caused by failure to give such notice.
- 150 OWNERSHIP: Materials arising from the alteration work are to become the property of the Contractor except where otherwise stated. Remove from site as work proceeds.
- 212 PROGRAMME:
- As soon as possible and before starting work on site prepare in an approved form a master programme for the Works, which must make allowance for all:
 - Planning and mobilisation by the Contractor
 - Subcontractor's work
 - Running in, adjustment, commissioning and testing of all engineering services.
 - Work resulting from instructions issued in regard to the expenditure of provisional sums
 - Work by others concurrent with the Contract
- Submit 2No. copies to CA.
- 261 CA'S SITE MEETINGS:
- The CA will hold regular site meetings to review progress and other matters. Meetings will normally be held monthly.
 - Ensure the availability of accommodation at the time of such meetings.
 - The CA will chair the meetings and take and distribute minutes.
- 290 NOTICE OF COMPLETION: Give CA at least 2No. weeks notice of the anticipated dates of Practical Completion of the whole or parts of the Works.

- 410 CASH FLOW FORECAST: As soon as possible and before starting work on site submit to the CA a forecast showing the gross valuation of the Works at the date of each Interim Certificate throughout the Contract period and based upon the programme for the Works.
- 420 EXISTING WORK: The extent and location of renewal of existing work must be agreed, at least on a provisional basis, with the CA before the work is started. Remove existing work in ways which will reasonably minimise the amount of removal and renewal.
- 430 ESTIMATED COST OF VARIATIONS: If the CA issues details of a proposed instruction with a request for an estimate of cost, submit such an estimate without delay and in any case within 7 days.
- 440 MEASUREMENTS: Give reasonable notice to the Quantity Surveyor before covering up work which the Quantity Surveyor requires to be measured.
- 461 INTERIM VALUATIONS: At least 7 days before the established dates for interim valuations submit to the Quantity Surveyor details of amounts due under the Contract together with all necessary supporting information.

A33 QUALITY STANDARDS/CONTROL

MATERIALS AND WORK GENERALLY

- 110 GOOD PRACTICE: Where and to the extent that materials, products and workmanship are not fully detailed or specified they are to be:
- Of a standard appropriate to the Works and suitable for the functions stated in or reasonably to be inferred from the project documents, and
 - In accordance with relevant good building practice.
- 121 GENERAL QUALITY OF PRODUCTS:
- Products to be new unless otherwise specified.
 - For products specified to a British or European Standard obtain certificates of compliance from manufacturers when requested.
 - Where a choice of manufacturer or source of supply is allowed for any particular product, the whole quantity required to complete the work must be of the same type, manufacture and/or source unless otherwise approved. Produce written evidence of sources of supply when requested.
 - Ensure that the whole quantity of each product required to complete the work is of consistent kind, size, quality and overall appearance.
 - Where consistency of appearance is desirable ensure consistency of supply from the same source. Do not use different colour batches where they can be seen together.
 - If products are prone to deterioration or have a limited shelf life, order in suitable quantities to a programme and use in appropriate sequence. Do not use if there are any signs of deterioration, setting or other unsatisfactory condition.
- 131 PROPRIETARY PRODUCTS:

- Handle, store, prepare and use or fix each product in accordance with its manufacturer's current printed or written recommendations. Inform CA if these conflict with any other specified requirement. Submit copies when requested.
 - Ancillary products and accessories to be of a type recommended by the main product manufacturer, unless otherwise specified.
 - The tender will be deemed to be based on the products specified and recommendations on their use as described in the manufacturers' literature current at the date of tender.
 - Where British Board of Agrément certified products are used, comply with the limitations, recommendations and requirements of the relevant valid certificates.
- 141 CHECKING COMPLIANCE OF PRODUCTS: Check all documentation and the products themselves to ensure compliance with the project documents. Where different types of any product are specified, check to ensure that the correct type is being used in each location. In particular, check that:
- The sources, types, qualities, finishes and colours are correct, and match any approved samples.
 - All accessories and fixings, which should be supplied with the goods, have been supplied.
 - Sizes are correct. Where tolerances are critical, measure a sufficient quantity to ensure compliance.
 - The delivered quantities are correct, to ensure that shortages do not cause delays in the work.
 - The products are clean, undamaged and otherwise in good condition.
 - Products which have a limited shelf life are not out of date.
- 151 PROTECTION OF PRODUCTS:
- Prevent over-stressing, distortion and any other type of physical damage.
 - Keep clean and free from contamination. Prevent staining, chipping, scratching or other disfigurement, particularly of products exposed to view in the finished work.
 - Keep dry to prevent premature setting, moisture movement and similar defects. Where appropriate store off the ground and allow free air movement between stored products.
 - Prevent excessively high or low temperatures and rapid changes of temperature in the products.
 - Protect adequately from rain, damp, frost, sun and other elements as appropriate. Ensure that products are at a suitable temperature and moisture content at time of use.
 - Ensure that sheds and covers are of ample size, in good weatherproof condition and well secured.
 - Keep different types and grades of products separately and adequately identified.
 - Keep products in their original wrappings, packings or containers, until immediately before they are used. Wherever possible retain protective wrappings after fixing and until shortly before Practical Completion.
 - Ensure that protective measures are fully compatible with and not prejudicial to the products/materials.
- 161 SUITABILITY OF RELATED WORK AND CONDITIONS:

Provide all trades with necessary details of related types of work. Before starting each new type of work, ensure that:

- Previous work is appropriately complete, in accordance with the project documents, to a suitable standard and in a suitable condition to receive the new work.
- All necessary preparatory work has been carried out, including provision for services, openings, supports, fixings, damp proofing, priming and sealing.
- The environmental conditions are suitable, particularly that the building is suitably weather tight.

171 GENERAL QUALITY OF WORKMANSHIP:

- Operatives must be appropriately skilled and experienced for the type and quality of work.
- Take all necessary precautions to prevent damage to the work from frost, rain and other hazards.
- Inspect components and products carefully before fixing or using and reject any which are defective.
- Fix or lay securely, accurately and in alignment.
- Where not specified otherwise, select fixing and jointing methods and types, sizes and spacings of fastenings in compliance with section Z20. Fastenings to comply with relevant British Standards.
- Provide suitable packings at screwed and bolted fixing points to take up tolerances and prevent distortion. Do not overtighten.
- Adjust location and fixing of components and products so that joints which are to be finished with mortar or sealant or otherwise left open to view are even and regular.
- Ensure that all moving parts operate properly and freely. Do not cut, grind or plane prefinished components and products to remedy binding or poor fit without approval.

191 WATER FOR THE WORKS: If other than mains supply is proposed provide evidence of suitability.

SAMPLES/APPROVALS

211 SAMPLES: Where approval of a product is specified the requirement for approval relates a sample of the product and not the product as used in the Works. Do not confirm orders or use the product until approval of sample has been obtained. Retain approved sample in good, clean condition on site. Ensure that the product used in the Works matches the approved sample.

230 APPROVALS: Where and to the extent that products or work are specified to be approved or the CA instructs or requires that they are to be approved, the same must be supplied and executed to comply with all other requirements and in respect of the stated or implied characteristics either:

- To the express approval of the CA or
- To match a sample expressly approved by the CA as a standard for the purpose.

ACCURACY/SETTING OUT GENERALLY

- 321 SETTING OUT: Check the levels and dimensions of the site against those shown on the drawings, and record the results on a copy of the drawings. Notify CA in writing of any discrepancies and obtain instructions before proceeding.
- 322 SETTING OUT: Inform CA when overall setting out is complete and before commencing construction.
- 341 APPEARANCE AND FIT:
- Arrange the setting out, erection, juxtaposition of components and application of finishes to ensure satisfactory fit at junctions, no practically or visually unacceptable changes in plane, line or level and a true and regular finished appearance.
 - Wherever satisfactory accuracy, fit and/or appearance of the work are likely to be critical or difficult to achieve, obtain approval of proposals or of the appearance of the relevant aspects of the partially finished work as early as possible.
- 371 LEVELS OF STRUCTURAL FLOORS: Maximum tolerances for designed levels to be as follows:
- Floors which are to be self-finishes, and floors to receive sheet or tile finishes directly bedded in adhesive ± 10 mm.
 - Floors to receive dry board/panel construction with little or no tolerance on thickness: ± 10 mm.
 - Floors to receive fully bonded screeds/toppings/beds: ± 15 mm.
 - Floors to receive unbonded or floating screeds/beds: ± 20 mm.

SERVICES GENERALLY

- 410 SERVICES REGULATIONS: Any work carried out to or which affects new or existing services must be in accordance with the Bylaws or Regulations of the relevant Statutory Authority.
- 414 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.
- 415 WATER REGULATIONS/BYELAWS CONTRACTOR'S CERTIFICATE: On completion of the work, submit to the CA (and where required also 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.
- 417 GAS INSTALLATION CERTIFICATION: Hand over to the CA before Practical Completion a certificate stating:
- The address of the premises.
 - A brief description of the new installation and/or work carried out to an existing installation.
 - Any special recommendations or instructions for the safe use and operation of gas appliances and flues.
 - The Contractor's name and address.
 - A statement that the installation complies with the Gas Safety (Installation and Use) Regulations.
 - The name and signature of the CORGI registered individual responsible for checking compliance.
 - The date on which the installation was checked.
- 420 SERVICE RUNS: Make adequate provision for services, including unobstructed routes and fixings. Wherever possible ducts, chases and holes are to be formed during construction rather than cut.
- 440 MECHANICAL AND ELECTRICAL SERVICES must have final tests and commissioning carried out so that they are in full working order at Practical Completion.

SUPERVISION/INSPECTION/DEFECTIVE WORK

- 550 DEFECTS IN EXISTING CONSTRUCTION to be reported to CA without delay. Obtain instructions before proceeding with work that may:
- Cover up or otherwise hinder access to the defective construction, or
 - Be rendered abortive by the carrying out of remedial work.
- 560 TIMING OF TESTS AND INSPECTIONS: Agree dates and times of tests and inspections with CA several days in advance, to enable the CA and other affected parties to be present. On the previous working day to each such test or inspection confirm that the work or sample in question will be ready or, if not ready, agree a new date and time.
- 570 PROPOSALS FOR RECTIFICATION OF DEFECTIVE WORK/ PRODUCTS:
- As soon as possible after any part(s) of the work or any products are known to be not in accordance with the Contract, or appear that they may not be in accordance, submit proposals to CA for opening up, inspection, testing, making good, adjustment of the Contract Sum, or removal and re-execution.
 - Such proposals may be unacceptable to the CA, and he may issue contrary instructions.

WORK AT OR AFTER COMPLETION

- 611 **GENERALLY:**
- Make good all damage consequent upon the work.
 - Remove all temporary markings and protective coverings.
 - 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 to be as recommended by manufacturers of products being cleaned and to be such that there is no damage or disfigurement to other materials.
 - Obtain COSHH dated data sheets for all materials used for cleaning and ensure they are used only as recommended by their manufacturers.
 - Touch up minor faults in newly painted/repainted work, carefully matching colour. Repaint badly marked areas back to suitable breaks or junctions.
 - Adjust, ease and lubricate moving parts as necessary to ensure easy and efficient operation, including doors, windows, drawers, ironmongery, appliances, valves and controls.
- 640 **SECURITY AT COMPLETION:** Leave the Works secure with all accesses locked. Account for and adequately label all keys and hand over to Employer with itemised schedule, retaining duplicate schedule signed by Employer as a receipt.
- 650 **MAKING GOOD DEFECTS:** Make arrangements with the and give reasonable notice of the precise dates for access to the various parts of the Works for purposes of making good defects. Inform CA when remedial works to the various parts of the Works are completed.
- A34 SECURITY/HEALTH AND SAFETY**
- 110 **PRE-CONSTRUCTION INFORMATION**
- Location: Refer the Pre-Construction Information issued by the CDM Co-Ordinator and included with the tender documents.
- 140 **CONSTRUCTION PHASE HEALTH AND SAFETY PLAN**
- Submission: Present to the Employer (Client) not less than
 - 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 CDM Regulation 16.
 - Content: Develop the plan from and draw on the Outline Construction Phase Health and Safety Plan and the Pre-Construction Information.
- 150 **SECURITY**
- Protection: Adequately 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 unauthorised access to the site, the Works and adjoining property.
- 160 **STABILITY**
- Responsibility: Maintain the stability and structural integrity of the Works during the Contract.

- Design loads: Obtain details, support as necessary and prevent overloading.
- 170 OCCUPIED PREMISES
- Extent: Existing buildings will be occupied and/or used during the Contract as follows: by tenants
 - Works: Carry out without undue inconvenience and nuisance and without danger to occupants and users.
 - Overtime: If compliance with this clause requires certain operations to be carried out during overtime, and such overtime is not required for any other reason, the extra cost will be paid to the Contractor, provided that such overtime is authorised in advance.
- 210 EMPLOYER'S REPRESENTATIVE SITE VISITS
- 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.
 - Protective clothing and/or equipment: Provide on site for the Employer, the Employer's representatives and other visitors to the site.
- PROTECT AGAINST THE FOLLOWING:**
- 330 NOISE CONTROL
- Standard: Comply generally with the recommendations of BS 5228-1, clause 9.3 to minimize noise levels during the execution of the Works.
 - Equipment: Fit compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles.
 - Restrictions: Do not use:
 - Radios or other audio equipment or permit employees to use in ways or at times that may cause nuisance.
- 340 POLLUTION
- Prevention: Protect the site, the Works and the general environment including streams and waterways against pollution.
 - Contamination: If pollution occurs inform immediately, including the appropriate Authorities and provide relevant information.
- 350 PESTICIDES
- Use: Not permitted.
- 351 PESTICIDES:
- Use only where specified or approved, and then only suitable products as listed in the UK Pesticide Guide.
 - Where work is near water, drainage ditches or land drains, comply with MAFF 'Guidelines for the use of herbicides on weeds in or near water courses and lakes'.
 - Observe all precautions recommended by the manufacturer and remove containers from site immediately they have been emptied or are no longer required.
 - Operatives must hold a BASIS Certificate of Competence or work under supervision of a Certificate holder.

- 360 NUISANCE:
- Prevent nuisance from smoke, dust, rubbish, vermin and other causes.
 - Prevent hazardous build up of surface water on site, in excavations and to surrounding areas and roads.
- 370 ASBESTOS BASED MATERIALS: Report immediately any suspected materials discovered during execution of the works.
- Do not disturb.
 - Agree methods for safe removal or encapsulation.
- 380 FIRE PREVENTION: Prevent personal injury, death, and damage to the Works or other property from fire. Comply with Joint Code of Practice 'Fire Prevention on Construction Sites' published by the Building Employers Confederation and The Fire Protection Association ('The Joint Fire Code').
- 390 SMOKING ON SITE
- Duty: Not permitted.
- 400 BURNING ON SITE
- Burning on site: Not permitted.
- 410 MOISTURE
- Wetness or dampness: Prevent where this may cause damage to the Works.
 - Drying out: Control humidity and application of heat to prevent:
 - Blistering and failure of adhesion.
 - Damage due to trapped moisture.
 - Excessive movement.
- 420 INFECTED TIMBER
- Removal: Where instructed to remove timber affected by fungal/insect attack from the building, minimize the risk of infecting other parts of the building.
- 430 WASTE
- Includes: Rubbish, debris, spoil, containers and surplus material.
 - Minimize: Keep the site and Works clean and tidy.
 - Remove: Frequently and dispose off site in a safe and competent manner:
 - Non-hazardous material: In a manner approved by a Waste Regulation Authority.
 - Hazardous material: As directed by the Waste Regulation Authority and in accordance with relevant regulations.
 - Documentation: Retain on site.
 - Voids and cavities in the construction: Remove rubbish, dirt and residues before closing.
- 440 ELECTROMAGNETIC INTERFERENCE
- Duty: Prevent excessive electromagnetic disturbance to apparatus outside the site.

PROTECT THE FOLLOWING:

510 EXISTING SERVICES

- Notice: Notify all service authorities, statutory undertakers and/or adjacent owners of proposed works not less than one week before commencing site operations.
- Before starting work: Check and mark positions of mains/services. Where positions are not shown on drawings obtain relevant details from service authorities, statutory undertakers or other owners.
- Work adjacent to services:
 - Comply with service authorities'/statutory undertakers' 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.
 - If disturbed during site operations replace marker tapes or protective covers to service authority's/statutory undertaker's recommendations.
- 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.

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.

540 RETAINED TREES/SHRUBS/GRASSED AREAS

- Protection: Prevent damage and preserve, except those not required.
- Replacement: Mature trees and shrubs if uprooted, destroyed, or damaged beyond reasonable chance of survival in their original shape, as a consequence of the Contractor's negligence, must be replaced with those of a similar type and age at the Contractor's expense.

560 EXISTING FEATURES

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

570 EXISTING WORK

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

580 BUILDING INTERIORS

- Protection: Prevent exposure to weather during course of alteration work permitting execution to proceed.
- 600 EXISTING FURNITURE, FITTINGS AND EQUIPMENT
- Protection: Prevent damage or move as necessary to enable the Works to be executed. Reinstate in original positions.
 - Extent: Before work in each room starts the Employer will remove the following:
- 601 EXISTING FURNITURE, FITTINGS AND EQUIPMENT
- Protection: Prevent damage or move as necessary to enable the Works to be executed. Reinstate in original positions.
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- 610 ESPECIALLY VALUABLE/VULNERABLE ITEMS
- Protection: Ensure provision and maintenance of special protective measures to prevent damage to the following: Tenant fixtures and fittings
 - Method statement: Submit within one week of request describing special protection to be provided.
- 621 ADJOINING PROPERTY
- Precautions: Prevent trespass of work people and damage to adjoining property.
 - Permission: Obtain as necessary from owners if requiring to erect scaffolding on or otherwise use 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
- A35 SPECIFIC LIMITATIONS ON METHOD/SEQUENCE/TIMING**
- 140 ACCESS TO THE SITE: See section A12.
- 150 USE OF THE SITE: See section A12.
- 155 SCAFFOLDING: Ensure that standing scaffolding is erected early enough and/or dismantled late enough to suit the programmes of all subcontractors.

A36 FACILITIES/TEMPORARY WORK/SERVICES

- 110 LOCATIONS: Inform CA of the intended siting of all spoil heaps, temporary works and services.
- 120 MAINTAIN, alter, adapt and move temporary works and services as necessary. Remove when no longer required and make good.
- 270 ACCOMMODATION/LAND NOT INCLUDED IN THE SITE:
Use of N/A for the duration of the Contract without charge may be assumed by the Contractor, provided that:
- It is used solely for the purposes of carrying out the Works.
 - The use to which it is put must not involve undue risk of damage.
 - Any temporary adaptations must be approved by or on behalf of the Employer before being carried out.
 - It must be evacuated on completion of the Works or determination of the Contract.
 - When vacated, its condition must be at least equivalent to its condition at the start of the Contract.
- 281 EXISTING ACCOMMODATION: The existing properties may not be used as temporary accommodation.
- 361 NAME BOARD: Obtain approval for and provide a suitable temporary name board displaying:
- Title of project.
 - Name of Employer.
 - Names of Consultants as follows:
If the Contractor wishes, names of Contractor and Subcontractors.
- 410 LIGHTING: During finishing work and inspection provide temporary lighting, the intensity and direction of which closely resembles that provided by the permanent installation.
- 420 LIGHTING AND POWER: Electricity supply from the Employer's mains may be used for the Works as follows:
- 431 WATER for the Works will be supplied free of cost to the Contractor.
- 442 TELEPHONES: Provide as soon as practicable after the Date of Possession a joint temporary on site telephone for use by the Contractor, Subcontractors and those acting on behalf of the Employer. Make arrangements to ensure that incoming calls are answered reasonably promptly. Allow for the cost of a modest number of calls made by those acting on behalf of the Employer.
- 445 TELEPHONES: Provide as soon as practicable a means of direct telephone communication with the Contractor's person-in-charge.
- 461 TEMPERATURE AND HUMIDITY: The permanent heating installation may be used for drying out the Works and controlling temperature and humidity levels, but:
- The Employer does not undertake that it will be available.

- The Contractor must take responsibility for operation, maintenance and remedial work, and arrange supervision by and indemnification of the appropriate Subcontractors, and pay costs arising.
- 500 METER READINGS: Where charges for service supplies need to be apportioned ensure that meter readings are taken by relevant authority at possession and/or completion as appropriate. Ensure that copies of readings are supplied to interested parties.
- 511 THERMOMETER: Provide on site and maintain in accurate condition a maximum and minimum thermometer for measuring atmospheric shade temperature, in an approved location.

A37 OPERATION/MAINTENANCE OF THE FINISHED BUILDING

111 THE BUILDING MANUAL

- Purpose: The Building Manual (incorporating the Health and Safety File) is to be a comprehensive information source and guide for the Employer and end users providing a complete understanding of the building and its systems to enable efficient and safe operation and maintenance.
- Compilation:
 - Prepare and information for Contractor designed or performance specified work including as-built drawings.
 - Obtain or prepare all other information to be included in the Manual.
- Content: As clause 155.
- Presentation of Manual: As clause 160.
- Reviewing the Manual:
 - Review process: Submit a complete draft. Amend in the light of any comments and resubmit. Do not proceed with production of the final copies until authorized.
- Final copies of the Manual:
 - Number of copies: 2 paper and 4 electronic.
 - Latest date for submission: 1No. week before the date for completion stated in the contract.
- As-built drawings:
 - Number of copies: 2 paper and 4 electronic.

120 THE HEALTH AND SAFETY FILE

- Purpose: To provide information about the structure or materials used which might affect the health or safety of anyone if construction works (including cleaning, maintenance, alterations, refurbishment and demolition) are carried out.
- Contractor designed and performance specified work: Obtain or prepare the following and submit to the CDM-Co-Ordinator:
 - Details of key structural principles, including safe working floor and roof loads.
 - Details of construction methods and materials, including COSHH dated data sheets, which may present residual hazards.
 - General maintenance instructions including access provision and information about equipment provided for cleaning and maintaining the building fabric.
 - As-built drawings.

- Other information: Obtain or prepare the following and submit to the CDM-Co-Ordinator:
 - The nature, location and markings of utilities and services, including emergency and fire fighting.
 - Instructions for operation, maintenance, dismantling and removal of equipment and systems.
 - Details of hazards associated with the materials used in the construction.
 - Access requirements/restrictions.
- Copies of the File:
 - Number of copies: 2 paper and 4 electronic.
 - Latest date for submission: 1No. week before the date for completion stated in the contract.

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 the 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 within being detached from the rings.
- As-built drawings: The main sets may form annexes to the Manual.

