

**CHURCH OF ST MARY MAGDALENE,
WETHERSFIELD
SPECIFICATION FOR
NAVE AND NORTH AISLE ROOF REPAIRS**

JUNE 2019

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1. PRELIMINARIES/GENERAL CONDITIONS

Revised March 2019

A10 PROJECT PARTICULARS

110 THE PROJECT

- Name: Nave and North Aisle Roof Repairs
- Nature: Repairs/Alteration.
- Location: Address and Postcode
- Length of contract: State on tender form.

120 EMPLOYER (CLIENT)

- Name: **The PCC of St. Mary's Church**
- Address: **Hillfoot Cottage, Braintree Road, Wethersfield, BRAINTREE CM7 4BU**
- Contact: **Eve Newell**
- Telephone: **01371 850957**
- email: eve.newell@outlook.com

130 PRINCIPAL CONTRACTOR (CDM)

- Name: _____ .
- Address: _____ .
- Contact: _____ .
- Telephone: _____ .
- email: _____ .

140 PERSON EMPOWERED BY THE CONTRACT TO ACT ON BEHALF OF THE EMPLOYER

- Title: Architect.
- Name: **David Whymark.**
- Address: **Architecture & Conservation
The Studio, Stackwood Road, Polstead, COLCHESTER CO6 5BA**
- Contact: **David Whymark.**
- Telephone: **01473 827200.**
- email: info@suffolk-architects.com

150 PRINCIPAL DESIGNER CDM

- Name: **Safescope Ltd**
- Address: **Felaw Maltings, 44 Felaw Street, IPSWICH IP2 8SJ**
- Contact: **Khalid Bhutto**
- Telephone: **01473 407020**
- email: MCzechowska@safescope.com

A11 TENDER AND CONTRACT DOCUMENTS

110 TENDER DRAWINGS

- The tender drawings are:
 - 01 1:200 A1 Block Site Plan showing Drains
 - 02 1:100 A4 Nave roof heights from floor
 - 03 1:50 A2 Nave ceiling plan, photos key and old repairs
 - 04 1:50 A2 Nave and Aisle Roof Plan
 - 05 1:20 A2 Nave section and gutter and timber repair details
 - 06 1:50,20&10 A1 Nave section, plan and details
- Photos referenced on drawing 03 & 05

All the above will be sent electronically - and prints posted if requested.

120 CONTRACT DRAWINGS

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

- 160 PRECONSTRUCTION INFORMATION
- Format: The Preconstruction information is described in these preliminaries in Section A34. It refers to information given elsewhere in the preliminaries and other tender documents.
- 180 OTHER DOCUMENTS
- Inspection: Drawings and other documents relating to the Contract but not included in the tender documents may be seen by appointment during normal office hours at the office of Plume Library.
 - The documents include: Fire Alarm details etc.
- A12 THE SITE/ EXISTING BUILDINGS**
- 110 THE SITE
- Description: Churchyard.
- 140 EXISTING UTILITIES AND SERVICES
- Drawings: None.
- 170 SITE INVESTIGATION
- Report: Drawing showing drain routes.
- 180 HEALTH AND SAFETY FILE
- Availability for inspection: The Health and Safety File for the site/ building may be seen by appointment during normal office hours at:
 - Other documents: Electrical test Certificate of Compliance.
 - Arrangements for inspection: **Eve Newell**
- 200 ACCESS TO THE SITE
- Description: Pedestrian only at the north gate to be used for deliveries and any skip location.
 - Limitations: No vehicular access.
- 210 PARKING
- Restrictions on parking of the Contractor's and employees' vehicles:
- 220 USE OF THE SITE
- General: Do not use the site for any purpose other than carrying out the Works.
- 230 SURROUNDING LAND/ BUILDING USES
- General: Adjacent or nearby uses or activities are as follows:
 - Domestic gardens and rear yard access.
- 240 HEALTH AND SAFETY HAZARDS
- General: The nature and condition of the site/ building cannot be fully and certainly ascertained before it is opened up. However the following hazards are or may be present:
 - Asbestolux ceiling panels are marked.
 - Information: The accuracy and sufficiency of this information is not guaranteed. Ascertain if any additional information is required to ensure the safety of all persons and the Works.
 - Site staff: Draw to the attention of all personnel working on the site the nature of any possible contamination and the need to take appropriate precautionary measures.
- 250 SITE VISIT
- Assessment: Ascertain the nature of the site, access thereto and all local conditions and restrictions likely to affect the execution of the Works.
 - Arrangements for visit: **Eve Newell.**

A13 DESCRIPTION OF THE WORKS

110 PREPARATORY WORK BY OTHERS

- Works: Carried out under a separate contract and completed before the start of work on site for this contract.

120 THE WORKS

- Description: Repairs.

130 WORK BY OTHERS CONCURRENT WITH THE CONTRACT

- Description: Assumed none.

A20 JCT MINOR WORKS BUILDING CONTRACT (MW)

370 JCT MINOR WORKS BUILDING CONTRACT

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

THE RECITALS

First

THE WORKS AND THE CONTRACT ADMINISTRATOR

- The work comprises: Repairs.
- Architect/ Contract Administrator: See clause A10/140.

Second

CONTRACT DOCUMENTS

- Contract drawings: As listed in clause A11/120.
- Contract documents: The following have been prepared which show and describe the work to be done: This specification, drawings, schedule of work, Tender form and schedule of day work rates.

Third

PRICED DOCUMENTS

- Documents to be priced or provided by the Contractor: Include pricing all documents within the schedule of work, schedule of day rates and tender form.

THE ARTICLES

3

ARCHITECT/ CONTRACT ADMINISTRATOR

- Architect/ Contract Administrator: See clause A10/140.

4 and 5

PRINCIPAL DESIGNER/ PRINCIPAL CONTRACTOR

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

CONTRACT PARTICULARS

Fourth Recital and Schedule 2

BASE DATE

- Base date: **10 days before the return of tenders.**

Fourth Recital and clause 4.2

CONSTRUCTION INDUSTRY SCHEME (CIS)

- Employer at the Base Date **is not** a 'contractor' for the purposes of the CIS.

Fifth Recital

CDM REGULATIONS

- The project is notifiable.

Sixth Recital

FRAMEWORK AGREEMENT

- Framework agreement: **Does not apply.**
- Details:
 - Date: _____ .
 - Title: _____ .
 - Parties: _____ .

Seventh Recital and Schedule 3

SUPPLEMENTAL PROVISIONS

- Collaborative working: Supplemental Provision 1 **Does not apply.**
- Health and safety: Supplemental Provision 2 **Does not apply.**
- Cost savings and value improvements: Supplemental Provision 3 **Does not apply.**
- Sustainable development and environmental considerations: Supplemental Provision 4 **Does not apply.**
- Performance indicators and monitoring: Supplemental Provision 5 **Does not apply.**
- Notification and negotiation of disputes: Supplemental Provision 6 **Does not apply.** Where Supplemental Provision 6 applies, the respective nominees of the parties are:
 - Employer's nominee: _____ .
 - Contractor's nominee: _____ .
 - Or such replacement as each party may notify to the other from time to time.

Article 7

ARBITRATION

- Article 7 and Schedule 1 apply.

Clause 2.2

COMMENCEMENT AND COMPLETION

- Date for Commencement of the Works: _____ .
- Date for Completion: _____ .

Clause 2.8

LIQUIDATED DAMAGES

- At the rate of **£150 per week or pro rata thereto.**

Clause 2.10

RECTIFICATION PERIOD

- Period: **Six months** from the date of practical completion.

Clause 4.3

INTERIM PAYMENTS

- Interim Valuation Dates:
- The first Interim Valuation Date is: 2nd week.
- Thereafter at intervals of: 4 weeks.
- Payments due prior to practical completion:
- Percentage of total value of the work etc.: 95%.
- Payments becoming due on or after practical completion:
- Percentage of the total amount to be paid: 97.5%.

Clause 4.3 and 4.8

FLUCTUATIONS PROVISION

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

Clause 4.8.1

SUPPLY OF DOCUMENTATION FOR COMPUTATION OF AMOUNT TO BE FINALLY CERTIFIED

- Period: **Two weeks** from the date of practical completion.

Clause 5.3

CONTRACTOR'S PUBLIC LIABILITY INSURANCE – INJURY TO PERSONS OR PROPERTY

- The required level of cover for any one occurrence or series of occurrences arising out of one event:
 - Not less than: **£10,000,000**.

Clauses 5.4A, 5.4B and 5.4C

INSURANCE OF THE WORKS ETC – ALTERNATIVE PROVISIONS

- Clause **5.4B** applies.
 - Percentage to cover professional fees: **15%**.

Clauses 5.4A.1 and 5.4B.1.2

PERCENTAGE TO COVER PROFESSIONAL FEES

- Addition: **15%**

Clause 7.2

ADJUDICATION

- The Adjudicator is: **President or a Vice President of the Chartered Institute of Arbitrators**.
- Nominating body: **Chartered Institute of Arbitrators**.

Schedule 1 paragraph 2.1

ARBITRATION

- Appointor of Arbitrator (and of any replacement): President or a Vice president of the: **Chartered Institute of Arbitrators**.

THE CONDITIONS

SECTION 1: DEFINITIONS AND INTERPRETATION

1.4

RECKONING PERIODS OF DAYS

- Amendments: _____ .

1.8

APPLICABLE LAW

- Amendments: _____ .

SECTION 2: CARRYING OUT THE WORKS

SECTION 3: CONTROL OF THE WORKS

SECTION 4: PAYMENT

SECTION 5: INJURY, DAMAGE AND INSURANCE

SECTION 6: TERMINATION

SECTION 7: SETTLEMENT OF DISPUTES

JCT PUBLIC SECTOR SUPPLEMENT

- Document: The JCT Public Sector Supplement 2011 – Fair Payment, Transparency and Building Information Modelling.
- Fair Payment provisions: **Does not apply**.
- Transparency provisions: **Does not apply**.
- Building information modelling provisions: **Does not apply**.

EXECUTION

- The Contract: Will be executed **underhand**.

CONTRACT GUARANTEE BOND

- Contract Guarantee Bond: **None**.

A30 TENDERING/ SUBLETTING/ SUPPLY

MAIN CONTRACT TENDERING

110 SCOPE

- General: These conditions are supplementary to those stated in the invitation to tender and on the form of tender.

145 TENDERING PROCEDURE

- General: In accordance with the principles of JCT Practice Note 6 (Series 2) ‘Main Contract Tendering’.
- Arithmetical errors: **Alternative two is dominant**.

160 EXCLUSIONS

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

170 ACCEPTANCE OF TENDER

- Acceptance: No guarantee is offered that any tender will be recommended for acceptance or be accepted, or that reasons for non acceptance will be given.
- Costs: No liability is accepted for any cost incurred in the preparation of any tender.

PRICING/ SUBMISSION OF DOCUMENTS

210 PRELIMINARIES IN THE SPECIFICATION

- Measurement rules: Preliminaries/ General Conditions have been prepared in accordance with SMM7.

220 PRICING OF PRELIMINARIES

- 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:
 - Fixed (i.e. where the charge for the item does not depend on duration)
 - Time related (i.e. where the charge for the item does not depend on duration).

250 PRICED DOCUMENTS

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

310 TENDER

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

440 SCHEDULE OF RATES

- Content: **Day work rates and percentages to be fully priced.**
- Fully priced copy: **With the tender.**

500 TENDER STAGE METHOD STATEMENTS

- Method statements: Prepare, describing how and sequence of the following are to be carried out:
 - Ceiling and insulation removal. Raising of materials from ground level.
- Statements: Submit **with the tender.**

530 SUBSTITUTE PRODUCTS

- Details: If products of different manufacture to those specified are proposed, submit details with the tender giving reasons for each proposed substitution. Substitutions, which have not been notified at tender stage, may not be considered.
- Compliance: Substitutions accepted will be subject to the verification requirements of clause A31/200.

A31 PROVISION, CONTENT AND USE OF DOCUMENTS

DEFINITIONS AND INTERPRETATIONS

110 DEFINITIONS

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

120 COMMUNICATION

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

130 PRODUCTS

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

135 SITE EQUIPMENT

- Definition: Apparatus, appliances, machinery, vehicles or items of whatsoever nature required in or about the construction for the execution and completion of the Works but not materials or other items intended to form or forming part of the Permanent Works.
- Includes: Construction appliances, vehicles, consumables, tools, temporary works, scaffolding, cabins and other site facilities.
- Excludes: Products and equipment or anything intended to form or forming part of the permanent works.

140 DRAWINGS

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

145 CONTRACTOR'S CHOICE

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

150 CONTRACTOR'S DESIGN

- 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

- Meaning: Submit information in response to specified requirements.

160 TERMS USED IN SPECIFICATION

- Remove: Disconnect, dismantle as necessary and take out the designated products or work and associated accessories, fixings, supports, linings and bedding materials. Dispose of unwanted materials. Excludes taking out and disposing of associated pipework, wiring, ductwork or other services.
- Fix: Receive, unload, handle, store, protect, place and fasten in position and disposal of waste and surplus packaging including all labour, materials and site equipment for that purpose.
- Supply and fix: As above, but including supply or products to be fixed. All products to be supplied and fixed unless stated otherwise.

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

170 MANUFACTURER AND PRODUCT REFERENCE

- Definition: When used in this combination:
 - Manufacturer: the person or legal entity under whose name or trademark the particular product, component or system is marketed.
 - Product reference: the proprietary brand name and/ or identifier by which the particular product, component or system is described.
- Currency: References are to the particular product as specified in the manufacture's technical literature current on the date of the invitation to tender.

200 SUBSTITUTION OF PRODUCTS

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

210 CROSS REFERENCES

- Accuracy: Check remainder of the annotation or item description against the terminology used in the section or clause referred to.
- Related terminology: Where a numerical cross-reference is not given the relevant sections and clauses of the specification will apply.

- Relevant clauses: Clauses in the referred to specification section dealing with general matters, ancillary products and execution also apply.
- Discrepancy or ambiguity: Before proceeding, obtain clarification or instructions.

220 REFERENCED DOCUMENTS

- Conflicts: Specification prevails over referenced documents.

230 EQUIVALENT PRODUCTS

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

250 CURRENCY OF DOCUMENTS AND INFORMATION

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

260 SIZES

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

DOCUMENTS PROVIDED ON BEHALF OF EMPLOYER

410 ADDITIONAL COPIES OF DRAWINGS/ DOCUMENTS

- Copies: Two of each contract drawing and contract document will be issued free of charge (not counting any certified copies).
- Additional copies: Issued on request and charged to the Contractor.

440 DIMENSIONS

- Scaled dimensions: Do not rely on.

460 THE SPECIFICATION

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

A32 MANAGEMENT OF THE WORKS

GENERALLY

120 INSURANCE

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

130 INSURANCE CLAIMS

- Notice: If any event occurs which may give rise to any claim or proceeding in respect of loss or damage to the Works or injury or damage to persons or property arising out of the Works, immediately give notice to the Employer, the person administering the contract on their behalf and the Insurers.
- Failure to notify: Indemnify the Employer against any loss, which may be caused by failure to give such notice.

140 CLIMATIC CONDITIONS

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

150 OWNERSHIP

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

PROGRAMME/ PROGRESS

255 NOTIFICATION OF COMPENSATION EVENT

- Content: Notwithstanding the Contractor's obligations under the Contract, written notice must also be given of all other causes which apply concurrently.

290 NOTICE OF COMPLETION

- Requirement: Give notice of the anticipated dates of completion of the whole or parts of the Works.
- Associated works: Ensure necessary access, services and facilities are complete.
- Period of notice (minimum): **One week.**

310 EXTENSIONS OF TIME

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

CONTROL OF COST

420 REMOVAL/ REPLACEMENT OF EXISTING WORK

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

430 PROPOSED INSTRUCTIONS

- Estimates: If a proposed instruction requests an estimate of cost, submit without delay and in any case within seven days.

440 MEASUREMENT

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

450 DAYWORK VOUCHERS

- Before commencing work: Give reasonable notice to person countersigning daywork vouchers.
- Content: Before delivery, each voucher must be:
 - Referenced to the instruction under which the work is authorized.

- Signed by the Contractor's person in charge as evidence that the operatives' names, the time daily spent by each and the equipment and products employed are correct.
- Submit: **Weekly**.

460 INTERIM VALUATIONS

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

470 PRODUCTS NOT INCORPORATED INTO THE WORKS

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

475 PRODUCTS STORED OFF SITE

- Evidence of Title: Submit reasonable proof that the property in items stored off site to be included in valuations is vested in the Contractor.
- Include for products purchased from a supplier:
 - A copy of the contract of sale.
 - a written statement from the supplier that any conditions of the sale relating to the passing of property have been fulfilled and the products are not subject to any encumbrance or charge.
- Include for products purchased from a supplier by a subcontractor or manufactured or assembled by any subcontractor:
Copies of the subcontract with the subcontractor and a written statement from the subcontractor that any conditions relating to the passing of property have been fulfilled.

A33 QUALITY STANDARDS/ CONTROL

STANDARDS OF PRODUCTS AND EXECUTIONS

110 INCOMPLETE DOCUMENTATION

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

120 WORKMANSHIP SKILLS

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

130 QUALITY OF PRODUCTS

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

135 QUALITY OF EXECUTION

- Generally: Fix, apply, install or lay products securely, accurately, plumb, neatly and in alignment.
- Colour batching: Do not use different colour batches where they can be seen together.
- Dimensions: Check on-site dimensions.
- Finished work: Without defects, e.g. not damaged, disfigured, dirty, faulty, or out of tolerance.
- Location and fixing of products: Adjust joints open to view so they are even and regular.

140 EVIDENCE OF COMPLIANCE

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

150 INSPECTIONS

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

160 RELATED WORK

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

170 MANUFACTURER'S RECOMMENDATIONS/ INSTRUCTIONS

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

180 WATER FOR THE WORKS

- Mains supply: Clean and uncontaminated.

SAMPLES/ APPROVALS

210 SAMPLES

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

220 APPROVAL OF PRODUCTS

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

230 APPROVAL OF EXECUTION

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

ACCURACY/ SETTING OUT GENERALLY

320 SETTING OUT

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

330 APPEARANCE AND FIT

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

SERVICES GENERALLY

445 SERVICE RUNS

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

SUPERVISION/ INSPECTION/ DEFECTIVE WORK

525 ACCESS

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

530 OVERTIME WORKING

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

540 DEFECTS IN EXISTING WORK

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

560 TESTS AND INSPECTIONS

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

599 FREEDOM OF INFORMATION

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

610 PROPOSALS FOR RECTIFICATION OF DEFECTIVE PRODUCTS/ EXECUTIONS

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

WORK AT OR AFTER COMPLETION

710 WORK BEFORE COMPLETION

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

720 SECURITY AT COMPLETION

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

730 MAKING GOOD DEFECTS

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

A34 SECURITY/ SAFETY/ PROTECTION

SECURITY, HEALTH AND SAFETY

- 110 PRECONSTRUCTION INFORMATION
- Location: Integral with the project Preliminaries, including but not restricted to the following sections:
 - Description of project: Sections A10 and A11.
 - Client's consideration and management requirements: Sections A12, A13 and A36.
 - Environmental restrictions and on-site risks: Section A12, A35 and A34.
 - Significant design and construction hazards: Section A34.
 - The Health and Safety File: Section A37.
- 120 EXECUTION HAZARDS
- Common hazards: Not listed. Control by good management and site practice.
 - Significant hazards: The design of the project includes the following:
 - Hazard: Lead based paint on windows.
- 130 PRODUCT HAZARDS
- Hazardous substances: Site personnel levels must not exceed occupational exposure standards and maximum exposure limits stated in the current version of HSE document EH40: Workplace Exposure Limits.
 - Common hazards: Not listed. Control by good management and site practice.
 - Significant hazards: Specified construction materials include the following:
 - Hazard: No unusual hazards known.
- 140 CONSTRUCTION PHASE HEALTH AND SAFETY PLAN
- Submission: Present to the Employer Client no later than 14 days.
 - 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 Regulations.
 - Content: Develop the plan from and draw on the Outline Construction Phase Health and Safety Plan, clause A30/570, and the Pre-tender Health and Safety Plan/ Preconstruction information.
- 150 SECURITY
- Protection: Safeguard the site, the Works, products, materials, and any existing buildings affected by the Works from damage and theft.
 - Access: Take all reasonable precautions to prevent unauthorized access to the site, the Works and adjoining property.
- 152 CHURCHES IN USE:
- Ascertain times of weekly services - **None**
 - Allow for suspension of work during any weekday funerals.
 - No Sunday work permitted
 - Clean and clear the interior to allow services if safe to use by the public.
 - Clean and tidy ready for normal weekend use each Friday during work in the nave and chancel spaces, unless specified in the schedule:
- 160 STABILITY
- Responsibility: Maintain the stability and structural integrity of the Works and adjacent structures during the Contract.
 - Design loads: Obtain details, support as necessary and prevent overloading.
- 200 MOBILE TELEPHONES AND PORTABLE ELECTRONIC EQUIPMENT
- Restrictions on use:
 - Not in the church.
- 210 SAFETY PROVISIONS FOR 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 and maintain on site for other visitors to the site.

220 **WORKING PRECAUTIONS/ RESTRICTIONS**

- Hazardous areas: Operatives must take precautions as follows:
 - Work area: Churchyard – hidden vaults.

PROTECT AGAINST THE FOLLOWING

330 **NOISE AND VIBRATION**

- Standard: Comply with the recommendations of BS 5228-1, in particular clause 7.3, to minimize noise levels during the execution of the Works.
- Noise levels from the works: Maximum level: 50 dB(A) when measured from boundaries.
- 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:
 - Percussion tools and other noisy appliances.
 - Radios or other audio equipment or permit employees to use.

340 **POLLUTION**

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

350 **PESTICIDES**

- Use: Not permitted.

360 **NUISANCE**

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

370 **ASBESTOS CONTAINING MATERIALS**

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

371 **DANGEROUS OR HAZARDOUS SUBSTANCES**

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

375 **ANTIQUITIES**

- Duty: Report immediately any fossils, antiquities and other objects of interest or value discovered during execution of the works.
- Preservation: Keep objects in the exact position and condition in which they were found.

380 **FIRE PREVENTION**

- Duty: Prevent personal injury or death, and damage to the Works or other property from fire.
- Standard: Comply with Joint Code of Practice 'Fire Prevention on Construction Sites', published by Construction Industry Publications and The Fire Protection Association (The 'Joint Fire Code').

- 390 **SMOKING ON SITE**
- Smoking on site: Not permitted.
- 400 **BURNING ON SITE**
- Burning on site: Not permitted.
- 410 **MOISTURE**
- Wetness or dampness: Prevent, where this may cause damage to the Works.
- Drying out: Control humidity and the application of heat to prevent:
- Blistering and failure of adhesion.
- Damage due to trapped moisture.
- Excessive movement.
- 420 **INFECTED TIMBER/ CONTAMINATED MATERIALS**
- Removal: Where instructed to remove materials affected by fungal/ insect attack from the building, minimize the risk of infecting other parts of the building.
- Testing: Carry out and keep records of appropriate tests to demonstrate that hazards presented by concentrations of airborne particle, toxins and other micro organisms are within acceptable levels.
- 430 **WASTE**
- Includes: Rubbish, debris, spoil, surplus material, containers and packaging.
- General: Minimize production. Prevent accumulations. Keep the site and Works clean and tidy.
- Handling: Collect and store in suitable containers. Remove frequently and dispose off site in a safe and competent manner:
- Non-hazardous material: In a manner approved by the Waste Regulation Authority.
- Hazardous material: As directed by the Waste Regulation Authority and in accordance with relevant regulations.
- Recyclable material: Sort and dispose at a Materials Recycling Facility approved by the Waste Regulation Authority.
- Voids and cavities in the construction: Remove rubbish, dirt and residues before closing in.
- Waste transfer documentation: Retain on site.

PROTECT THE FOLLOWING

- 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.
- 530 **EXISTING TOPSOIL/ SUBSOIL**
- Duty: Prevent over compaction of existing topsoil and subsoil in those areas which may be damaged by construction traffic, parking of vehicles, temporary site accommodation or storage of materials and which will require reinstatement prior to completion of the Works.
- Protection: Before starting work submit proposals for protective measures.
- 540 **RETAINED TREES/ SHRUBS/ GRASSED AREAS**
- Protection: Preserve and prevent damage.
- 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.
- 555 **WILDLIFE SPECIES AND HABITATS**
- General: Safeguard the following: **Bats - see the report**

- Protected habitats and species: Upon discovery immediately advise. Do not proceed until instruction is received.
 - Education: Ensure employees and visitors to the site receive suitable instruction and awareness training.
- 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 work, structure or other property during the course of the work.
 - Removal: Minimum amount necessary.
 - Replacement work: To match existing.
- 580 BUILDING INTERIORS
- Protection: Prevent damage from exposure to the environment, including weather, flora, fauna, and other causes of material degradation during the course of the work.
- 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 following will be removed **by the PCC**:
 - All loose items.
- 625 ADJOINING PROPERTY RESTRICTIONS
- Precautions:
 - Prevent trespass of workpeople and take precautions to prevent damage to adjoining property.
 - Pay all charges.
 - Remove and make good on completion or when directed.
 - Damage: Bear cost of repairing damage arising from execution of the Works.
- 630 EXISTING STRUCTURES
- Duty: Check proposed methods of work for effects on adjacent structures inside and outside the site boundary.
 - Supports: During execution of the Works:
 - Provide and maintain all incidental shoring, strutting, needling and other supports as may be necessary to preserve stability of existing structures on the site or adjoining that may be endangered or affected by the Works.
 - Do not remove until new work is strong enough to support existing structure.
 - Prevent overstressing of completed work when removing supports.
 - Adjacent structures: Monitor and immediately report excessive movement.
 - Standard: Comply with BS 5975 and BS EN 12812.
- 640 MATERIALS FOR RECYCLING/ REUSE
- Duty: Sort and prevent damage to stated products or materials, clean off bedding and jointing materials and other contaminants.
 - Storage: Stack neatly and protect until required by the Employer or for use in the Works as instructed.
- A35 SPECIFIC LIMITATIONS ON METHOD/ SEQUENCE/ TIMING**
- 130 METHOD/ SEQUENCE OF WORK
- Specific Limitations: Include the following in the programme:
NB: The scaffold can abut but must not be fixed to the structure in any way.
- 160 USE OR DISPOSAL OF MATERIALS
- Specific limitations: None.

- 170 WORKING HOURS
- 7.30 am to 4.30 pm week days only.
Saturdays only by prior approval.

A36 FACILITIES/ TEMPORARY WORKS/ SERVICES

GENERALLY

- 110 SPOIL HEAPS, TEMPORARY WORKS AND SERVICES
- Location: Give notice of intended siting. **It is assumed the contractor will remove insulation on a daily basis, to prevent blowing away, but otherwise encapsulate prior to lowering from roofs.**
 - Maintenance: Alter, adapt and move as necessary. Remove when no longer required and make good.

ACCOMMODATION

- 230 TEMPORARY ACCOMMODATION
- Accommodation made available by the Employer: The following may be used for the duration of the Contract without charge provided that:
 - It is used solely for the purposes of carrying out the Works.
 - It is vacated on completion of the Works or determination of the Contract
 - When vacated, its condition is at least equivalent to its condition at the start of the Contract.
 - Description: Toilet in the church.
 - Available services and facilities: Free of charge.

- 231 TEMPORARY ACCOMMODATION SITE HOARDING AND COMPOUNDS
- Proposals for temporary accommodation and storage for the Works: Submit with tender preliminary proposals and exact locations two weeks prior to starting on site eg Pre-contract site meeting.
 - Details to be included: Type of accommodation and storage, its siting and the programme for site installation and removal.

- 280 EXISTING ACCOMMODATION
- Restrictions on use: Temporary accommodation is prohibited in the following:
 - Church .

TEMPORARY WORKS

- 310 ROADS
- Permanent roads, hard standings and footpaths on the site: The following may be used, subject to clause A34/520:
 - Details: Road.
 - Restrictions on use: Deliveries.

- 320 TEMPORARY WORKS
- Employer's Specific Requirements: Provide: Window covering.

- 340 NAME BOARDS/ ADVERTISEMENTS
- Name boards/ advertisements: Not permitted.

SERVICES AND FACILITIES

- 410 LIGHTING

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

420 LIGHTING AND POWER

- Supply: Electricity from the existing mains may be used for the Works as follows:
 - Metering: None.
 - Point of supply: Sockets on mains. Controls are in the tower.
 - Available capacity: Hand tools only.
 - Frequency: 50 Hz.
 - Phase: Single.
 - Current: Alternating.
- Continuity: The Employer will not be responsible for the consequences of failure or restriction in supply.

430 WATER

- Supply: The existing mains may be used for the Works as follows:
 - Metering: None.
 - Source: Mains.
 - Location of supply point: Kitchen/WC.
 - Conditions/ Restrictions: Control use avoid waste.
- Continuity: The Employer will not be responsible for the consequences of failure or restriction in supply.

440 TELEPHONES

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

530 BENEFICIAL USE OF INSTALLED SYSTEMS

- Permanent systems: Do not use for the Works.

550 THERMOMETERS

- General: Provide on site and maintain in accurate condition a maximum and minimum thermometer for measuring atmospheric shade temperature, in an approved location.

570 PERSONAL PROTECTIVE EQUIPMENT

- General: Provide for the sole use of those acting on behalf of the Employer/ Client, in sizes to be specified:
 - Safety helmets to BS EN 397, neither damaged nor time expired. Number required: 2.
 - High visibility waistcoats to BS EN ISO 20471 Class 2. Number required: 2.
 - Hand protection – to BS EN 388, 407, 420 or 511 as appropriate.

A37 OPERATION/ MAINTENANCE OF THE FINISHED WORKS

GENERALLY

115 HEALTH AND SAFETY INFORMATION

- Content: Obtain and provide the following information: List materials used.
- Format: A4 ring binder or electronic Word docx
- Deliver to: Safescope no later than: Two weeks from Practical completion.

2. PREAMBLES:

B1 SCAFFOLDING:

Refer to BS EN 12811-1:2003

Design in accordance with NASC Guidelines and TG20:08

01 DESCRIPTION:

- The works comprise the erection of a self supporting access scaffold to outside of the spire and any internal scaffolding required by the contractor. The sides of the spire must be free of scaffold hold backs etc as it is to be re-clad. The scaffold may be partially supported on the nave roof and walls, provided the loads are adequately spread.
- Upon completion the scaffold shall be used for access to the roof for inspection and repairs.
- This is a minimum and the contractor should extend this as necessary for their own requirements.
- The main contractor is to design and put forward proposals for the scaffold based on the parameter within the specification.

02 LOAD CLASS FOR NON-DESIGNED SCAFFOLDS:

- In accordance with NASC Guide Table 1: Load Classes for access and working scaffolds made from tube and fittings.
- 3 General purpose – Birdcage internally and outside access tower at the nave northeast corner by the chancel.

05 SURVEY:

- Before starting work carry out a survey and submit a report and method statement covering all relevant matters listed below and in Health and Safety guidance note HS(G)150:
- Condition of the fabric:
- Type of structure:
- Suitability of support:
- Identification and location of services to be protected:

10 METAL SCAFFOLDING:

- To BS 1139: Section 1.1: 1990; Part2: 1982; Section 2.1: 1991; Part 3: 1983; Part 4: 1982; Part 5 1990. All scaffolding and couplings to be hot dip galvanised.

15 TIMBER SCAFFOLD BOARDS:

- To BS 2482: 1981 re-issued with amendment 1990.

20 LADDERS:

- To BS 1129: 1982 and BS 2037: 1984. All ladders to be of new manufacture.

25 SCAFFOLD ERECTION AND MAINTENANCE:

- To BS 5973: 1990 and BS 5974: 1990 and all statutory regulations.

30 DESIGN:

- **The contractor is to put forward proposals** for the scaffold based on the parameters set out in this specification, with details of kentledge to resist wind lift.
- Details of the design of the proposal should be **submitted with the tender**.
- No putlogs or holdfasts will be inserted into or positioned nearer than 25mm, use plastic end caps throughout. Holdfasts may be fitted under the eaves of the spire.
- If required at the higher level, the scaffolder must allow for attendance for removing and replacing during the work – changes must not be made by others.

35 WIND LOADING:

- Not applicable for internal scaffold.
- For external scaffold to be in accordance with BS6399 Part 2 1997 Loading for Buildings: Code of Practice for Wind Loads.

40 PLATFORM LOADS:

- Shall be appropriate to the designation of the scaffold but not less than **2.0kN/m²**. Any two levels may be fully loaded at any one time. The contractor should allow for the worst condition.

45 LOADING ON EXISTING STRUCTURES:

- The scaffold may not gain lateral restraint from the building. Timber sole plates are required below each standard. All transoms are to be capped before assembly of the scaffold to avoid damage to the fabric of the church at points of contact.
- The contractor is to make his own assessment of any movement to the scaffold and design the restraint accordingly to prevent any scoring or damage to the fabric of the church.

50 SUPPORT STRUCTURE SCAFFOLD:

- The support structure of the scaffold should be concentrated as necessary to leave the area outside the west tower entrance as free as possible for access to the church and fire escape.

55 PLATFORMS:

- The scaffold must be boarded out for working at the inside walls for decoration and works to the roof timbers, windows. Around the exterior parapets hand rails will be required.

•

60 LADDERS:

- Provide ladder access for full height of scaffold at a minimum of two positions set as far apart as practicable and not so located to interfere with access to the building. Agree positions with the architect. The lowest to be removed when operatives are off site.

70 CLADDING/SECURITY:

- Enclose the outside scaffold in corrugated galvanised sheeting to 3.0m above ground level.

80 LIGHTNING PROTECTION:

- Provide full protection to the scaffold at earth termination rods in accordance with current British and European Standards.

F10 BRICK WALLING

10 RECLAIMED FACING BRICKWORK TO NORTH CLERESTORY WALL FLASHING

- Reclaimed bricks: Handmade red clay.
 - Condition: Sound, free from mortar, clean and reasonably free from cracks and chipped arrises and deleterious matter.
 - Supplier/ source: Bulmer Brick and Tile Company, Sudbury.
- Mortar: As section Z21.
 - Mix: 1:3 3.5NHL to graded fine to sharp red sands with stippled recessed joints to match existing.
- Bond: to match existing.
- Joints: to match existing wipe over with wet cotton rags to spread lichen spores when dry.

51 BASIC WORKMANSHIP

- Bond where not specified: As existing.
- Mortar joints: Fill all vertical joints. Lay bricks, solid and cellular blocks on a full bed.

55 FACEWORK

- Brick selection: Do not use units with damaged faces or arrises.
- Cut masonry units: Where cut faces or edges are exposed cut with table masonry saw.

90 CRACKED BRICKS IN EXISTING FACEWORK

- Replacement: Prior to repointing adjacent cracked joints, cut out and replace with matching sound bricks to approval.
- Jointing mortar: As section 10.

91 CRACKED JOINTS IN EXISTING FACEWORK WHICH IS NOT TO BE REPOINTED

- Crack width determining need for joint remedial work: 4mm.
- Preparation: Cut out joints to form a rectangular recess of 35mm depth. Clean and dampen joints sufficiently to control suction.
- Joint profile: To match existing.
- Repointing mortar: As 10.

95 REPOINTING

- Preparation: Cut out joints to form a rectangular recess of 15-20 mm depth. Clean and dampen joints sufficiently to control suction.
- Joint profile: As 10.
- Mortar: As 10.

G12 ISOLATED STRUCTURAL METAL MEMBERS

10 STEEL SECTIONS AND PLATE

- Section properties and dimensions: To BS 4-1, BS EN 10055, BS EN 10056 or BS EN 10210, as appropriate.
 - Steel: To BS EN 10025-2 or BS EN 10210-1, as appropriate.
 - Grade: Stainless steel S2 type 316 Austenitic.
 - Surface condition: Free from heavy pitting and rust, burrs, sharp edges and flame cutting dross.
- Cuts and holes: Accurate and neat.
- Welding: Metal arc method to BS EN 1011-2.
 - Welded joints: Fully fused, with mechanical properties not less than those of the parent metal.
 - Site welding: **Not permitted.**

20 SHOP PRIMING TO ANY SPECIFIED MILD STEEL ONLY

- Preparation: To BS EN ISO 12944-4. Remove fins, burrs, sharp edges and weld spatter, clean out crevices
 - Surface finish: Manually cleaned to BS EN ISO 8501-1, grade St 2.
 - Prepared surfaces: Keep in a dry atmosphere and apply first coating without delay.
- Priming:
 - Primer: One coat zinc phosphate modified alkyd, minimum dry film thickness 40 micrometres.
 - Application: To BS EN ISO 12944-7.

30 PROPRIETARY LIGHT STRAPPING AS MAY BE SPECIFIED ON SITE

- Manufacturer: Bat or similar.
 - Product reference: Restraint straps 30 x 5mm
- Finish as delivered: Stainless steel.
- Other requirements: Fix with stainless steel countersunk screws as directed.

35 BOLT ASSEMBLIES

- Manufacturer: Contractors choice.
 - Product reference: Stainless steel coach bolts and screws as may be directed on site.
 - Size: To be specified.
- Nuts and washers: Material grade and finish to suit bolts.

40 INSTALLATION

- Accuracy: Members positioned true to line and level using, if necessary, stainless steel packs of sufficient area to allow full transfer of loads to bearing surfaces.
- Fixing: Use 50mm washers under bolt heads and nuts.

G20 CARPENTRY

02 TIMBER PROCUREMENT

- Timber (including timber for wood based products): Obtained from well managed forests/ plantations in accordance with:
 - The laws governing forest management in the producer country or countries.
 - International agreements such as the Convention on International Trade in Endangered Species of wild fauna and flora (CITES).
- Documentation: Provide either:
 - Documentary evidence (which has been or can be independently verified) regarding the provenance of all timber supplied, or
 - Evidence that suppliers have adopted and are implementing a formal environmental purchasing policy for timber and wood based products.

08 HARDWOOD FOR TIMBER REPAIRS:

- 3 year air dried English Oak or matching existing species, as approved samples by CA
- Surface finish: Sawn.
- Treatment: Apply clear preservative to saw cuts. Apply paste (Wykabor 20 gel from Wykamol) to end grain before splice repairs.
See <http://www.wykamol.com/about-us/brochure/timber-treatments.html>
- Graded: Free of defect and decay, insect attack, sapwood, heartwood, shakes and as BS5756 for hardwoods., and fit for purpose. To be inspected by the Architect/Structural Engineer prior to use.

10 UNGRADED SOFTWOOD

- Quality of timber: Free from decay, insect attack (except pinhole borers) and with no knots wider than half the width of the section.
- Surface finish: Eased.
- Treatment: FR4 Protim as section Z12 and British Wood Preserving and Damp-proofing recommendations.

15 PLYWOOD DECKING

- Standard: To an approved national standard.
- Service class to BS EN 1995-1-1:
- Use class to BS EN335:
- Nominal thickness: 12mm
- Appearance class to BS EN 635: IV
- Bond quality to BS EN 314-2: Part 2 class 3.
- Finish: Sanded.
- Treatment: C 8 To NBS section Z12 and British Wood Preserving and Damp-proofing Association Commodity Specification.

30 SELECTION AND USE OF TIMBER

- Timber members damaged, crushed or split beyond the limits permitted by their grading: Do not use.

32 NOTCHES, HOLES AND JOINTS IN TIMBER

- Notches and holes: Position in relation to knots or other defects such that the strength of members will not be reduced.
- Scarf joints, finger joints and splice plates: Do not use without approval.

35 PROCESSING TREATED TIMBER

- Cutting and machining: Carry out as much as possible before treatment.
- Extensively processed timber: Retreat timber sawn lengthways, thickened, planed, ploughed, etc.
- Surfaces exposed by minor cutting/ drilling: Treat with two flood coats of a solution recommended by main treatment solution manufacturer.

40 MOISTURE CONTENT

- Moisture content of wood and wood based products at time of installation: Not more than:
 - Covered in generally unheated spaces: 24%.

43 BOLTED JOINTS

- Bolt spacings (minimum): To BS EN 1995-1-1, section 8.5.
- Holes for bolts: Located accurately and drilled to diameters as close as practical to the nominal bolt diameter and not more than 2 mm larger.
- Washers: Placed under bolt heads and nuts that would otherwise bear directly on timber. Use spring washers in locations which will be hidden or inaccessible.
- Bolt tightening: So that washers just bite the surface of the timber. Ensure that at least one complete thread protrudes from the nut.
 - Checking: At agreed regular intervals. Tighten as necessary.

50 ADDITIONAL SUPPORTS

- Provision: Position and fix additional studs, noggings and/ or battens to support edges of sheet materials, and wall/ floor/ ceiling mounted appliances, fixtures, etc. shown on drawings.
- Material properties: Timber to be of adequate size and have the same treatment as adjacent timber supports.

H71 LEAD FLASHINGS

35 HANGING FLASHINGS

- Lead:
 - Thickness: Code 5.
- Dimensions:
 - Lengths: Not more than 1500 mm.
 - End to end joints: Laps of not less than 100 mm.
 - Cover: Overlap to upstand not less than 75 mm.
- Fixing: Lead wedges (when stepped, wedge at every course).
 - Depth in wall: 35mm (min) with British Lead Mills "Leadmate" pointing.
 - Bottom edge: Clips.
 - Material: Lead 50mm wide.
 - Spacing: 500mm and laps.
- Roof membrane: Upstand 150mm minimum and adhered to substrate as manufacturers instructions.

60 MATERIALS AND WORKMANSHIP GENERALLY

- Lead production method:
 - Rolled, to BS EN 12588.
 - Identification: Colour marked for thickness/ code, weight and type.
- Workmanship standard: To BS 6915 and latest editions of 'Rolled lead sheet. The complete manual' published by the Lead Sheet Association.
- Fabrication and fixing: To provide a secure, free draining and weathertight installation.
- Marking out: Do not use scribes or other sharp instruments to mark out lead without approval.
- Solder: Do not use.
- Finished leadwork: Fully supported, adequately fixed to resist wind uplift but also able to accommodate thermal movement without distortion or stress.
- Patination oil: Apply smear coating to all visible lead, evenly in one direction and in dry conditions.

62 LEADWELDING

- In situ leadwelding: Not permitted.

80 CLIPS

- Material:
 - Lead clips: Cut from sheets of the same thickness/ code as sheet being secured.
 - Copper clips: Cut from 0.70 mm thick sheet to BS EN 1172, temper R220 (soft) or R240 (half hard) depending on position, dipped in solder if exposed to view.
 - Stainless steel: Cut from 0.38 mm sheet to BS EN 10088, grade 1.4301(304), terne coated if exposed to view.
- Dimensions:
 - Width: 50 mm where not continuous.
 - Length: To suit detail.
- Fixing clips: Secure each to substrate with either two screw or three nail fixings not more than 50 mm from edge of lead sheet. Use additional fixings where lead down stands exceed 75 mm.
- Fixing lead sheet: Welt clips around edges and turn over 25 mm.

83 WEDGE FIXING INTO JOINTS/ CHASES

- Joint/ chase: Rake out to a depth of not less than 25 mm.
- Lead: Dress into joint/ chase.
 - Fixing: Lead wedges at not more than 450 mm centres, at every change of direction and with at least two for each piece of lead.
- Sealant: British Lead Mills Leadmate.
 - Application: As section Z22.

J42 SINGLE LAYER POLYMERIC SHEET ROOF COVERINGS

10 WARM DECK ROOF COVERING TO NAVE AND NORTH AISLE WITH 20 YEAR GUARANTEE TO MATERIALS AND WORKMANSHIP

- Substrate: Oak boarding decking.
 - Preparation: Remove/drive under surface all hard materials and plane off sharp timber.
- Roof covering system: FleeceBack EPDM.
 - Manufacturer: Flex-R Ltd. www.rubberbond.co.uk enq@rubberbond.co.uk Tel: +44 (0)1494 448792
 - Fax: +44 (0)1494 858433. Opt 3 for technical Sandwood House, Hillbottom Road, Sands Industrial Estate, High Wycombe, Buckinghamshire HP12 4HJ.

Product reference: FleeceBack EPDM.

- Protection layer and air and vapour control layer: IKO PRO Breather membrane laid up slope and writing uppermost AND BLACK SIDE DOWN (AS SEEN THROUGH WIDE BOARD GAPS).
- 18mm OSB with staggered joints
- Insulation: Kingspan TR26 LPC/FM 1.2 X 2.4M BOARD SIZE.
Edges: Tapered softwood kerbs at parapet gutters.
Thickness: 70mm.
- 18mm OSB with staggered joints fixed through to rafters with M4 Timloc or similar hex hd screws countersunk into board with 10mm tolerance for insulation movement/subsidence.
- Waterproof membrane: FleeceBack EPDM.
Width: Roofers choice to minimize number of joints/maximum carrying weight for operatives.
Thickness: 2.54mm.
Colour: Grey.
- Accessories: 75mm Pressure sensitive secure tape /150mm Pressure Sensitive Cover Strip /225mm Pressure Sensitive Uncured tape /Pressure Sensitive Walkway pad /HP-250 Primer /Decking Adhesive /Bonding Adhesive /Water Cut Off Mastic /Termination bars /HP Fasteners /Insulation Plates /Angle roof drain /Anti Back Up Drain /Top Drain /Drip trim /Edge trim 75/ 150 /Wall trim /RB Fasteners /Paving Support discs

15 ROOFING GENERALLY

- Surfaces to be covered: Secure, clean, dry, smooth, free from frost, contaminants, voids and protrusions.
- Adverse weather: Do not lay membrane at temperatures below 5°C, in high winds, wet or damp conditions unless effective temporary cover is provided over working area.
- Unfinished areas of roof: Keep dry and protect edges of laid membrane from wind action.
- Completed coverings: Firmly attached, fully sealed, smooth, weather proof and free draining.

20 RENEWING EXISTING COVERINGS

- Areas to be renewed: Nave and North Aisle.
- Substrate: Oak boards - do not damage.
- Timing: Remove only sufficient coverings as will be renewed and made weathertight on same day.

25 TIMBER TRIMS, ETC.

- Quality: Planed. Free from wane, pitch pockets, decay and insect attack except ambrosia beetle damage.
- Moisture content at time of covering (maximum): 22%.
- Preservative treatment: as Z12.
- Fixing: Stainless steel screws at maximum 600 mm centres.

30 JOINTS IN RIGID BOARD SUBSTRATES

- Cover strip: Lay centrally over substrate joints before laying air and vapour control layers or coverings. Adhere to substrate with bonding compound along edges only.

35 LAYING AIR AND VAPOUR CONTROL LAYER

- Laying: Up slope to hide laps above rafters and staple in place for immediate rain protection.
- Side and head laps: 100mm.
- Upstands, kerbs and other penetrations: Enclose edges of insulation. Fully seal at abutment by bonding or taping.
- If lifted for repairs renew after final repairs inspection and approval.

40 LAYING WARM DECK ROOF INSULATION

- Setting out:
 - Long edges: Fully supported and running at right angles to rafters.
 - End edges: Adequately supported.
 - Joints: Butted together.
 - End joints: Staggered.
- Completion: Boards must be in good condition, well fitting and secure.

50 ADHESIVE BONDING OF WATERPROOF MEMBRANE

- Setting out: Horizontal east to west.
- Attachment: Fully bonded.
 - Do not wrinkle or stretch.
- Surface condition at completion: Fully sealed, smooth, weatherproof and free draining.

55 JOINTING OF WATERPROOF MEMBRANE

- Side and end joints:
 - Laps (minimum):
 - Preparation:
 - Sealing:
- Seam sealant: All above to manufacturers instructions – see attached product data sheet.
- Condition at completion: Fully sealed, smooth, weatherproof and free draining.

60 PERIMETER DETAILS

- General: Secure membrane at roof edge conditions, changes of plane, curb flashings, upstands to roof lights, etc.: with mechanical fasteners.
- Upstands, edge trims, drips, kerbs, etc:
- Reinforcing strip: Pressure Sensitive walkways and protection as recommended.
- Roof membrane: Terminate and secure in accordance with manufacturer's/ supplier's recommendations.

65 ROOF PENETRATIONS

- Roof membrane: None existing nor permitted.

M20 PLASTERED COATING

06 LIME PUTTY:SAND RENDER/HYDRAULIC LIME:SAND RENDER:

- Substrate: Masonry or stainless steel/wood lath
- Preparation: Clean surface and soak
Sand: To BS EN 13139
 - Grading: 0/2 or 0/4 (CP or MP); category 2 fines.
- Undercoat(s):
Mix: 1:3 Bleaklow or similar slaked lime/3.5NHL to graded fine to coarse sands
- Thickness (excluding keys and dubbing out): 25mm.
- Final coat: 1:3
Lime and sand as for undercoat.
- Finish: Wood float to match existing.

65 MIXING

- Render mortars (site-made):

- Batching: By volume using gauge boxes or buckets.
 - Mix proportions: Based on damp sand. Adjust for dry sand.
 - Mixes: Of uniform consistence and free from lumps.
- 67 COLD WEATHER
- Internal work: Take precautions to prevent damage to internal coatings when air temperature is below 3°C.
 - External work: Avoid when air temperature is at or below 5°C and falling or below 3°C and rising.
- 70 GENERAL WORKMANSHIP
- Preparation: Cut out cracks and all defective areas, then make good. Form and seal all holes for fastenings. Do not make any holes after coatings are applied.
 - Application: Thoroughly soak backgrounds. Joints in successive coats, if necessary, must be staggered by at least 100 mm and must not occur at angles. Patch all pinholes, breaks and thin areas before applying next coat. Scratch to form sound mechanical key.
 - Internal angles: After first coat form fillets of coating mix. After final coat form smooth round contours.
 - Finish with a wood float without drawing excessive laitance to the surface.
- 71 SUITABILITY OF SUBSTRATES
- General: Suitable to receive coatings. Sound, free from contamination and loose areas.
- 74 EXISTING DAMP AFFECTED PLASTER
- Plaster affected by damp: Remove to 300 mm beyond point reached by damp
 - Perished and salt contaminated masonry:
 - Mortar joints: Rake out.
 - Drying out substrates: Supply and maintain fans, not heat.
- 76 REMOVING DEFECTIVE EXISTING PLASTER
- Plaster for removal: Loose, hollow, soft, friable, badly cracked, affected by efflorescence or otherwise damaged.
 - Removing plaster: Cut back to a square, sound edge.
- 87 APPLICATION OF COATINGS
- General: Apply coatings firmly and achieve good adhesion.
 - Appearance of finished surfaces: Even and consistent. Free from rippling, hollows, ridges, cracks and crazing.
 - Accuracy: Follow existing plane with walls and reveals.
 - Drying out: Prevent excessively rapid or localized drying out.
 - Keying undercoats: Cross scratch plaster coatings and comb render coatings. Do not penetrate undercoat.
- 93 CURING AND DRYING OF RENDER COATINGS
- Curing: Keep each coat damp by covering with polyethylene sheet and/ or spraying with water.
 - Curing period (minimum): two weeks.
 - Drying: Allow each coat to dry thoroughly, with shrinkage substantially complete before applying next coat.
- 99 RENDER FINAL COAT – PLAIN FLOATED FINISH

- Finish: Even, open texture free from laitance.

M62 LIME WASHING

10 LIME WASH MADE ON SITE:

- Manufacturer: Slaked lime putty as Bleaklow or similar thinned to the consistency of milk with clean tap water and measured quantities of ground powder paint added to approved samples.
- Surface(s): Plaster.
Preparation: As clause 30.
- Additives: Add 1 teaspoon of Alum to 5 litres of lime wash at stair turrets etc to resist rubbing off on clothes.
- Initial coat(s): 1 mist coat on new render or plaster
- Finishing coats: 4 full coats applied with long bristle brush in many directions.
- Safety: Wear goggles and protective clothing - lime is caustic.

11 LIME WASH SUPPLIED (no added salt)

- Manufacturer: Ingilby Paints 01787 204181.
- Surface(s): As 10.
Preparation: As clause 30.
- Additives: None unless approved by manufacturer and CA.
- Initial coat(s): As 10.
- Finishing coats: As 10.

25 SURFACES NOT TO BE COATED:

- Stonework unless previously coated.
- Timbers unless previously coated.
- Wall paintings. Stop preparation if colour traces discovered and report to CA immediately.

30 PREPARATION GENERALLY:

- Comply with BS 8000:Part 12, Section 2 and additional requirements in this specification.
- When removing or partially removing coatings, use methods which will not damage the substrate or adjacent surfaces or adversely affect subsequent coatings.
- **CEASE WORK IF COLOUR TRACES DISCOVERED AND REPORT TO CA IMMEDIATELY.**
- Materials used in preparation to be types recommended by their manufacturers and the coating manufacturer for the situation and surfaces being prepared.
- Apply oil based stoppers/fillers after priming. Apply water based stoppers/fillers before priming unless recommended otherwise by manufacturer. Patch prime water based stoppers/fillers when applied after priming.
- Ensure that doors and opening windows, etc., are 'eased' as necessary before coating. Prime any resulting bare areas.

35 FIXTURES:

Before commencing work, remove the following fixtures and fittings, set aside and replace on completion:

All loose fittings, hanging pictures

41 MASONRY AND RENDERING PREPARATION

- Loose and flaking material: Remove.

43 PLASTER PREPARATION

- Nibs, trowel marks and plaster splashes: Scrape off.
- Over trowelled 'polished' areas: Provide suitable key.

Z11 PURPOSE MADE METALWORK

31 METAL PRODUCTS

- Grades of metals, section dimensions and properties: To the appropriate British Standards and suitable for the purpose.
- Fasteners: Generally, same metal as component, with matching coating and finish.

FABRICATION

50 PREPARATION FOR APPLICATION OF COATINGS

- General: Complete fabrication, and drill fixing holes before applying coatings.
- Paint, grease, flux, rust, burrs and sharp arrises: Remove.

51 FABRICATION GENERALLY

- Contact between dissimilar metals in components: Avoid.
- Finished components: Rigid and free from distortion, cracks, burrs and sharp arrises.
 - Moving parts: Free moving without binding.
- Corner junctions of identical sections: Mitre.
- Prefinished metals: Do not damage or alter appearance of finish.

52 COLD FORMED WORK

- Profiles: Accurate, with straight arrises.

53 WELDING AND BRAZING GENERALLY

- Surfaces to be joined: Clean thoroughly.
- Tack welds: Use only for temporary attachment.
- Joints: Fully bond parent and filler metal throughout with no inclusions, holes, porosity or cracks.
- Surfaces of materials that will be self-finished and visible in completed work: Protect from weld spatter.
- Flux residue, slag and weld spatter: Remove.

54 WELDING OF STEEL

- Method: Metal arc welding to BS EN 1011-1 and -2.

56 FINISHING WELDED AND BRAZED JOINTS VISIBLE IN COMPLETE WORK

- Butt joints: Smooth, and flush with adjacent surfaces.
- Fillet joints: Neat.
- Grinding: Grind smooth where indicated on drawings.

Z12 PRESERVATIVE TREATMENT

10 TREATMENT APPLICATION

- Timing: After cutting and machining timber, and before assembling components.
- Processor: Licensed by manufacturer of specified treatment solution.
- Certification: For each batch of timber provide a certificate of assurance that treatment has been carried out as specified.

20 COMMODITY SPECIFICATIONS

- Standard: Current edition of the Wood Protection Association (WPA) publication 'Industrial wood preservation specification and practice'.
- 25 PRESERVATIVE TREATMENT SOLUTION STRENGTHS/ TREATMENT CYCLES
- General: Select to achieve specified service life and to suit treatability of specified wood species.
- 40 ORGANIC SOLVENT PRESERVATIVE TREATMENT
- Solution:
 - Manufacturer: Wykamol .
 - Product reference: Plus.
- Z20 FIXINGS AND ADHESIVES**
- 10 FIXINGS AND FASTENERS GENERALLY
- Integrity of supported components: Select types, sizes, quantities and spacings of fixings, fasteners and packings to retain supported components without distortion or loss of support.
 - Components, substrates, fixings and fasteners of dissimilar metals: Isolate with washers or sleeves to avoid bimetallic corrosion.
 - General usage: To recommendations of fastener manufacturers and/ or manufacturers of components, products or materials fixed and fixed to.
 - Fixings: To be in straight lines, at regular centres.
- 25 FASTENER DURABILITY
- Materials: To have:
 - Bimetallic corrosion resistance appropriate to items being fixed.
 - Atmospheric corrosion resistance appropriate to fixing location.
 - Appearance: Submit samples on request.
- 30 FIXINGS THROUGH FINISHES
- Penetration of fasteners and plugs into substrate: To achieve a secure fixing.
- 35 PACKINGS
- Materials: Non-compressible, corrosion proof.
 - Area of packings: Sufficient to transfer loads.
- 40 CRAMP FIXINGS
- Fasteners: Fix cramps to frames with screws of same material as cramps.
 - Fixings in masonry work: Fully bed in mortar.
- 50 PELLETED COUNTERSUNK SCREW FIXINGS
- Finished level of countersunk screw heads: Minimum 6 mm below timber surface.
 - Pellets: Cut from matching timber, grain matched, glued in to full depth of hole.
 - Finished level of pellets: Flush with surface.
- 55 PLUGGED COUNTERSUNK SCREW FIXING
- Finished level of countersunk screw heads: Minimum 6 mm below timber surface.
 - Plugs: Glue in to full depth of hole.
 - Finished level of plugs: Projecting above surface.
- 60 APPLYING ADHESIVES
- Surfaces: Clean. Regularity and texture to suit bonding and gap filling characteristics of adhesive.

- Support and clamping during setting: Provide as necessary. Do not mark surfaces of or distort components being fixed.
- Finished adhesive joints: Fully bonded. Free of surplus adhesive.

Z21 MORTARS

10 MORTAR MIX PROPORTIONS and other particular requirements are specified in the schedule of works.

25 SAND FOR HYDRAULIC LIME:SAND MORTARS: Sampling, testing and quality requirements to BS 1200. Source/type of sand specified elsewhere.

45 HYDRAULIC LIME:

- Supplier: 1) Bulmer Brick and Tile Company
- 2) The Lime Centre, Sudbury

50 ADMIXTURES: To BS 4887. Do not use in mortar unless specified or approved. Do not use calcium chloride or any admixtures containing calcium chloride.

60 MAKING MORTAR:

- Measure materials accurately by volume using clean gauge boxes. Proportions of mixes are for dry sand; allow for bulking if sand is damp.
- Mix ingredients thoroughly to a consistence suitable for the work and free from lumps. Do not overmix mortars containing air entraining admixtures.
- Do not mix mortar when the air temperature is at or below 3°C.
- Use mortar within about two hours of mixing at normal temperatures. Do not use after the initial set has taken place and do not re-temper.
- Keep plant and banker boards clean at all times.

70 MAKING HYDRAULIC LIME:SAND MORTAR: Mix thoroughly, first in the dry state and then with water. Follow the lime manufacturer's recommendations for each stage of the mix. Add only sufficient water to produce a workable mix.

Z22 SEALANTS

PRODUCTS

31 JOINTS ABOVE COVER FLASHINGS

- Primer: Types recommended by sealant manufacturer.

EXECUTION

61 SUITABILITY OF JOINTS

- Pre-sealing checks:
 - Joint dimensions: Within limits specified for the sealant.
 - Substrate quality: Surfaces regular, undamaged and stable.
- Joints not fit to receive sealant: Shallow chases less than 35mm.

62 PREPARING JOINTS

- Surfaces to which sealant must adhere:
 - Remove temporary coatings, tapes, loosely adhering material, dust, oil, grease, surface water and contaminants that may affect bond.
 - Clean using materials and methods recommended by sealant manufacturer.
- Vulnerable surfaces adjacent to joints: Mask to prevent staining or smearing with primer or sealant.

- Backing strip and/ or bond breaker installation: Insert into joint to correct depth, without stretching or twisting, leaving no gaps.
- Protection: Keep joints clean and protect from damage until sealant is applied.

63 APPLYING SEALANTS

- Substrate: Dry (unless recommended otherwise) and unaffected by frost, ice or snow.
- Environmental conditions: Do not dry or raise temperature of joints by heating.
- Sealant application: Fill joints completely and neatly, ensuring firm adhesion to substrates.
- Sealant profiles:
 - Butt and lap joints: Slightly concave.
 - Fillet joints: Flat or slightly convex.
- Protection: Protect finished joints from contamination or damage until sealant has cured.