

## DAINTREE FARM, RAMSEY EXTENSION

Specification & Schedule of Works

for

Cambridgeshire County Council

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## 1.0 Project Particulars

- 1.0.1 THE PROJECT: Single storey extension including internal alterations and external works.
- 1.0.2 LOCATION: Daintree Farm, Daintree Road, Ramsey St Marys
- 1.0.3 EMPLOYER: Cambridgeshire County Council
- 1.0.4 ARCHITECTURAL TECHNOLOGIST (hereinafter referred to as 'CA'):

Studio 11 Architecture Kings Lynn Innovation Centre Innovation Drive Kings Lynn Norfolk

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## 1.1 Drawings

1.1.1 THE TENDER DRAWINGS:

521 Drawing Specification Notes 521.WD.01 Plans, Elevations and Section – Revision B 521.WD.02 Site and location Plan – Revision B 31221 - 1 to 7 31221-01A 31221-BS-0010-01

- 1.1.2 THE CONTRACT DRAWINGS: Will be the same as the tender drawings.
- 1.1.3 INSPECTION: Drawings and other documents relating to the Contract may be seen by appointment during normal office hours at the office of Studio 11 Architecture.

## 1.2 The Site/Existing Buildings

- 1.2.1 THE SITE: Daintree Farm, Daintree Road, Ramsey St Marys
- 1.2.2 EXISTING BUILDINGS ON/ADJACENT TO THE SITE: The existing structure is a 3 Bedroom bungalow with integral garage and conservatory.
- 1.2.3 EXISTING MAINS/SERVICES: The contractor is to evaluate and ascertain the position of existing services during his site visit. Record position on a drawing and provide a copy to the CA.
- 1.2.4 RISK TO HEALTH AND SAFETY: The nature and condition of the site/building cannot be fully and certainly ascertained before it is opened up. The contractor must ascertain for himself any information he may require to ensure the safety of all persons and the works.
- 1.2.5 SOILS AND GROUND WATER INFORMATION: The nature and condition of the soils cannot be fully and certainly ascertained before it is opened up. The contractor must

- ascertain for himself any information he may require to ensure the safety of all persons and the works.
- 1.2.6 SITE VISIT: May be made by appointment with the Employer. A site visit is recommended to ascertain the extent of the work.

## 1.3 Description of the Work

1.3.1 THE WORK: Single storey pitched roofed extension to Daintree Farm including internal alterations and external works to facilitate extension, including demolition of existing conservatory.

### 1.4 The Contract

1.4.1 THE CONTRACT: Minor Works Building Contract with Contractors Design 2016

## 2.0 Employers Requirements: Tendering/Subletting/Supply

## 2.1 Main Contract Tendering

- 2.1.1 TENDERING PROCEDURE: will be in accordance with the principles of the 'Code of Procedure for Single Stage Selective Tendering' 1996'.
- 2.1.2 EXCLUSIONS: If the contractor cannot tender for any part(s) of the work as defined in the tender documents he must inform the CA as soon as possible, defining the relevant part(s) and stating the reasons for his inability to tender.
- 2.1.3 ACCEPTANCE OF TENDER: The Employer and his 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.
- 2.1.4 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.
- 2.1.5 PERIOD OF VALIDITY: Tenders must remain open for consideration (unless previously withdrawn) for not less the **56** days from the date fixed for the submission or lodgement of tenders.

## 2.2 Pricing/Submission of Documents

- 2.2.1 QUANTITIES IN THE SPECIFICATION/ SCHEDULE OF WORKS:

  Where and to the extent that quantities are included in the specification, they have been prepared in accordance with SMM7 only where and to the extent stated.

  Where not so stated, the items, descriptions and measurements:
  - Must not be relied on as complying to SMM7
  - Must be priced taking account of the information given elsewhere in the tender documents, including for all associated and ancillary work shown or clearly apparent as being necessary for the complete and proper execution of the work.
- 2.2.2 SPECIFICATION/ SCHEDULE OF WORKS WITHOUT QUANTITIES: Where and to the extent that quantities are not included in the specification, 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.
- 2.2.3 PRICING OF SPECIFICATION: Alterations and qualifications to the specification must not be made without the written consent of the CA. Tenders containing such alterations or qualifications may be rejected. Costs relating to items in the specification which are not priced will be deemed to have been included elsewhere in the tender.
- 2.2.4 SCHELDULE OF RATES: A Schedule of Rates must be submitted on request. The schedule must include rates for all significant items of work.
- 2.2.5 PROGRAMME: The contractor must provide on request a proposed master programme or a summary thereof showing the sequence and timing of the principal parts of the works and itemizing any work which is excluded must be submitted at the pre contract meeting.
- 2.2.6 ALTERNATIVE TENDERS: In addition to and at the same time as his tender for the works as defined in the tender documents, the Contractor may, at his discretion, submit

alternative method(s) of construction for consideration. Alternatives which would involve significant changes to other work will not be considered.

- Such alternative(s) will be deemed to be alternative tender(s) and each must include a complete and precise statement of the effects on cost and programme.
- Full technical data for each such alternative must be submitted with the tender together with details of any consequential amendments to the design and/or construction of other parts of the works.

## 3.0 Employer's Requirements: Provision, Content and Use of Documents

## 3.1 Definitions and Interpretations

- 3.1.1 DEFINITIONS: The meaning of terms, derived terms and synonyms used in the preliminaries/general conditions and specification/ schedule of works is as defined below or in the appropriate British Standard or British Standard glossary.
- 3.1.2 CA: means the person nominated in the Contract as Contract Administrator or his authorised representative.
- 3.1.3 IN WRITING: When required to notify, inform, instruct, agree, confirm, obtain approval or obtain instructions do so in writing.
- 3.1.4 APPROVAL: (and words derived therefrom) means the approval in writing of the CA unless specified otherwise.
- 3.1.5 CROSS REFERENCES TO THE SPECIFICATION/SCHEDULE OF WORKS: Where a numerical cross-reference to a specification section or clause is given on drawings or in the bill of quantities or other pricing documents the Contractor must verify its accuracy by checking the remainder of the annotation or item description against the terminology used in the referred section or clause.

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 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 he may discover.

#### 3.2 British Standard Products

- 3.2.1 BRITISH STANDARD PRODUCTS: Where any Product is specified to comply with a British Standard it may be substituted by a product complying with a grade or category within a national standard of another Member State of the European Union or an international standard recognised in the UK specifying equivalent requirements and assurances in respect of material, safety, reliability, fitness for purpose and, where relevant, appearance. Notify the CA of all such substitutions in advance of ordering and provide documentary evidence confirming that the products comply with the specified requirements.
- 3.2.2 REFERENCES TO BSI DOCUMENTS are to the versions and amendments listed in the British Standards Catalogue
- 3.2.3 MANUFACTURER AND REFERENCE: Where used in this combination: 'Manufacturer' means the firm under whose name the particular product is marketed.
  - 'Reference' means the propriety brand name and/or reference by which the particular product is identified.
- 3.2.4 MANUFACTURERS' REFERENCES: are those current at tender stage and mean the particular product as specified in the manufacturer's technical literature current at the time.

- 3.2.5 OR EQUIVALENT APPROVED: means that products of different manufacture may be substituted if prior approval has been obtained, but the CA reserves the right to insist on the named product(s). The rates or prices will be held to be based on the product(s) specified unless agreed otherwise.
- 3.2.6 PROPRIETARY NAMES: The phrase 'or equivalent approved' is to be deemed included whenever products are specified by proprietary name.
- 3.2.7 SIZES: Unless otherwise stated, products are specified by their co-ordinating sizes.

## 3.3 Demolishing/Removing/Cutting

- 3.3.1 DEMOLISHING/REMOVING/CUTTING: These terms mean remove existing work so described and all associated accessories, fastenings, linings and bedding materials, without damaging adjacent work to be retained and dispose of unwanted materials.
- 3.3.2 REFIX means:
  - Carefully remove existing work required to be refixed.
  - Remove fastenings and bedding materials from products/materials and cleans and repair as necessary.
  - Set aside and adequately protect until required.
  - Relocate accurately and fix securely using fixing and jointing materials and methods to match existing, or alternatives, if approved, and make good.
  - Comply with additional specified requirements.
- 3.3.3 MAKE GOOD: means to carry out local remedial work, including the following as appropriate and necessary to leave the work in a sound and neat condition:
  - Remove defective parts of existing finishes and components and around any stated features.
  - Fill, dress down, piece-in, patch, extend existing finishes, make minor repairs and adjustments.
  - Refix or restick
  - Redecorate
- 3.3.4 TO MATCH EXISTING: means use products, materials and methods to closely match 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 and to additional specified requirements.
- 3.3.5 RENEW: means carefully remove existing work and replace:
  - With materials/products identical to those removed or equivalent substitutes of approved appearance
  - Using methods similar to those used in constructing the removed work
  - To meet additional specified requirements
- 3.3.6 FIX ONLY: means all labours in unloading, handling, storing and fixing in position, including use of all plant.
- 3.3.6 SUPPLY AND FIX: Unless stated otherwise all items given the schedule of work and/or on the drawings are to be supplied and fixed complete.

## 3.4 Documents Provided on Behalf of Employer

- 3.4.1 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.
- 3.4.2 ADDITIONAL COPIES OF SPECIFICATION/SCHEDULE OF WORKS: After execution of the Contract, two copies of the Specification 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.
- 3.4.3 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.
- 3.4.4 ORDERING OF MATERIALS: The accuracy and sufficiency of the measured quantities is not guaranteed for purposes of ordering materials or constructing the work.

## 3.5 Documents Provided by Contractor

- 3.5.1 TECHNICAL LITERATURE: The Contractor is to keep copies of the following on site, readily accessible for reference by all supervisory personnel:
  - Manufacturer's current literature relating to all products to be used in the works.
  - Relevant British Standard Codes of Practice.
- 3.5.2 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 Subcontractors after Practical Completion.

## 4.0 Employer's Requirements: Management of the Works Generally

- 4.0.1 SUPERVISION: Accept responsibility for co-ordination, supervision and administration of the works, including all subcontracts. Arrange and monitor a programme with each subcontractor, supplier, local authority and statutory undertaker, and obtain and supply information as necessary for co-ordination of the work.
- 4.0.2 INSURANCES: Before starting work on site submit documentary evidence and/or policies and receipts for the insurances required by the Conditions of Contract.
- 4.0.3 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.
- 4.0.4 CLIMATIC CONDITIONS: Keep an accurate record of:
  - Daily maximum and minimum temperatures (including overnight)
  - Number of hours per day in which work is prevented by adverse weather.

## 4.1 Programme/Progress

#### 4.1.1 MASTER 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:
- Subcontractor's work, including the completion of drawings etc. ,testing and commissioning
- Work resulting from instructions issued in regard to the expenditure of provisional sums.
- Work by others concurrent with the Contract the nature and scope of which, the relationship with proceeding and following work and any relevant limitations on method, sequence or timing are suitably defined in the Contract Documents.
- Where and to the extent that the programme implications for work which is not so defined are impossible to assess the Contractor should exclude it from his programme and confirm this when submitting the programme.
- Submit 2 copies to the CA
- 4.1.2 PROGRAMME SUBMISSION: will not relieve the Contractor of his responsibility to apply in writing for instructions, drawings etc. in accordance with the Conditions of Contract.
- 4.1.3 COMMENCEMENT OF WORK: Inform the CA at least 5 working days before the proposed date for commencement of work on site.
- 4.1.4 MONITORING: Record progress on a copy of the programme kept on site. If any circumstances arise which may affect to progress of works put forward proposals or take other action as appropriate to minimise any delay and recover any lost time.

#### 4.1.5 CA'S SITE MEETINGS:

- The CA will hold regular site meetings to review progress and any other matters arising from the administration of The Contract. Meetings will normally be held every 4 weeks at a time and day to be agreed
- Ensure the availability of accommodation at the time of such meetings

- Attend all meetings and inform subcontractors and suppliers when their presence is required.
- The CA will chair the meetings and take and distribute minutes
- 4.1.6 CONTRACTOR'S SITE MEETINGS: Hold meetings with appropriate subcontractors and suppliers shortly before main site meetings to facilitate accurate reporting progress
- 4.1.7 NOTICE OF COMPLETION: Give CA at least 4 weeks' notice of the anticipated dates of Practical Completion of the whole or parts of work.

#### 4.2 Adverse Weather

- 4.2.1 ADVERSE WEATHER: Use all reasonable and suitable building aids and methods to prevent or minimise delays during adverse weather conditions.
- 4.2.2 EXTENSIONS OF TIME: When a notice of the cause of any delay or likely delay in the progress of the works is given under Contract, written notice must also be given of all other clauses which apply concurrently. The Contractor shall, as soon as possible, submit to the CA:
  - Relevant particulars of the expects effects, if appropriate related to the works beyond the Date for Completion, and
  - All other relevant information required by the CA

#### 4.3. Control of Cost

- 4.3.1 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.
- 4.3.2 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.
- 4.3.3 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.
- 4.3.4 MEASUREMENTS: Give reasonable notice to the CA before covering up work which the CA requires to be measured.
- 4.3.5 DAYWORK VOUCHERS: Give reasonable notice to the CA of the commencement of any work for which daywork vouchers are to be submitted. Before being delivered to the CA, each voucher must be:
  - Referenced to the instruction under which the work is authorised, and
  - Signed by the person in charge as evidence that the workmen's names, the time spent by each, the plant and materials shown are correct.
- 4.3.6 INTERIM VALUATIONS: At least 7 days before the established dates for Interim Valuations submit to the CA for details of amounts due under the Contract together with all necessary supporting information.

## 5.0 Employer's Requirements: Quality Standards/Control

## 5.1 Materials and Work Generally

- 5.1.1 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 purposes stated in or reasonably to be inferred from the project documents, and
  - In accordance with good building practice.

#### 5.1.2 GENERAL QUALITY OF PRODUCTS/MATERIALS:

- Products to be new unless otherwise specified.
- For products and materials specified to a British Standard obtain certificates of compliance from manufacturers when requested by CA.
- Where a choice of manufacturer or source of supply is allowed for any particular product or material, 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 by CA.
- Ensure that the whole quantity of each product and material required to complete the work is of consistent kind, size, quality and overall appearance.
- If materials are prone to deterioration or have a limited shelf life, order in suitable quantities to programme and use in appropriate sequence.

#### 5.1.3 PROPRIETARY PRODUCTS:

- Handle, store, prepare and use or fix each product in accordance with its manufacturer's current printed or written recommendations/instructions. Inform CA if these conflict with any other specified requirement. Submit copies to CA when requested.
- The tender will be deemed to be based on the products as marketed and recommendations on their use current at specification.
- Obtain confirmation from manufacturers that the products specified and recommendations on their use have not been changed since that time. Where such change has occurred, inform the CA and do not place orders for or use the affected products without further instructions.
- 5.1.4 CHECKING COMPLIANCE OF PRODUCTS/MATERIALS: Check all delivery tickets, labels, identification marks and, where appropriate, the goods themselves to ensure that all products comply 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 and dimensions are correct. Where tolerances of components 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 goods are clean, undamaged and otherwise in good condition, with intact protective coverings and unbroken seals.
  - Any materials which have a limited shelf life are not out of date.

#### 5.1.4 PROTECTION OF PRODUCTS/MATERIALS:

- Prevent over-stressing and any other type of physical damage.
- Keep clean and free from contamination and staining

- Keep dry and in suitably low humidity atmosphere to prevent premature setting, moisture movement and similar defects. Where appropriate allow free aim movement around and between stored components
- Prevent excessively high or low temperatures and rapid changes of temperatures in the material
- Protect adequately from rain, frost, sun and other elements as appropriate
- Ensure that sheds and covers are of ample size, in good weatherproof condition and well secured
- Keep different types and grades of materials separately and adequately identified
- So far as possible keep materials in their original wrappings, packings or containers, with unbroken seals, 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
- 5.1.5 SUITABILITY OF PREVIOUS WORKS AND CONDITIONS: Before starting each new type or section of work, ensure that:
  - Previous related work is appropriately complete, in accordance with the project documents, to a suitable standard and in suitable condition to receive the new work.
  - All necessary preparatory work has been carried out, including provision for services, damp proofing, priming and sealing
  - The environmental conditions are suitable, particularly that the building is suitably weather tight when internal components, services and finishes are installed.

#### 5.1.5 GENERAL QUALITY OF WORKMANSHIP:

- Operatives must be appropriately skilled and experienced for the type and quality of work
- Inspect components/materials carefully before fixing or using and reject any which are defective
- Fix or lay securely, accurately and in alignment
- Use fixings/accessories and bedding/jointing materials/methods recommended for the purpose by the manufacturer of the component/material being fixed or laid
- Provide suitable, tight packings at screwed and bolted fixing points to take up tolerances and prevent distortion. Do not overtighten fixings
- Adjust location and fixing of components so that the 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 to remedy binding or poor fit without approval.
- 5.1.6 WATER FOR THE WORKS: Clean and uncontaminated. If other than mains supply is proposed provide evidence of suitability. Test to BS 3148 if instructed.

## 5.2 Samples/Approvals

- 5.2.1 SAMPLES: Where approval of products or materials is specified submit samples or other evidence of suitability. Do not confirm orders or use materials until approval has been obtained. Retain approved samples in good, clean condition on site for comparison with products and materials used in the works. Remove when no longer needed.
- 5.2.2 SAMPLES: Where samples of finished work are specified obtain approval of stated characteristic(s) before proceeding with the works. Retain approved samples in

- good, clean condition on site for comparison with the works. Remove samples which are not part of the finished works when no longer required.
- 5.2.3 APPROVALS: Where and to the extent that products, materials 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
- 5.2.4 APPROVALS: Inspection or any other action by the CA must not be taken as approval of materials, products or work unless the CA so confirms in writing in express terms 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.

## 5.3 Accuracy/Setting Out Generally

- 5.3.1 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.
- 5.3.2 SETTING OUT: Inform CA when overall setting out is complete and before commencing construction.
- 5.3.3 APPEARANCE AND FIT:
  - Arrange the setting out, erection, juxtaposition of components and application of finishes (working within the practical limits of design and the specification) to ensure that there is satisfactory fit at junctions, that there are no practically or visually unacceptable changes in plane, line or level and that the finished work has a true and regular 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
- 5.3.4 LEVELS OF STRUCTURAL FLOORS: Maximum permissible deviations from designed levels to be as follows:
  - Floors which are to be self-finished, and floors to receive sheet or tile finishes directly bedded in adhesive: +/-10mm
  - Floors to receive fully bonded screeds/topping/beds: +/-15mm
  - Floors to receive unbonded or floating screeds/beds: +/-20mm
- 5.3.5 RECORD DRAWINGS: Record details of all grid lines, setting out stations, bench marks and profiles on site setting-out drawing Retain on site throughout the contract and hand to CA on completion.

## **5.4 Services Generally**

5.4.1 SERVICES REGULATIONS: Any work carried out or to which affects new or existing services must be in accordance with Bye Laws or Regulations of the relevant Statutory Authority and entirely to their inspector's satisfaction.

- 5.4.2 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.
- 5.4.3 MECHANICAL AND ELECTRICAL SERVICES: must have final tests and commissioning carried out so that they are in full working order at Practical completion.

## 5.5 Supervision/Inspection/Defective Work

- 5.5.1 SUPERVISION: In addition to the constant management and supervision of the works provided by the Contractor's person in charge, all significant types of work must be under the close control of competent trade supervisors to ensure maintenance of satisfactory quality and progress
- 5.5.2 PERSON IN CHARGE: Give maximum possible notice to CA before changing the Foreman in charge or Site Agent
- 5.5.3 ACCESS FOR CA: Provide at all reasonable times access to the works and to other places of the Contractor on Subcontractors where work is being prepared for the Contract.
- 5.5.4 OVERTIME WORKING: Whenever overtime is to be worked, give CA not less than one day's notice, specifying times, types and locations of work to be done. Concealed work executed during overtime for which notice has not been given may be required to be opened up for inspection and reinstated at the Contractor's expense.
- 5.5.5 DEFECTS IN EXISTING CONSTRUCTION to be reported to CA without delay. Obtain instructions before proceeding with work which may:
  - Cover up or otherwise hinder access to the defective construction, or
  - Be rendered abortive by the carrying out of remedial work.
- 5.5.6 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 conform that the work or sample in question will be ready or, if not ready, agree a new time and date.
- 5.5.7 PROPOSALS FOR RECTIFICATION OF DEFECTIVE WORK/MATERIALS:
  - As soon as possible after any part(s) of the work or any materials or goods are known or appear to be not in accordance with the Contract, submit proposals to CA for opening up, inspection, testing, making good or removal and reexecution.
  - Allow for the possibility that such proposals may be unacceptable to the CA, and that he may issue instructions requiring removal from the site.
- 5.5.8 MEASURES TO ESTABLISH ACCEPTABILITY: Wherever inspection or testing shows that the work, materials or goods are not in accordance with the Contract and measures (e.g. testing, opening up, experimental making good) are taken to help in establishing whether or not the work is acceptable, such measures:
  - Will be at the expense of the Contractor, and
  - Will not be considered as grounds for extension of time

- 5.5.9 QUALITY CONTROL RECORDS: Maintain full records to substantiate that the works, including the work of all subcontractors, comply with specified requirements. Keep copies on site for inspection by the CA, and submit copies of particular parts of the records on request. The records must include:
  - Identification of the element, item batch or lot including location in the works
  - The nature and dates of inspections by the Contractor or CA, tests and approvals
  - The nature and extent of deficiencies found
  - Details of any corrective action.

## 5.6 Work at or After Completion

#### 5.6.1 GENERALLY:

- Make good all damage consequent upon the work
- Remove all temporary markings, coverings and protective wrappings unless otherwise instructed
- Clean the works thoroughly inside and out, remove all splashes, deposits, efflorescence, rubbish and surplus materials consequent upon the execution of the work
- 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 or construction.
- 5.6.2 PAINTED SURFACES: Touch up minor faults in newly painted/repainted work, carefully matching colour, and brushing out edges. Repaint badly marked areas back to suitable breaks or junctions.
- 5.6.3 MOVING PARTS: Adjust ease and lubricate moving parts of new work as necessary to ensure easy and efficient operation, including doors, windows, drawers, ironmongery, appliances, valves and controls.
- 5.6.4 SECURITY AND 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.
- 5.6.5 MAKING GOOD DEFECTS: Make arrangements with the CA 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.

## 6.0 Employer's Requirements: Security/Safety/Protection

## 6.1 Generally

- 6.1.1 SECURITY: Adequately safeguard the site, the works, products, materials, plant, and any existing buildings affected by the works from damage and theft. Take all reasonable precautions to prevent unauthorised access to the site, the works and adjoining property.
- 6.1.2 STABILITY: Accept responsibility for the stability and structural integrity of the works during the contract, and support as necessary. Prevent overloading: details of design loads may be obtained from the CA.

## 6.2 Protect Against the Following:

#### 6.2.1 NOISE:

- Fit all compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles
- Do not use pneumatic drills and other noisy appliances during 5pm to 8am without consent of the CA
- Do not use or permit employees to use radios or other audio equipment in ways or at times which may cause nuisance.
- 6.2.2 POLLUTION: Take all reasonable precautions to prevent pollution of the site, the works and the general environment.
- 6.2.3 NUISANCE: Take all necessary precautions to prevent nuisance from smoke, dust, rubbish and other causes.
- 6.2.4 FIRE: Take all necessary precautions to prevent personal injury, death and damage to the works or other property from fire.
- 6.2.5 MOISTURE: Prevent the work from becoming wet or damp where this may cause damage. Dry out the works thoroughly. Control the drying out and humidity of the works and the application of heat to prevent:
  - Blistering and failure of adhesion
  - Damage to trapped moisture
  - Excessive movement
- 6.2.6 RUBBISH: Remove rubbish and debris from time to time to keep the site and works clean and tidy. Remove all rubbish, dirt and residues from voids and cavities in the construction before closing in.

## 6.3 Protect the following:

6.3.1 WORK IN ALL SECTIONS: Adequately protect all types of work and all parts of the works, including work carried out by others, throughout the Contract. Wherever work is of an especially vulnerable nature or is exposed to abnormal risks, provide special protection to ensure that damage does not occur.

#### 6.3.2 EXISTING SERVICES:

- Notify all service authorities or private owners of proposed works not less than one week before commencing site operations
- Before starting work check positions of existing services

- Observe service authority's recommendations for work adjacent to existing services.
- Adequately protect, and prevent damage to all services. Do not interfere with their operation without consent of the service authorities or private owners
- If any damage to services results from the execution of works, notify the CA and appropriate service authority without delay. Make arrangements for the work to be made good without delay to the satisfaction of the service authority or private owner as appropriate
- Replace any marker tapes or protective covers disturbed during site operations to the service authority's recommendations
- 6.3.3 ROADS AND FOOTPATHS: Any damage to roads and footpaths caused by site traffic or otherwise consequent upon the works must be made good to the satisfaction of the Local Authority or private owner. Adequately maintain approaches to the site and keep clear of mud and debris.
- 6.3.4 TREES: Adequately protect and preserve, except those which are to be removed. Replace to approval or treat as instructed any species or areas damaged or removed without approval.
- 6.3.5 TREES TO BE RETAINED: Unless specified otherwise do not:
  - Dump spoil, rubbish or materials within the branch spread
  - Excavate or disturb the topsoil within the branch spread
  - Change the level of the ground within an area 3m beyond the branch spread.
- 6.3.6 EXISTING FEATURES: Prevent damage to existing buildings, fences, gates, walls, roads, paved areas and other site features which are to remain in position during the execution of the works.
- 6.3.7 EXISTING WORK: Prevent damage to existing property undergoing alteration or extension. Adequately protect parts which are to be retained. Cut away and strip out the minimum necessary and with care to reduce the amount of making good to a minimum.
- 6.3.8 ADJOINING PROPERTY: Take all reasonable precautions to prevent damage to adjoining property. Obtain permission as necessary from the owners if requiring to erect scaffolding on or otherwise use adjoining property, and pay all charges. Clear away and make good on completion or when directed. Bear the cost of repairing any damage arising from the execution of the works.
- 6.3.9 EXISTING STRUCTURES: Provide and maintain during the execution of the works all incidental shoring, strutting, needling and other supports as may be necessary to preserve the stability of existing structures on the site or adjoining, that may be endangered or affected by the works. Prevent overstressing of completed work when removing supports.

# 7.0 Employer's Requirements: Specific Limitations on Methods/Sequence/Timing

- 7.0.1 SCOPE: The limitations described in this section are supplementary to the limitations described or implicit in the information given in other sections or on the drawings.
- 7.0.2 ACCESS TO THE SITE: Access is available via Daintree Road.
- 7.0.3 USE OF THE SITE:
  - Do not use the site for any purpose other than carrying out the works
  - Do not display or permit advertisements to be displayed on the site without the consent of the CA.
- 7.0.4 WORKING AREA: the Contractor will be confined to the site boundary.
- 7.0.5 USE OR DISPOSAL OF MATERIALS: Retain topsoil as required for landscaping etc. Retain brick rubble etc. from demolition as required for hardcore.
- 7.0.6 WORKING HOURS: within the hours of 7am to 5pm only, unless approved by the CA.

## 8.0 Employer's Requirements: Facilities/Temporary/Work/Services

## 8.1 Generally

- 8.1.1 Inform CA of the intended siting of all spoil heaps, temporary works and services
- 8.1.2 Maintain, alter, adapt and move temporary works and services as necessary. Clear away when no longer requires and make good.
- 8.1.3 METER READINGS: Where charges for service supplies need to be apportioned ensure that the meter readings are taken by relevant authority at possession and/or completion as appropriate. Ensure that copies of reading are supplied to interested parties.

#### 8.2 Site Accommodation

- 8.2.1 ROOM FOR MEETINGS: Either provide or agree in writing with the CA/ Employer a suitable temporary accommodation for site meetings, adequately heated and lit, with table and chairs for six people. The room may be part of the Contractor's own site offices.
- 8.2.2 SANITARY ACCOMMODATION: Provide and maintain in a clean condition sanitary accommodation for the Employer's representatives, either separate or shared with the Contractor's supervisory staff.

## 8.3 Temporary Work

- 8.3.1 NAME BOARD: Obtain approval for and provide suitable temporary name board displaying:
  - Title of project
  - Name of Employer
  - Name of consultants as follows:

Studio 11 Architecture Sidebottom Richardson Cheng

- If the Contractor wishes, names of Contractor

### 8.4 Services and Facilities

- 8.4.1 LIGHTING: During finishing work and inspection provide temporary lighting, the intensity and direction of which closely resembles that provided by the permanent installation.
- 8.4.2 TELEPHONES: Provide as soon as practicable after the Date of Possession a joint temporary on site telephone facility for use by the Contractor, Subcontractors and those acting on behalf of the Employer.
- 8.4.3 USE OF PERMANENT INSTALLATIONS: Unless specific permission is given, the permanent supply, disposal, mechanical, electrical, communications and transport installations may not be used for any purposes other than testing and commissioning.
- 8.4.4 THERMOMETERS: Provide on-site and maintain in accurate condition:

- A maximum and minimum thermometer for measuring atmospheric shade temperature, in an approved location
- A thermometer for measuring concrete and ground temperature.

# 9.0 Employer's Requirements: Operation/Maintenance of the Finished Building

- 9.0.1 TOOLS: At Practical Completion provide two complete sets of tools and portable indicating instruments for the operation and maintenance of all services plant and equipment together with suitable means of identifying same.
- 9.0.2 OPERATING AND MAINTENANCE MANUAL(S): The Contractor will provide all maintenance and operating manuals as supplied by the manufacturer and hand over to the CA for inclusion in the client's manual.

## 10.0 Provisional Work/Items

- 10.0.1 GENERAL PROVISIONAL SUMS:
  - Wall Tiling £1,500.00
  - Floor Finish £900.00
  - Utility Fittings Item
  - Floor Finish £1,100.00
- 10.0.2 INSURANCE AGAINST DAMAGE TO PROPERTY: give indemnity up to the sum of £2,000,000.00
- 10.0.3 BUILDING CONTROL PRESCRIBED INSPECTION FEE: Include the provisional sum of £286.00
- 10.0.4 CONTINGENCIES: Include the provisional sum of £2,500.00.

11	.0	Schedule	of	Work ir	ı Buil	lding	<b>Elements</b>
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