BRAMCOTE CREMATORIUM 2016

PRELIMINARIES



Directorate of Housing, Leisure & Property Services

Broxtowe Borough Council Council Offices, Foster Avenue, Beeston, Nottingham NG9 1AB Director T Czerniach

STANDARD CONTRACT PRELIMINARIES

PRELIMINARIES

DESCRIPTION OF THE WORK

A building extension to the Reflection Chapel Waiting room.

LOCATION

Bramcote Crematorium, Coventry Lane, Beeston, Bramcote NG9 3GJ

EMPLOYER

Broxtowe Borough Council, Council Offices, Foster Avenue, Beeston, Nottingham, NG9 1AB.

CONTRACT ADMINISTRATOR

Projects Officer of Broxtowe Borough Council, Council Offices, Foster Avenue, Beeston, Nottingham, NG9 1AB.

CONTRACT

The contract will be administered under a standard JCT Minor Works contract with the following main Contract Particulars:

CDM Regulations The project is Notifiable

CDM Planning Period 3 weeks min.

Date of Commencement To be agreed
Date of Completion To be agreed
Liquidated Damages £1,00.00 / week
Rectification Period 12 months

STANDING ORDERS

All contracts will be conducted in accordance with the Councils Standing Orders, copies of which may be obtained from the council. Particular attention is drawn to the conditions of contract and the prevention of corruption.

CHECKING/SITE VISIT

The contractors must ensure that all the information necessary for preparing a tender has been provided. All additional information must be requested in writing. We also strongly recommend that you visit the proposed site to fully appreciate proposed works and site conditions.

SAFETY AND CONVENIENCE OF THE BUILDING OCCUPANTS

The safety and convenience of the building occupants at Bramcote Crematorium is of paramount importance throughout the works. Prior to works commencing on site a detailed programme to be agreed in order to ensure sufficient working area for site operations whilst allowing safe access for the building occupants and mourners.

The site's business is of a sensitive nature which requires the utmost respect from the contractor.

The contractor is to clean and clear away rubbish from the working area at the end of each working day to avoid accidents. Rubbish shall not be allowed to accumulate in or around the site.

EXISTING SERVICES

There are several water source points around the site, particular usage to be agreed.

TEMPORARY SCREENS

The contractor to effectively screen off the area of works to prevent trespassing by members of the public and to protect building occupants from danger. Contractor is responsible for works area access and security.

DATA PROTECTION ACT 1998 (C29)

The contractors hereby undertakes that they and their employees and agents will treat as confidential and will not hold or publish in any form any personal data, as defined by the Data Protection Act 1998 which they become aware of during the execution of the works and will not pass on such data to any other person or body.

The contractor further undertakes that he will indemnify the Employer against all liability under the Act arising from the failure of the contractor or his employees or agents to comply with this undertaking.

PREVENTION OF TRESPASS

No workman is to trespass upon the adjoining sections of the building except when permission has been given by the CA. The contractor shall insure against and indemnify the Employer against any claim or action for damage on action of any trespass or their misconduct of his employees.

NORMAL WORKING HOURS

The normal working hours will be between the hours of 8.00 am. and 6.00 pm. However, to assist with the smooth running of the contract, arrangements may be made between the Contractor and the Contract Administrator to extend these hours.

PARKING

Parking is available on site, however, the contractor will be responsible to supervise during the contract period, the parking of all works vehicles and site operatives' private cars including any subcontractors within the local area. Specific parking areas to be advised by CA.

STORAGE

The contractor must make provision for all storage requirements and its security. An area to be allocated to the contractor within the grounds for site cabins and storage – these facilities must be kept clean and tidy throughout.

DRAWINGS/SKETCHES

The contractor will be responsible for checking dimensions prior to ordering any components. No claim will be entertained for any additional costs arising from failure to detect dimensional or similar discrepancies which could have been found by physically checking.

The contractors shall notify the supervising officer immediately of the discovery of any service pipes, ducts, cables etc, not shown on the drawing and he shall obtain instructions before removing, altering or adapting the same.

SURETY BOND

A Surety Bond of 10% of the contract sum must be provided by the Contractor that will not be released until the end of defects liability.

QUALITY & SUPERVISION

The contractor shall allow in his tender for a foreman/supervisor who will be in attendance at all times. This person can be a working foreman/supervisor.

The foreman/supervisors role shall consist of:-

- 1. Arranging access and notifying the CA of the proposed date for starting each element of the works.
- 2. Keep the CA informed of any amendments to the programme.
- 3. Liaise with all trade foremen, including nominated subcontractors, to ensure coordination of the works.
- 4. List all snagging defects and issue to his operatives ensuring that all snagging works are carried out as specified.
- 5. Agree variations with the client for unforeseen works.
- 6. Carry out joint inspections with the client.
- 7. Measuring and ordering materials ensuring that they arrive on site in time for fixing.
- 8. Maintaining material stock levels.
- 9. The foreman/supervisor shall carry some form of communication for the duration of the contract.
- 10. Any other duties to ensure the smooth running of the contract.

Should any components or materials specified not be available or sufficient quantities not likely to be available the contractor must not substitute components or materials other than specified without obtaining the supervising officers prior written instruction.

TIME AND PROGRESS SCHEDULE

Within two weeks of the Contract Administrator's instructions to proceed, the contractor shall prepare and provide the Contract Administrator with four copies of a detailed programme of work clearly showing the proposed method of working. The programme to be approved by the CA prior to issue. The contractor must also ensure that all subcontractors, suppliers etc. are fully aware of the programme to ensure deliveries etc. of materials are in accordance with the programme.

SCOPE OF THE CONTRACT

Prior to tendering the contractor must ensure that he is fully conversant with the terms and conditions of the works as described in the Schedule of Works. Should the contractor intending to submit a tender have any queries concerning the quantity of work or conditions of tender they should consult the Contract Administrator and discuss the subject prior to tendering. No claim for extra payment based on lack of knowledge or misunderstanding will be paid.

LABOUR RESOURCES

It is the responsibility of the contractor to ensure adequate tradesmen in each trade as available to ensure that all works issued by the employer can be carried out within the targets set. All persons employed must be qualified in the trade for which he or she is employed. The employer reserves the right to request that an operative who in his opinion is unsuitable is removed from the site.

PLANT AND MATERIALS

The Contractor shall provide and pay the cost incurred in the supply of labour and plant together with attendance of specialised personnel in maintaining such plant. The employers' safety officer may inspect the equipment from time to time.

SCAFFOLDING

Whenever scaffolding is required the cost will be included within the price submitted. Scaffolds must comply with BS EN 12811-1:2003 and shall be erected by a competent person. The employers' safety officer will make interim visits to ensure compliance.

DRESS AND IDENTIFICATION

The contractor shall ensure that all persons carrying out the work shall at all times be properly attired and presentable. The contract's attention is particularly drawn to Health and Safety Regulations.

LIGHTING, GAS, POWER AND WATER

The contractor shall include for the provision of all necessary materials, tools, plant, labour, transportation, supervision, temporary works and support, water, lighting, power, access equipment, lifting equipment, signage, security, site storage, barriers, fencing or any other item required for the installation in connection with the works, and their work people employed in the work.

GUARANTEES

The contractor is required to ensure that where guarantees are given for materials supplied or work done, such guarantees are to be transferred to, and vested in the possession of the Employer as soon as the material is supplied or the works completed.

DEFECTS

All non-urgent defects/snagging, which has been identified by the supervising officer, shall be completed within 5 working days. Any defects/snagging, which the supervising officer deems to be urgent, shall be completed within 24 hours.

EMERGENCY CONTACT

The contractor will be required to provide the client with an emergency contact. This will be the telephone number of an employee, or other representative of the contractor, who will respond to emergencies should the need arise. The contact will be required 24 hours a day, including weekends and holiday periods. Failure to respond may result in the Council appointing another contractor to rectify the defect and recover the cost from the original contractor as a debt.

DEFECTS LIABILITY PERIOD

Any defects, which occur during the defects liability period, must be dealt with within twenty-four hours of notification unless otherwise agreed. Failure to respond may result in the Council appointing another contractor to rectify the defect and recover the cost from the original contractor as a debt.

FINANCE ACT & REGULATIONS

The contractor shall provide evidence to satisfy the Employer that he is a limited company or holds a Certificate of Exemption for the Inland Revenue to comply with the provisions of sections 29 to 31 of the Finance Act 2004. All business will be conducted in line with current finance regulations.

DAMAGE TO THE HIGHWAY ETC.

The contractor shall make good any damage caused to roadways, kerbs, verges or pavements and the like and they shall jointly with the Council's Supervising Officer inspect the roadway in the area of his storage facility to note any pre-existing damage. Any additional damage found on completion shall be deemed to be the Contractor's responsibility. Skips shall not be allowed to be left on the highway except in complete conformity with the requirements of the Highway Authority and shall not be permitted elsewhere without prior approval. Particular attention is required to lighting of skips after dark.

SECURITY

All plant is to be securely locked when personnel are not on site. Proper and adequate precautions are to be taken for safety and protection of the public at all times, providing any necessary screens, barriers etc. Particular attention must be paid to security during Bank Holiday and school holiday periods.

CONTRACTOR'S DETAILS

The successful tenderer is to provide names and telephone numbers of staff both on and off the site and in addition a telephone number of a member of staff who is able to deal with an emergency out of normal working hours.

PRIOR TO WORK COMMENCING

The contractor shall prior to work commencing:

- a) Comply with and give all notices required by any Act or Parliament any instrument rule or Order made under Act of Parliament, and regulation or Bye-law of the Authority or any statutory undertaker which has any jurisdiction with regard to the Works or with those systems the same are or will be connected.
- b) Appoint a trained Safety Supervisor.
- c) Notify the Authority's Representative in writing of the person so appointed.
- d) Cause such Safety Supervisor to properly carry out or cause to be carried out these General Requirements.

HEALTH AND SAFETY

Contractors must ensure that they and their employees meet the requirements of all current Health and Safety requirements. This extends to monitoring the subcontractors.

Health and Safety at Work

General Requirements

The Contractor shall comply, and so far as is reasonably practical, shall ensure that his employees comply with the provisions of the Health and Safety at Work Act 1974, the Factories Act 1961, The Construction (General) Provision Regulations 1961, the Offices, Shops and Railway Premises Act 1963, The CDM Regulations 2015, and any subsequent statutory amendments or alterations made to these Acts.

In addition the Contractor shall ensure the works are carried out in accordance with all orders and regulations made thereunder and with any approved Code of Practice, Guidance Notes, Acts of Parliament, Orders, regulations and Bye-laws which are applicable.

It shall be the Contractor's duty to ensure so far as is reasonably practical, that neither his employees, members of the public, nor anyone else who may be affected thereby are not exposed to risks to their health or safety.

The Contractor shall provide the Authority with the names of all Sub-contractors, and the latter shall properly carry out these General Requirements.

The Contractor shall comply with the arrangements for the time being in force for reporting to the Health & Safety Executive with a copy to the Authority, all incidents that occur during the works relative to:

- a. lost time accidents:
- b. fatalities and major injuries
- c. dangerous occurrences of specified kinds;
- d. illness known to be associated with the works

Where work necessitates the use of naked flames in roof and similar confined spaces a suitable portable fire extinguisher shall be readily available. No welding or similar operations shall be executed until all surrounding inflammable materials have been removed or adequately protected.

All flammable rubbish shall be disposed of quickly and not to be allowed to accumulate on site.

GAS SAFETY REGULATIONS

The whole of the works must be carried out with due diligence in respect of the Gas Safety (Installation and Use) Regulations 1998, should any defect be discovered during the works in respect of the said Act, the incident must be reported immediately to the Supervising Officer. On completion of the works the contractor must satisfy the employer that all bonding has been correctly carried out and all works comply with the Act.

HAZARDOUS AND SPECIAL WASTE (INCLUDING ASBESTOS)

If during any part of the works waste or hazardous waste is discovered, it must be reported to the contract supervisor immediately. Any subsequent remedial work will be completed in strict accordance with current legislation and all waste arising must be disposed of in accordance with The Hazardous Waste Regulations 2005.

FIRE PRECAUTIONS

i. The contractor shall take all reasonable precautions to avoid the outbreak of fire on the site of the works and in adjacent buildings and he shall draw the attention of all workmen to the dangers involved in the careless disposal of matches, cigarettes and combustible materials.

- ii. Where work necessitates the use of naked flames in roofs and similar confined spaces a suitable portable fire extinguisher shall be readily available. No welding or similar operations shall be executed until all surrounding inflammable materials have been removed or adequately protected.
- iii. All inflammable rubbish shall be disposed of quickly and not to be allowed to accumulate on site.
- iv. The use of asphalt boilers and similar containers shall not be allowed on combustible roofs and floors.

PROTECTION OF PUBLIC PROPERTY

Maintenance and protection of public property of the Public Utility Service Companies and the making good of, or paying for any damage thereto will be the responsibility of the contractor. See also particular conditions relating to highways above.

INSURANCES

The main contractor shall hold adequate insurances to indemnity the Client in the sum of £10,000,000 for Employer's Liability and £5,000,000 for Public and Product's Liability as a minimum.

PRELIMINARY PRICING IN RESPECT OF PROVISIONAL SUMS

In pricing items of a preliminary or similar nature (except those dealt with the inclusion in schedule of rates or by percentage addition) the contractor shall make due allowance for the additional cost of such items arising from the execution of the work for which provisional sums are included elsewhere in this specification.

CONTINGENCY SUMS

Any included contingency sums will be expended at the sole discretion of the contract administrator.

RECEIPTED INVOICES

The contractor shall produce receipted invoices from named sub contractors and suppliers for inspection at the supervising officers office as and when required as in the absence of receipted accounts produce satisfactory evidence of payment having been made.

PROTECTION OF EXISTING ADJOINING AREAS ETC

The Contractor must protect the site and adjoining areas and protect against injury to the public and also against undermining stability of any building or structure. The Contractor will be held responsible for any injury or damage.

PROTECTING THE WORKS FROM INCLEMENT WEATHER

The Contractor shall carry out all temporary works and measures or take precautions necessary to protect the site generally from injury by inclement weather; including all tarpaulins, coverings, temporary chutes, drains, grips, ditches, etc required to carry off surface water and for all coverings, screens, heating etc, required to protect any work or materials liable to be damaged by frost; include also for all precautions necessary to prevent damage to any part of the building, fitting etc, by high winds or by excessive humidity or changes in humidity. The Contractor will be held entirely responsible for the adequacy of the protection afforded against damage by inclement weather and for making good any such damage to his own expense.

PROTECTION OF THE WORKS

The Contractor shall at his own expense protect the property against damage or theft including lighting for security and for protection of the public.

PROTECTION OF PUBLIC AND PRIVATE SERVICES

The Contractor is responsible for the protection and shall uphold and maintain all pipes, sewers, service mains, overhead cables etc, during the works. The Contractor shall make good any damage due to any cause within his control at his own expense of pay any costs and charges in connection with reinstatement.

DRYING OUT

The Contractor shall allow for the cost or providing and maintaining heat in the building as becomes necessary for adhering to his work schedule, drying out, protecting joinery, plaster and all other work likely to be affected by humidity or low temperatures.

SITE MEETINGS

A pre-contract meeting will be held prior to works commencing, thereafter meetings to be held every 2 weeks or more often as required. The Contractor shall arrange and meet all expenses for site meetings as necessary and ensure attendance of any subcontractors.

In the event of any conflict between these conditions and the condition of contract these conditions shall prevail.

PRE-CONSTRUCTION INFORMATION

DIRECTORATE OF HOUSING, LEISURE & PROPERTY SERVICES

CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015

PRE CONSTRUCTION INFORMATION

1.0 <u>INTRODUCTION</u>

The Pre Construction information is to be read in conjunction with the contract specification and drawings.

Risks which should be resourced or controlled by good management and site practice are not listed but are deemed to have been considered by the contractor and taken into account in his tender.

2.0 NATURE OF THE PROJECT

Name of Client: Broxtowe Borough Council

Directorate of Housing, Leisure and Property Services

Designer: Broxtowe Borough Council

Directorate of Housing, Leisure and Property Services

Principle Designer: Broxtowe Borough Council

Directorate of Housing, Leisure and Property Services

Site Location: Bramcote Crematorium, Coventry Lane, Beeston, Bramcote

NG9 3GJ

Nature of Works: Reflection Chapel waiting room extension.

Timescale for Completion: To be agreed

Minimum Lead Time: To be agreed

3.0 THE EXISTING ENVIRONMENT

3.1 Surrounding Land Uses and Related Restrictions

The site is located within the grounds of Bramcote Crematorium. Area of works is to the North East of the site. Bramcote Crematorium has two Chapels which conduct services six days a week, sometimes Sundays too. During the works, one of the Chapels will be closed (Reflection Chapel) to allow for the works. However, the other Chapel (Serenity Chapel) will be open and operational. The number of services will be greatly reduced but site will still be operational. This will consist of mourners

coming on site to attend services or to visit commemorative sections of the site such as flower viewing area.

The site partakes in works of a sensitive nature which will require a respectful attitude from the contractor and team.

Comprehensive plans outlining access routes, materials store and site accommodation to be agreed between the contractor and the CA prior to commencement on site.

3.2 Existing Services

The contractor, prior to carrying out work, must confirm the exact position of existing services on site. The contractor's attention is brought to the fact that overhead services and general services fixed to buildings on or adjacent to the working area may exist.

The contractor will be supplied with the contact details for the relevant maintenance contractors who maintain the site, whose knowledge of the building should facilitate the works.

3.3 Existing Traffic Systems

It is important that coordination of lifting operations and skip loading and unloading is carried out to keep congestion of the roads to a minimum thus reducing the potential risk to pedestrians, vehicular traffic and operatives.

Further discussion will be required on site to develop any proposal covering the above.

3.4 Existing Structure

The tender drawings contain all the information currently available to the Client – any discrepancy must be notified to the CA.

The contractor must also consider the effects of dust that is inevitable due to the nature of the works and put in place proposals for dealing with it to safeguard the environment, the public, centre staff and the site operatives.

3.5 Ground Conditions

The ground conditions of the site must be ascertained prior to commencement of the works.

5.0 THE DESIGN

5.1 Principles of Structural Design

Strict adherence must be kept to the structural Engineers details and calculations as part of the works – see CW16.007.S0.0

5.2 Specific Requirements of the Principle Contractor

The Principal Contractor is required to:

- 1. Prepare develop communicate, implement and amend the construction phase plan.
- 2. Plan and manage the construction processes and ensure that other contractors manage their own work including inspections.
- 3. Submit all method statements for their own works and those of subcontractors to the CDM coordinator.
- 4. Prevent unauthorised access onto site, prepare and enforce the site rules and mange effective co-operation and co-ordination between contractors.
- 5. To provide adequate welfare facilities for site operatives.
- 6. Ensure operatives have proper site induction and training.
- 7. Should deal with localised workplace isolation, dust and noise suppression techniques.
- 8. Display the project notification on the site.

5.3 Possible Site Hazards

The following list also includes other areas to be considered and deemed hazardous which may exist or which may be encountered. This list is not exhaustive and further discussion will be required with the CDM Coordinator should they arise to resolve methods and proposals to deal with them agreeing appropriate legislative guidance and advice notes.

- 1. Control of Substances Hazardous to Health (COSHH)
- 2. Asbestos
- 3. Use of paints and solvents
- 4. Drilling
- 5. Handling materials manually/mechanically
- 6. Mechanical/Electrical plant
- 7. Portable tools
- 8. Working / Storage from highway
- Working at height.

Subsequently the Principal Contractor must demonstrate by reference to their Health and Safety Policy his awareness of the said hazards and produce method statements to ensure adequate health and safety respective to each hazard.

N.B. to be read in conjunction with all other sections.

5.4 An Outline Construction Phase Plan must be submitted at least two weeks prior to commencement, and is to include the following:

- Method statements related to the hazards identified in the pre-tender health and safety plan and/or statements on how the hazards will be addressed and other significant hazards identified by the contractor.
- Details of the management structure and responsibilities.
- Arrangements for issuing health and safety directions.
- Procedures for informing other contractors and employees of health and safety hazards.
- Selection procedures for ensuring competency of other contractors, the selfemployed and designers.
- Procedures for communications between the project team, other contractors and site operatives.
- Arrangements for ensuring that all accidents, illness and dangerous occurrences are recorded.
- Arrangements for welfare facilities.
- Procedures for ensuring that all persons on site have received relevant health and safety information and any training.
- Arrangements for consulting with and taking the views of people on site.

Any queries arising from the Construction Phase Plan should be referred to the Principle Designer:

Director of Housing, Leisure and Property Services
Broxtowe Borough Council
Council Offices
Foster Avenue
Beeston
Nottingham NG9 1AB

Telephone: 0115 917 7777

6.0 CONSTRUCTION MATERIALS

6.1 Potentially hazardous materials

The following potentially hazardous materials have been identified:

- a) Paints and Protective Coatings
- b) Silicone based sealants

Where the Principal Contractor intends to use these materials and any other hazardous materials found to be required for the work, they are to provide the Planning Supervisor with full health and safety data sheets, COSHH assessments **before** the materials are incorporated in the works. Suitable protective clothing appropriate to the task and material being used should be made available to all personnel.

Should a material be used which may pose a danger/hazard to the occupants of the dwelling, during the progress of the works, this must be brought to their attention and its use progressed in line with COSHH and other appropriate legislation.

7.0 SITE WIDE ELEMENTS

7.1 Site access and egress

Site access and egress will be via the public highway. No road closures will be permitted. See also Items 3.1 and 3.3

7.2 Temporary accommodation/loading and storage area

All site accommodation and storage to be contained on the site and close to the working area. They should be suitably secured where required and the surrounding area be kept tidy at all times. Unloading is to be carried out in such a manner to ensure that both the public highway and footpaths are not obstructed or damaged during unloading operations. Special attention should be paid to ensuring protection of vehicular and pedestrian traffic with long off loading processes programmed for quieter times.

All hazardous materials should be stored in a lockable unit and clearly identified externally as to the contents.

Unattended skips must be kept locked and removed when full immediately.

7.3 Traffic/Pedestrian Routes

Hazards will arise as a result of operatives, plant and materials, accessing, egressing and being delivered and taken off site respectively. During these actions due care and attention should be employed to reduce the potential for hazardous situations arising.

8.0 OVERLAP WITH CLIENT'S UNDERTAKING

Most areas have been previously discussed with respect to consideration of the health and safety issues which may arise from carrying out work within a crematorium services site occupied by staff and public visitors. The need for due care and attention cannot be overly emphasised.

9.0 SITE RULES

The Principal Contractor is to ensure all operatives possess the appropriate permits and certificates to operate plant and equipment necessary for carrying out the said work throughout the duration of the works.

The Principal Contractor should give their health and safety priority by ensuring all activities are locally isolated and all noise, dust and odours suppressed by appropriate means to prevent nuisance. The Contractor shall ensure both the highway and footpaths are kept clean, tidy and free from loose material post unloading or skip removal.

10.0 CONTINUING LIAISON

10.1 Design elements of contractor's proposals

Full details of the Contractor's design proposals for the scheme will be required for consideration by the Principle designer before work commences on site. Details of any subsequent design change are to be notified to the Principle Designer before implementation.

10.2 Procedure for dealing with unforeseen eventualities

Any changes affecting the agreed Construction Phase Plan must be notified to and agreed by the Principle Designer before implementation.

THE CONTRACTOR IS REMINDED THAT AN AGREED CONSTRUCTION PHASE PLAN, BASED ON THIS PRE CONSTRUCTION INFORMATION MUST BE SUBMITTED TO THE CLIENT AND AGREED BEFORE WORKS COMMENCE ON SITE AND THAT PRACTICAL COMPLETION WILL NOT BE ISSUED UNTIL COMPLIANCE WITH DUTIES AS PRINCIPAL CONTRACTOR IN RELATION TO THE HEALTH AND SAFETY FILE ARE COMPLETE AND APPROVED.

11.0 OPERATION/MAINTENANCE OF THE FINISHED BUILDING

11.1 The Building Manual Health and Safety File

- The Building Manual (incorporating the Health and Safety File and subtitled accordingly) is to be a comprehensive information source and guide for the Employer and end users providing a complete understanding of the building and its systems and enabling it to be operated and maintained efficiently and safely. The Contractor is required to obtain or prepare all the information to be included in the Manual, produce the required number of copies of them Manual and submit them to the Principal Designer for delivery to the Employer.
- The Manual is to consist of the following parts as required and agreed with the Principal Designer, sub sectioned as appropriate.
 - (a) A brief description of the work carried out
 - (b) Details of any residual hazards and how they have been dealt with
 - (c) Key structural principles
 - (d) Hazardous materials used
 - (e) Information on installed plant removal/dismantling
 - (f) Health and safety information about maintenance of any plant installed
 - (g) Details of significant services i.e. gas, electric, drains, telecommunications
 - (i) Details of the as built structures and any drawings
- The presentation of the Manual is to be as clause 11.5.
- A complete draft of the Manual must be submitted not less than four weeks before
 the date for submission of the final copies of the Manual. Amend the draft Manual in
 the light of any comments and resubmit. Do not proceed with production of the final
 copies of the Manual until authorised to do so by the Principal Designer.
- Final copies of the Manual: Provide two copies not less than four weeks before Practical Completion.

11.2 The Building Manual Part 1: General must include:

- A description of the building.
- Details of all consultants and designers.
- Copies of all consents and approvals obtained.

11.3 The Building Manual Part 2: Building Fabric:

Provide such information as is reasonably required by the Principal Designer including

- As-built drawings recording details of construction for all Contractor designed work and performance specified work. (Where applicable)
- Copies of manufacturer's current literature for all products for which the particular proprietary brand has been chosen by the Contractor, including COSHH dated data sheets and manufacturers/recommendations for cleaning and maintenance.
- Names, addresses, telephone and fax numbers of all subcontractors, suppliers and manufacturers.
- Copies of all guarantees, warranties and maintenance agreements offered by subcontractors and manufacturers.
- Copies of all test certificates and reports required in the specification.

11.4 The Building Manual Part 3: Building Services must include as appropriate:

- A full description of each of the systems installed, written to ensure that the Employer's staff fully understand the scope and facilities provided.
- A description of the mode of operation of all systems.
- Diagrammatic drawings of each system indicating principal items of plant, equipment, valves etc.
- The name, address and telephone number of the manufacturer of every item of plant and equipment together with catalogue list numbers.
- Manufacturer's technical literature for all items of plant and equipment, assembled specifically for the project, excluding irrelevant matter and including detailed drawings, electrical circuit details and operating and maintenance instructions.
- A copy of all manufacturer's guarantees, warranties and maintenance agreements offered by subcontractors and manufacturers.
- Recommendations as to the preventative maintenance frequency and procedures to be adopted to ensure the most efficient operation of the systems.
- Lubrication schedules for all lubricated items.
- A list of normal consumable items.
- Emergency procedures, including telephone numbers for emergency services.

11.5 Presentation of Building Manual:

The Manual is to be contained in a series of A4 size, plastic covered, loose leaf, four ring binders with hard covers, each indexed, divided and appropriately cover titled.

Selected drawings needed to illustrate or locate items mentioned in the Manual, where larger than A4, are to be fold and accommodated in the binders so that they may be unfolded without being detached from the rings. The main set(s) of as-built drawings will form annex(s) to the Manual.

11.6 Training of Employer's Staff:

Before Practical Completion explain and demonstrate to the Employer's maintenance staff the purpose, function and operation of the installations including all items and

procedures listed in the Building Manual, include for not less than one operating day for this purpose.