



MINISTRY OF FINANCE & ECONOMIC MANAGEMENT
GOVERNMENT HEADQUARTERS
BRADES, MONTERRAT, W.I

Tel: 664-491-2356/3057/2777

Fax: 664-491-2367

Email minfin@gov.ms

Our Ref: MF 5/7

04 July 2014

Dear Sir/Madam

Re: Tender for Construction of the Davy Hill 6-unit Apartments Building # 1

You have been invited to tender for the Construction of the Davy Hill 6-unit Apartments Building # 1, Davy Hill.

The successful contractors will be chosen by open competitive tender amongst the tenderers that tendered for this project. Tenderers who choose to enter the open tender process will follow the process outlined below:-

Step 1: Entities are asked to register their intention to tender by, completing the registration form at the Project Implementation Unit (PIU) Office.

Step 2: Pay fee of \$300.00 to the PIU to obtain tender pack. (N.B. \$150.00 will be refunded to all applicants who have submitted completed and valid tender documents) and collect hard copies of the tender package from the PIU.

Step 3: Complete the Tender documents, complete and deliver to:

**The Chairman
Public Procurement Board
Ministry of Finance and Economic Management
Government Headquarters
Brades
Montserrat**

Tenders and all supporting documents should be enclosed in an inner envelope duly sealed and bearing the words, "*Tender for Construction of the Davy Hill 6-unit Apartments Building #1*". The name and address of the tenderer should be written on the inner envelope which should be addressed to the **Chairman, Public Procurement Board, Ministry of Finance and Economic Management, Brades, Montserrat**. The outer envelope should be duly sealed and bear the words, "*Tender for Construction of the Davy Hill 6-unit Apartments Building #1*" and addressed to the **Chairman, Public Procurement Board, Ministry of Finance and Economic Management, Brades, Montserrat**. The outer envelope should reveal **no** indication as to the identity of the sender. **All**

tenders **MUST** be submitted no later than 2.00pm on Wednesday 23rd July 2014 for immediate opening thereafter.

The completed Tender shall be submitted using the Form of Tender, in the copy of the Tender Document provided. **Submitting an incomplete "Form of Tender" will result in the tender being rejected.**

Enclosed please find Tender Documents consisting of:

- 1) Instructions to Tenderers
- 2) Document Compliance Checklist
- 3) Form of Tender
- 4) Schedules
 - Schedule A – Labour Rates
 - Schedule B – Construction Materials
 - Schedule C – Construction Equipment
 - Schedule D – List of proposed Establish Sub-contractors
 - Schedule E – Payment Schedule and Advanced Payment Repayment Schedule
- 5) Anti-Collusion Certificate
- 6) Preliminaries and General Matters
- 7) General Specification
- 8) Appendices
 - Appendix 1: Schedule of Drawings
 - Appendix 2: **EXAMPLE** Construction Work Programme and Cash Flow Schedule
 - Appendix 3a: Performance Bond
 - Appendix 3b: Advance Payment Bond
 - Appendix 4: Form of Agreement

Construction Drawings as per Schedule of Drawings

Tenderers are advised that a site visit will be arranged for Wednesday July 09th at 10:00 am at the Davy Hill Site where any questions relating to the works can be answered. **It is expected that all tenderers would have visited the sites before preparing their tender to ensure familiarity with site conditions.**

All addenda would be sent electronically (via email) using the email addresses submitted during registration.

Yours faithfully,



.....
Lindorna Brade (Mrs)
Deputy Financial Secretary
Ministry of Finance and Economic Management
Brades
Montserrat

Construction of Davy Hill 6-unit Apartment Building # 1

INSTRUCTIONS TO TENDERERS

The following instructions have been included for the advice and guidance of Tenderers. Care should be exercised in ensuring that all conditions and clauses are adhered to in the preparation and submission of tenders. Tenders that are found to have not complied with the instructions may be rejected.

1. **Confidentiality of Documents**

All recipients of tender documents and drawings for the proposed contract (whether they submit a tender or not) shall treat the details of the documents and drawings as private and confidential. **Failure to do so will result in disqualification from this and future tenders.**

2. **Dispatch of Tenders**

The Tender shall be delivered on or before the day and before the hour of tender closing stated in the Invitation to Tender. The Form of Tender shall be signed by an authorized representative of the Company. **Tenders received late shall not be considered.** The completed Tender shall be submitted using the Form of Tender, in the copy of the Tender Document provided. **Submitting an incomplete “Form of Tender” will result in the tender being rejected.** Tenders will be opened at 2:00 pm on the Tender Closing day stated in the Invitation to Tender.

Tenders and all supporting documents should be enclosed in an inner envelope duly sealed and bearing the words, ***“Tender for Construction of Davy Hill 6-Unit Apartment Building # 1”***. The name and address of the tenderer **should also be written on the inner envelope** which should be addressed to the Chairman, Public Procurement Board, Ministry of Finance and Economic Management, Brades, Montserrat. The outer envelope should be duly sealed and bear the words, ***“Tender for Construction of Davy Hill 6-Unit Apartment Building # 1”*** and addressed to the Chairman, Public Procurement Board, Ministry of Finance and Economic Management, Brades, Montserrat. The outer envelope should reveal **no** indication as to the identity of the sender. **All tenders MUST be submitted no later than 1400 hrs on Wednesday 23rd July 2014.**

Contract Documents

Below is a summary of the Contract Documents, which should be submitted together with the Form of Tender:

1. Schedule A – Labour Rates

2. Schedule B - Construction Materials
3. Schedule C - Construction Equipment
4. Schedule D - List of proposed established sub-contractors.
5. Schedule E – Payment Schedule
6. Detailed Construction Work Programme
7. Cash Flow Schedule
8. Anti-Collusion Certificate
9. Tax and Social Security Compliance Certificate - tenderers must submit a current Tax Compliance Certificate with their bid if their place of business is registered in Montserrat.
10. Document Compliance Checklist

3. **Contract Documents**

This Tender is based on the Drawings, Specifications, Articles of Agreement and Conditions of Contract found in the JCT intermediate Form of Building Contract 1998 Edition issued by the Joint Contracts Tribunal of the United Kingdom and amended for use in Montserrat, hereinafter referred to as the Contract Documents.

4. No unauthorized alteration or addition should be made to the Form of Tender, or to any other component of the Tender Document. If any such alteration or addition is made or these instructions are not fully complied with, the Tender may be rejected. Should any further information be required, it will be supplied on request by the Architect/Contract Administrator, via email within 3 working days of the request being made.
5. Any neglect or failure on the part of the tenderer to obtain reliable information upon any matters affecting the cost, execution, construction, completion and maintenance of the Works and the Contract shall not relieve the contractor whose Tender is accepted from any risks of liabilities for the completion of the Works, nor will any claim for increase of the Contract sum be entertained as a result of such neglect or failure.
6. Tenderers are advised that a site visit will be arranged for Wednesday July 09th at 10:00 am at the Davy Hill Site where any questions relating to the works can be answered. **It is expected that all tenderers would have visited the sites at their expense before preparing their tender to ensure familiarity with site conditions.**
7. Tenders must be submitted using the Form of Tender provided. Prices shall be in Eastern Caribbean Dollars. Each form shall be completely filled out. Tender prices must be completed in ink. Erasures or other changes must be noted over the signature of the Tenderer.
8. The tenderer should submit a detailed Construction programme of works with his/her tender showing a list of proposed activities and the duration. This condition should be duly satisfied before any award of contract is made with the tenderer.
9. The tenderer should submit a Cash Flow Schedule detailing weekly & monthly planned expenditure corresponding to Construction Work Programme. This condition should be duly satisfied before any award of contract is made with the tenderer.

10. All works undertaken will be the subject of taxation and social security liability in accordance with current legislation. Tenderers **must** submit a current Tax Compliance certificate along with a valid Social Security Compliance certificate with their bid if **locally based**. **All tenderers must be tax and social security compliant at the commencement of contract.**
11. The successful Tenderer will be required to supply Construction All Risk Insurance to the value of the Contract Sum. The insurance shall indemnify contractor and GoM.
12. Each Tender should contain the name, residence and place of business of the person or persons making the Tender and must be signed by the Tenderer with his usual signature. Tenders by partnership must furnish the full names of all partners and must be signed with the partnership name by one of the members of the partnership or by an authorised representative followed by the signature and designation of the person signing. Tenders by corporation to be signed with the legal name of the corporation followed by the name of the State of incorporation and by the signature and designation of the President, Secretary or other person authorized to bind it in the matter. **Satisfactory evidence of the authority of the signer on behalf of the firm shall be furnished.**
13. Award of Contract will be made to the tenderer whose tender is found to be most advantageous to the Government of Montserrat. The Employer is not bound to accept the lowest or any tender and reserves the right to reject any or all tenders. **The employer is not bound to state the reason for the rejection of any tender. The Tenderer shall bear the cost of preparing the tender.**
14. **Bond**
 - 14.1 Performance Bond

The Tenderer to whom the award is made will be required to furnish, and deliver to the Employer, a written bond of indemnity, of the same form as that in Appendix 2A, in the amount of ten percent (10%) of the Contract Price, and with surety thereon acceptable to the Employer. The bond shall be furnished and maintained at the expense of the Tenderer.

The party to whom the Contract is awarded will be required to execute the Contract and (if required) furnish the Performance Bond duly executed within seven days of signing the contract, not including Saturday and Sunday or Legal Holiday. Failure to so execute the Contract shall be sufficient reason for the Employer's Agent to cancel the award without obligation or claim upon the Employer.
 - 14.2 Advance payment Bond

The Tenderer to whom the award is made on request of an Advance payment will be required to furnish, and deliver to the Employer at the time of the request, a written bond of indemnity, of the same form as that in Appendix 2B, in the amount of ten percent (10%) of the Contract Price, and with surety thereon acceptable to the Employer. The bond shall be furnished and maintained at the expense of the Tenderer.
15. **Increases / Decreases in Cost of Labour and Materials**

- i. Increases / decreases in the current cost of labour and certain materials subsequent to the date for closing of Tenders will not result in an adjustment to the Contract Price.
- ii. Basic unit costs of labour and certain materials upon which the Tender is based and upon which day-works and variations will be considered shall be listed in Schedule A, B, C and D of the Form of Tender. These Schedules shall be completed and submitted with the Tender. **Failure to submit them may lead to disqualification of the Tender.**

16. Should there be any doubt or obscurity as to the meaning of the Tender Documents, or as to anything to be done or not be done under the Contract or concerning these instructions, or any other matter or thing, Tenderers shall set forth in writing such doubts or obscurity and submit them to the Architect/Contract Administrator not later than **Tuesday July 15th 2014**. These and any other outstanding matters will be answered in writing no later than **Friday July 18th 2014**.

17. Tenderers are to fill in all blank spaces in the Form of tender including the appendix, except where specifically instructed otherwise.

18. Pricing

- i. Tenderers are to insert rates or prices against each item in the Form of Tender, Schedules, Summary sheets and where required in the contract. Items against which no rate or price is entered by the Tenderer will be deemed to be covered by the rates of prices set against other items in the Contract.
- ii. Prices inserted shall be based on duty free imports from abroad of materials and goods required specifically for this project and shall be deemed to include for the provision of all labour, materials and plant, for transport, for deliveries to Site (where not specifically mentioned in the description), for temporary storage of materials and return of empties, for the erection, maintenance and removal of scaffolding, temporary staging, protection, etc and for all other things necessary for the completion of the Works in accordance with the Drawings, Specifications and Conditions of Contract.

19. Import Duty Concessions

- i. The tenderer must ascertain from the responsible official of the Customs Department the allowable concessions at present in force in respect of duty on imported materials to be incorporated in the Works.
- ii. The tenderer must familiarize himself with the workings of the Customs Department and shall allow for the costs of and shall accept responsibility for preparing and processing the necessary documents involved in the importation of materials, etc. to be incorporated in the Works.
- iii. The tenderer must allow for all Wharfage, Dues, Package Tax, Importer's Licenses (where applicable), Stamp Duties, taxes and other charges that may be required.

- iv. Special rules are in force in respect of the importation of plant, scaffolding, tools, equipment and consumable stores that are not incorporated in the Works. The tenderers must allow for the result of licenses, bonds deposits, duties, taxes, stamp duties or any other charges that may be required.

20. Mistakes in Tenders

Arithmetic errors discovered in the Tender will be dealt with as follows: The Tenderer will be given details of such errors and afforded an opportunity of accepting the Client's correction(s) or withdrawing his offer. If the Tenderer withdraws, the tender of the second most advantageous tenderer will be examined, and if necessary this Tenderer will be given a similar opportunity.

21. Compliance with Instructions:

- i. No tender will be considered unless it complies with the conditions set out in these instructions.
- ii. All Addenda issued by the Architect/Contract Administrator prior to the date stated for the closing of Tenders shall be attached to and form part of the Tender.
- iii. The Employer will not be responsible for any expenses or losses that may be incurred by any Tenderer in the preparation of his Tender.
- iv. The Tenderer shall be bound by his Tender except as provided for in Paragraph 17 of these instructions.

22. Discrepancies in Specifications or Drawings

- i. Any ambiguity found in the drawings or specifications shall be called to the attention of the Architect/Contract Administrator prior to the date provided in paragraph 16 for clarification of tender queries.
- ii. Ambiguities will be clarified by the Architect/Contract Administrator by Addenda prior to accepting tenders, and one copy of each Addendum shall be submitted with the Tender. No consideration will be given to any claim by any tenderer that an ambiguity or question was settled verbally prior to submitting his Tender.
- iii. All information given to bidders other than by means of the drawings and tender documents or by Addenda as described above, is given informally and shall not be used as the basis of a claim.
- iv. To receive consideration, such questions shall be submitted in writing to the Architect/Contract Administrator so as to be received no later than the dates provided in paragraph 16.
- v. Decisions rendered by the Architect/Contract Administrator in response to questions received as above-provided will be arranged as Addenda and shall become a part of the Contract.

23. Commencement of the Works

Tenderers are advised that the actual work of this Contract must not be started until a "Notice to Commence Work" has been issued by the Architect/Contract Administrator. The Contractor shall, however, commence work no later than the date specified in the above Notification.

24.

Scope Statement

The proposed works embodying this contract comprises the construction of the Davy Hill 6-Unit Apartments Building #1 COMPLETE with all the required external works as detailed in the working drawing provided and in accordance with the SCOPE OF WORKS.

25.

Technical Compliance

All tenderers must satisfy the minimum criteria that they have previously successfully completed at least one (1) contract of EC\$1,000,000 or greater. Proof may be in the form of a written submission with details of previous clients name, contact information, addresses, nature and value of the construction undertaken. **Tenderers are asked to note that checks will be made to verify the accuracy of these submissions.** A tenderer will be deemed to be technically suitable to perform the contract if this requirement is met.

Scope of Work – Construction of Davy Hill 6-Unit Apartment Building # 1

The following items are considered to be **WITHIN** the scope of proposed Davy Hill 6-Unit Apartment Building # 1 project, as per the issued Approve Drawing:-

- Substructure
 - Layout of Building
 - Excavation & Filling
 - Termite treatment and moisture protection
 - Concrete Work
 - Form Work
 - Reinforcement
 - Block Work
- Superstructure
 - Concrete Work
 - Form Work
 - Reinforcement
 - Block Work
 - Doors
 - Windows
 - Sundries
 - Joinery
 - Roof → 6" Reinforced Concrete Slab, with smooth render and 1% slope to drain pipes and parapet.
- Finishing
 - All finishes as per drawings
 - Wall Finishes
 - External Wall Finishes
 - Wall finishes – M60 Painting; Painting / Clear Finishes (Apply "Marmoran" super fine texture, trowel-on, coloured exterior finish to External wall surfaces)
 - Floor Finishes
 - Porcelain tiles internally and painted concrete to exterior walkways
 - Ceiling Finishes
 - Roof Finishes
 - Approved roof sealant applied to finished RC slab.
 - Painting & Decorating
- Fixtures & Fittings
 - Built in Furniture
 - Fittings
 - Ironmongery
- Services
 - Plumbing & Sanitary Fittings

- Soil & Vent Installation
- Hot & Cold Water Installation
- LPG Line Installation
- Electrical Installation
- Telephone & Cable Installation
- Rain Water / Surface Water Installation
- External Works
 - Drive way
 - Walk way
 - Drainage
 - Landscaping (Grading/leveling of ground and removal of debris/stones)
 - Connection to Sewage Network

The following items are considered to be **OUTSIDE** the scope of proposed Post Office Building government headquarters.

- Landscaping (Grassing)

Note: The Appendix forms part of the Tender. Tenderers are requested to fill all blank spaces in the Tender Form and the Appendix.

The Tenderer declares that:

- a) No person, other than the tenderer, has any interest in this tender or in the Contract proposed to be entered into.
- b) This tender is made without any connection, knowledge, comparison of figures or arrangement with any other person or persons making a tender for the same work, and is in all respects fair and without collusion or fraud.
- c) The general matters stated in the said tender are in all respects true:

The tenderer has carefully inspected the locality and site of the proposed works, as well as all the drawings, form of tender, instruction to tenderers, specifications, general conditions, agreement and bond, and hereby accepts the same as part and parcel of this contract, and to hereby tender and offer to enter into a contract to do all the work, provide the labour and plant and to provide, furnish, deliver, place and erect all materials mentioned and described or implied therein, to construct, complete and maintain the whole of the said works in conformity with the said drawings, conditions of contract, and specifications, to complete and deliver the whole of the works comprised in the contract within the time stated in the Appendix.

The tenderer also agrees that this offer is to remain open to acceptance for a period of 90 calendar days from the date for the submission of tenders until receipt of written acceptance of the tender, or until the formal contract is executed by the successful tenderer.

Document Compliance Checklist

Project Title: “Tender for Construction of Davy Hill 6-Unit Apartment Building # 1

Date scheme advertised: Friday 04th July 2014

Tender Deadline Date: Wednesday 23rd July 2014

Tender Deadline Time: 1400 hours (2:00pm)

The following documents **should** be provided by the tenderer for his tender to be considered administratively compliant. Tenderers are required to supply and tick off the following information. **Failure to provide any of the stated documents may result in the bid being considered non-compliant and rejected.**

- The Form of Tender should be fully completed and signed (Including time for completion and notice period) [].
- Tax & Social Security Compliance Certificate (*If company is **Locally Based***) [].
- Proof of one (1) construction contracts valued \$1,000,000.00 or greater [].
- Schedule A - Labour Rates [].
- b) Schedule B - Construction Materials [].
- c) Schedule C - Construction Equipment [].
- d) Schedule D - List of proposed establish sub-contractors. [].
- e) Schedule E - Payment Schedule [].
- f) Signed Anti-Collusion Certificate [].
- g) Construction Programme
- H) Cash Flow Schedule [].
- I) Signed Document Compliance Checklist [].

.....
Signed on behalf of Tenderer

Date

FORM OF TENDER

The Chair of the Public Procurement Board
Ministry of Finance and Economic Management
Government Headquarters
Brades
Montserrat

Dear Sir/Madam,

Re: Tender for Construction of Davy Hill 6-Unit Apartment Building #1

I/We the undersigned undertake to perform and complete the above captioned works in accordance with the Conditions of Contract, specifications, drawings and scope of works for the sum of:

EC\$

.....
.....
(words).....
.....
.....
.....
.....
.....

If my/our tender is accepted, I/We undertake to commence the said Works within ____calendar days from the date of receipt by me/us of the official contract award letter and to complete the Works within ----- calendar days thereafter.

I/We understand I/We shall not be reimbursed for any cost that may have been incurred in compiling and submitting this tender.

I/We confirm this tender shall remain valid for a period of 90 calendar days from the date of submission of this tender.

Name.....

Signed.....

Name of firm (If Applicable)

Address.....

.....

Tel. nr.....

Fax nr.....

Date.....

APPENDIX TO FORM OF TENDER

Clauses

Amount of Bond or Guarantee (if required):	10 percent of contract price
Minimum Amount of Third Party Insurance	EC\$1,000,000.00
Period for commencement from Notification of Award of Contract Calendar Days **
Time for completion Calendar Days **
Amount of Liquidated Damages thereof	EC\$500 per week or part
Period of Maintenance	12 months
Percentage of Retention	5 percent
Limit of Retention Money	5 percent of Contract Sum
Time within which payment to be made after issue of Certificate	14 Calendar Days

** To be filled in by Tenderer

Dated this day of 2014

Signature in the capacity of

duly authorised to sign tenders for and on the behalf of
(IN BLOCK CAPITALS)

Address

SCHEDULE A - LABOUR RATES

I (We) hereby certify that to the best of my (our) knowledge and belief the wages, hours of work, and conditions of labour of all work personel proposed to be employed by me (us) on this project for which I (we) am (are) offering myself (ourselves) as a Contractor are fair and reasonable having regard to the statutory provisions regulating rates of wages as are in force in Montserrat on the date of this my (our) Tender and I (we) will accept responsibility for the observance of these regulations by sub-contractors employed by me (us) in the execution of the works.

The above mentioned wages and hours of work are as listed on the following pages:

The Tenderer shall list the labour, by classification, which he proposes to have on the site for performing all of the work, together with the applicable hourly rates. The rates stated shall include all fringe benefits, overhead and profit.

Class of Work-person	Rates of Wages (*) \$ (EC)	Hours of Work (**)
Foreman		
Mason		
Carpenter		
Steel bender/fixer		
Skilled Labourer		
Labourer		
Electrician		
Plumber		
Tiller		

I (We) shall pay times the above rates of wages for normal overtime work in excess of hours per work day and times the above rates of wages for work on Sunday and Statutory Holidays.

* per hour

** In a normal working day

Dated this day of 2014

..... (Signature)

(Name in Block Letters)

being an officer of, and duly authorized to sign on behalf of

.....

..... (Business Address)

.....
(Telephone)

SCHEDULE B CONSTRUCTION MATERIALS

On the following pages I (We) have listed to the best of my (our) knowledge all of the required construction materials to be incorporated into the Permanent Works, together with the names of my (our) proposed suppliers and the unit for each material including the country of origin thereof.

We have satisfied ourselves that the suppliers' delivery schedules are realistic and/or we have satisfied ourselves that materials are available in sufficient quantities to execute the works without delay, and that materials conform with all requirements of the Specification.

We understand that all materials will be subject to inspection and tests by the Architect/Contract Administrator.

Material	Supplier (Including Country of Origin)	Unit Cost \$ (EC)
Blocks		
Sand		
Aggregate		
Cement		
Reinforcement – 1/2"		
Reinforcement – 3/8"		
Reinforcement – 5/8"		
Lumber – 2" x 4"		
Lumber – Form Ply 3/4"		
Conduit		
Wiring per point		
Copper pipe		
Upvc pipe		
Concrete per cubic yards		

Dated this day of 2014

..... (Signature)

(Name in Block Letters)

being an officer of, and duly authorized to sign on behalf of

.....

..... (Business Address)

.....
(Telephone)

SCHEDULE C CONSTRUCTION EQUIPMENT

I (We) propose to employ the following construction machinery and equipment for the execution of the Works and to the best of my (our) knowledge, the equipment listed is in sufficient capacity to construct all of the Works within the time specified for completion.

Note: Indicate (*) if equipment is to be rented or sub-contracted locally, and provide details. Also list the rate of hourly hire of all equipment for Day-work purposes. Do not list hand tools or normal tools required by trade persons.

Description of Equipment	Hourly Rate for Day-work \$ (EC)
Concrete Mixer (with hopper)	
Concrete Mixer (without hopper)	
Rough Rider	
Bobcat	
5 Ton Lorry	
3 Ton Lorry	
Excavator	
Backhoe	
Compressor	
Vibrator	
Tele-handler	
Crane	
Concrete mixer truck	

Dated this day of 2014

..... (Signature)

(Name in Block Letters)

being an officer of, and duly authorized to sign on behalf of

.....

.....(Business Address)

.....
(Telephone)

SCHEDULE D - LIST OF PROPOSED ESTABLISH SUB-CONTRACTORS

I (We) propose to sub-contract the following parts of the Works to the sub-contractors listed below. I (We) agree not to make changes to this list without the written consent of the Project Manager.

In my (our) opinion, the sub-contractors named hereunder are reliable and competent to perform that part of the works for which each is listed and, in any case, I (we) understand that all proposed sub-contractors shall be subject to the Architect/Contract Administrator's written approval.

Name and Address of Sub-Contractor

Part of the works

Steel Bender
Electrician
Plumbing
Tiling
Painter
Landscaping

Dated this day of 2014

..... (Signature)

(Name in Block Letters)

being an officer of, and duly authorized to sign on behalf of

.....

..... (Business Address)

.....
(Telephone)

SCHEDULE E - PAYMENT SCHEDULE

The Client shall make payments to the Contractor for the Services which have been certified by Construction Supervisor as properly carried out by the Contractor, in the following stages:-

PAYMENT STAGES	TRIGGER POINT	VALUE
MOBILISATION [ADVANCE PAYMENT] @ 10% of Contract Sum	Presentation of:- 1. Advance payment Bond 2. Performance Bond 3. Construction All Risk Insurance	\$
Stage 1: SUBSTRUCTURE	Casting of Floor	\$
Stage 2: GROUND FLOOR SUPERSTRUCTURE [inclusive of casting of roof]	Casting of Roof	\$
Stage 3: FIRST FLOOR SUPERSTRUCTURE [inclusive of casting of roof]	Casting of Roof	\$
Stage 4: FINISHES, FIXTURES & FITTINGS	Plastering (internal & external); Electrical 3 rd Fix; Plumbing 2 nd Fix; Window & Doors; Painting (internal & external); Tiling; Cabinets;	\$
Stage 5: FINISHES, EXTERNAL WORKS, PRACTICAL COMPLETION	Electrical Final Fix and Plumbing Final Fix; Drainage Works; Walkway; Clear site of all construction debris and General site Cleanup; Snagging; Electrical Certification and Handover of Building to Client	\$
FINAL RETENTION PAYMENT @ 5% of Contract Sum	Certification ALL defects are made good, 6-months after Practical Completion	\$
Total Contract Price		\$

For the purposes of this Schedule, if the Contract Price is adjusted, the amounts payable at each Stage under the Schedule will be adjusted by agreement and until then the amounts due under the Schedule will be payable.

The date for payment of each stage payment shall be 14 days after the Contractor's payment application is received and accepted by the Client.

Rates for certain aspects of the work and/or which will be used to calculate any additional work, are set out in the relevant schedules.

ADVANCE PAYMENT REPAYMENT SCHEDULE

Advance Payment Repayment will commence at the Stage within which 20% of the Contract Sum is been claimed. The final advance payment will be paid within the Stage where 80% of the Contract Sum is been claimed. Thus the number of Advance payment Repayments must be determine by the completed Payment Schedule table above and the stated 20/80 rule. The Advance payment will be reimbursed to the employer in the following amount(s) and at the following time(s).

PAYMENT STAGES	REPAYMENT VALUE
Stage 1:	\$
Stage 2:	\$
Stage 3:	\$
Stage 4:	\$
Stage 5:	\$
Total ADAVANCE PAYMENT REPAYMENT	\$

GOVERNMENT OF MONTSERRAT

TENDER SUBMISSION ANTI-COLLUSION CERTIFICATE

I/WE CERTIFY THAT THIS TENDER IS MADE IN GOOD FAITH, AND THAT WE HAVE NOT FIXED OR ADJUSTED THE AMOUNT OF THE TENDER BY OR UNDER OR IN ACCORDANCE WITH ANY AGREEMENT OR ARRANGEMENT WITH ANY OTHER PERSON. I/WE ALSO CERTIFY THAT WE HAVE NOT AND I/WE UNDERTAKE THAT WE WILL NOT BEFORE THE AWARD OF ANY CONTRACT FOR THE WORK:

DISCLOSE THE TENDER PRICE OR ANY OTHER FIGURES OR OTHER INFORMATION IN CONNECTION WITH THE TENDER TO ANY OTHER PARTY (INCLUDING ANY OTHER COMPANY OR PART OF A COMPANY FORMING PART OF A GROUP OF COMPANIES OF WHICH I AM/WE ARE A PART OF) NOR TO ANY SUB-CONTRACTOR (WHETHER NOMINATED OR DOMESTIC) NOR SUPPLIER (WHETHER NOMINATED OR DOMESTIC) OR ANY OTHER PERSON TO WHOM SUCH DISCLOSURE COULD HAVE THE EFFECT OF PREVENTING OR RESTRICTING FULL COMPETITION IN THIS TENDERING EXERCISE

ENTER INTO ANY AGREEMENT OR ARRANGEMENT WITH ANY PERSON THAT THEY SHALL REFRAIN FROM TENDERING, THAT THEY SHALL WITHDRAW ANY TENDER ONCE OFFERED OR VARY THE AMOUNT OF ANY TENDER TO BE SUBMITTED OR OTHERWISE COLLUDE WITH ANY PERSON WITH THE INTENT OF PREVENTING OR RESTRICTING FULL COMPETITION

PAY, GIVE OR OFFER PAY OR GIVE ANY SUM OF MONEY OR OTHER VALUABLE CONSIDERATION DIRECTLY OR INDIRECTLY TO ANY PERSON FOR DOING OR HAVING DONE OR CAUSING OR HAVING CAUSED TO BE DONE IN RELATION TO ANOTHER TENDER OR PROPOSED TENDER FOR THE WORK ANY ACT OR THING OF THE SORT DESCRIBED AT I), II) OR III) ABOVE.

I/WE FURTHER DECLARE THAT I/WE HAVE NO KNOWLEDGE EITHER OF ANY SUM QUOTED OR OF ANY OTHER PARTICULARS OF ANY OTHER TENDER FOR THIS CONTRACT BY ANY OTHER PARTY.

I/WE FURTHER CERTIFY THAT THE PRINCIPLES DESCRIBED ABOVE HAVE BEEN, OR WILL BE, BROUGHT TO THE ATTENTION OF ALL SUB-CONTRACTORS, SUPPLIERS AND ASSOCIATED COMPANIES PROVIDING SERVICES OR MATERIALS CONNECTED WITH THE TENDER AND ANY CONTRACT ENTERED INTO WITH SUCH SUB-CONTRACTORS, SUPPLIERS OR ASSOCIATED COMPANIES WILL BE MADE ON THE BASIS OF COMPLIANCE WITH THE ABOVE PRINCIPLES BY ALL PARTIES.

I/WE ACKNOWLEDGE THAT ANY BREACH OF THE FOREGOING PROVISIONS SHALL LEAD AUTOMATICALLY TO THIS TENDER BEING DISQUALIFIED AND MAY LEAD TO CRIMINAL OR CIVIL PROCEEDINGS. THE GOVERNMENT OF MONTSERRAT SHALL TREAT ANY TENDER RECEIVED IN CONFIDENCE BUT RESERVES THE RIGHT TO MAKE THE SAME AVAILABLE TO ANY OTHER FUNDING ORGANISATION OR STATUTORY REGULATORY AUTHORITY EITHER HAVING JURISDICTION OVER THE WORKS OR WHO MAY NOW OR AT ANY TIME IN THE FUTURE HAVE STATUTORY POWER TO REQUIRE DISCLOSURE OF THIS TENDER.

IN THIS CERTIFICATE, THE WORD 'PERSON' INCLUDES ANY PERSONS AND ANY BODY OR ASSOCIATION, INCORPORATED OR UNINCORPORATED; ANY AGREEMENT OR ARRANGEMENT INCLUDES ANY TRANSACTIONS, FORMAL OR INFORMAL AND WHETHER LEGALLY BINDING OR NOT; AND 'THE WORK' MEANS THE WORK IN RELATION TO WHICH THIS TENDER IS MADE.

SIGNATURE..... IN CAPACITY OF
.....

DATE.....2014

DULY AUTHORISED TO SIGN TENDERS AND ACKNOWLEDGE THE CONTENTS OF THE ANTI-COLLUSION CERTIFICATE FOR AND ON BEHALF OF:

NAME OF FIRM.....

FULL POSTAL ADDRESS.....

TELEPHONE No..... FAX No

PRELIMINARIES & GENERAL MATTERS

A. Names of Parties

“Employer” shall mean

Government of Montserrat / Ministry of Finance and Economic Management
Government Headquarters
Brades
Montserrat

Tel: 664 491 2777

“Architect/Contract Administrator” shall mean

Director Project Implementation Unit

“Engineer” shall mean

Engineer (appointed by client)

“Quantity Surveyor” shall mean

The Government Quantity Surveyor or a firm to be (appointed by client)

Architectural drawings Nos: A-00 to A-10, ID-01 to ID-03

Structural drawings Nos: S-100, S-00 to S- 09

Electrical drawings Nos: Ground floor electrical layout, 1st floor electrical layout, ground floor electrical RCP, 1st floor electrical RCP, power distribution, electrical riser diagram and schedules, Misc. electrical details, External electrical work, Electrical symbols, Fire riser diagram

Plumbing drawings P-01, P-02

Air Conditioning drawings AC-01 to AC-05.

B Description of the Works

This project comprises the construction of a single storey steel reinforced concrete walls beams and columns structure. Foundations are a combination of reinforced strip on the perimeter with edge beam and isolated pads. The roof is a 6" reinforced concrete slab with smooth render finish and 1% slope to drain pipes. The internal layout comprises offices, conference, vault, storage rooms, customs/parcel post, sorting area, kitchenette, lobby, public service area. The building has a gross floor area of approximately 3,100 sq ft

C Restrictions on working

Noisy operations are to be carried out at weekends or after normal working hours been 8 to 4 Monday to Friday. These restrictions apply in particular to the use of jack hammers, angle grinders, excavators and the like. An existing concrete drop manhole and necessary pipe work exist on site.

D Description of the Site

The Site is located at Government Headquarters Brades. The building is to be sited where the evacuated Inland Revenue Old temporary Building is located. Various building are located at GHQ, with the Human Resources Building been in close proximity to the proposed site, and the **contractor shall take particular care to prevent both Government of Montserrat worker and the general public at large from gaining access to the works. The contractor shall take care to keep his workmen segregated from the Public. Access will be from the Government Headquarters main entrance road, taking the first right turn with the site on the you're left.**

The Contractor is requested to visit the site and ascertain for himself the current conditions on site and shall ensure that the activities and access of the various ministries and departments are carried out as normally as practical during the course of the project with minimal disruption for noise and dust.

E Tender Documents

Tenders are invited for these Works on the basis of the information contained on the Drawings, Specifications and Conditions of Contract, which are hereinafter referred to as the Tender Documents. The Contractor shall allow in his tender for all the provisions of these documents. The information contained in the Drawings shall take precedence over that shown in the Specifications. One copy of the Tender Documents is issued; it is to be returned as instructed in the Instructions to Tenderers on or before the closing date of Tenders, duly priced and with the Form of Tender and its annexes fully completed. Additional copies of the above documents may be supplied to the Contractor, if requested and charged for at cost.

F Limitations

The Contractor shall restrict all building operations within the confines of the site. The placing of huts, storage areas, etc. shall be confined to the site in a position to be agreed by the Architect/Contract Administrator prior to commencement of the works. Under no circumstances shall areas outside the site be used for storage.

A Inspection of Site

The tenderer is recommended to make a personal inspection of the site and existing adjacent properties. He shall satisfy himself as to the local conditions, accessibility of the site, accommodation for material and plant, supply and conditions of labour, availability of water supply and other services. No claim arising from the tenderer's failure to inspect the site and / or lack of knowledge of prevailing conditions shall be entertained.

B Method of Measurement

The work has been measured generally in accordance with the Principles of Measurement (International) for Works of Construction (June 1979) as published by the Royal Institution of Chartered Surveyors, modified to suit local conditions.

C Conditions of Contract

The works embraced in this Contract are to be carried out in accordance with the J.C.T. Intermediate Form of Building Contract 1998 Edition (IFC 98) (Form of Building Contract for works of simple content). A copy of the Conditions of Contract is available for inspection at the Architect/Contract Administrator's Office during normal office hours.

D Schedule of Clause Headings

The prices in this Specification and Schedule of Works will be deemed to cover the cost of complying with the Clauses contained in the Conditions of Contract, as set out below:

1st Recital Delete "Bills of quantities"

2nd Recital Delete "Bills of quantities"

Article 1 Contractor's obligation

Article 2 Contract Sum
The Contract Sum shall be in Eastern Caribbean Dollars.

Delete "Exclusive of VAT" and insert "inclusive of duties, consumption and customs services and taxes".

Article 7

Delete Alternative A

- 1.1 Contractor's obligations.
Delete "Bills of quantities"
- 1.2 Quality and quantity of work
- 1.3 **Priority of Contract Documents:**

Apart from these preliminary items nothing contained in the Specification shall override or modify the application or interpretation of that which is contained in the Articles, Conditions, Supplemental Conditions or Appendix.
- 1.4 Instructions as to inconsistencies, errors or omissions.
- 1.5 Bills of Quantities
- 1.6 Custody and copies of Contract Documents
- 1.7.1 Information Release Schedule
- 1.7.2 Provision of further drawings or details
- 1.8 Limited to use of documents.
- 1.9 Issue of certificates by Architect/Contract Administrator.
- 1.10 Unfixed materials or goods: (passing of property) etc. Materials on site intended for temporary work (e.g. formwork) will not be included in interim valuations. Ensure that a good title can be passed to the Employer for any unfixed materials and goods.
- 1.11 Off-site materials and goods: (passing of property) etc.
- 1.12 Reappointment of Planning Supervisor or Principal Contractor-notification to Contractor
- 1.13 Giving or service of notices or other documents
- 1.14 Reckoning periods of days
- 1.15 Applicable law: The law of Montserrat shall be applicable to this Contract as far as it is possible and thereafter the law of England shall apply. Where English Laws are referred to, the equivalent Laws of Montserrat shall apply.
- 1.16 Electronic data interchange
- 2.1 Possession and Completion dates:
- 2.2 Deferment of possession
- 2.3 Extension of time
- 2.4 Events referred to in clause 2.3
- 2.5 Further delay or extension of time
- 2.6 Certificate of non – completion

- 2.7 Liquidated damages for non-completion.
- 2.8 Repayment of liquidated damages
- 2.9 Practical completion.
Delete the words 'and the Contractor has complied sufficiently with clause 5.7.4'.
- 2.10 Defects liability.
Delete the words 'or frost occurring before Practical Completion'.
- 2.11 Partial possession by the Employer
- 3.1 Assignment.
- 3.2 Sub-contracting
Replace "Bank of England" with "Bank of Montserrat"
- 3.3 Named persons as sub-contractors.
- 3.4 Contractor's person-in-charge. The Contractor shall not change senior supervisory staff without giving adequate notice to the Architect/Contract Administrator.
- 3.5 Architect/Contract Administrator's / Contract Administrator's instructions.
- 3.6 Variations
- 3.7 Valuation of Variations and provisional sum work - Approximate Quantity, measurement and valuation.
- 3.8 Instructions to expend provisional sums
- 3.9 Levels and setting out
- 3.10 Clerk of Works.
- 3.11 Work not forming part of the Contract.
- 3.12 Instructions as to inspection – tests.
- 3.13 Instructions following failure of work etc.
- 3.14 Instructions as to removal of work etc.
- 3.15 Instructions as to postponement.
- 4.1 Contract Sum
- 4.2 Interim payments
Replace "Bank of England" with "Bank of Montserrat"
Clause 4.2(b) Delete the words clause 4.2(b) does not apply where the Employer is a local Authority

Clause 4.2(b) Delete the words 'on the terms agreed between the British Bankers Association and the JCT and annexed to the Appendix'.

Clauses 4.2.1.1 and 4.2.1.2 Delete the words 'on the terms agreed between JCT and the British Bankers Association and annexed to the Appendix'

- 4.3 Interim payment on Practical completion
- 4.4 Interest in percentage withheld
- 4.5 Computation of adjusted contract sum
- 4.6 Issue of final certificate
Replace "Bank of England" with "Bank of Montserrat"
- 4.7 Effect of final Certificate
- 4.8 Effect of certificate other than final
- 4.9 Fluctuations
Clause 4.9 shall be deleted and the following clause shall be inserted
"No account shall be taken in any payment to the Contractor under this Contract of any changes in the cost to the Contractor or to any sub – contractor of the labour, materials, plant and other resources employed in carrying out the works except for changes in costs as a result of statutory enactments."
- 4.10 Fluctuations
Clause 4.10 shall be deleted and the following inserted:
"No account shall be taken in any payment to the Contractor under this Contract of any changes in the cost to the Contractor or to any sub-contractor of the labour, materials, plant and other resources employed in carrying out the works except for changes in costs as a result of statutory enactments"
- 4.11 Disturbance of regular progress
- 4.12 Matters referred to in clause 4.11
- 5.1 Statutory obligations, notices, fees and charges.

Delete the second paragraph and insert "the amount of any such fees or charges including duties, consumption and customs service's taxes shall be deemed to have been included in the Contractor's Tender Sum".
- 5.2 Notice of divergence from Statutory Requirements
- 5.3 Extent of Contractor's liability for non-compliance
- 5.4 Emergency Compliance
- 5.5 Value Added Tax: Supplemental Condition A.

Clause 5.5 shall be deleted
- 5.6 Statutory tax deduction scheme: Supplemental Condition B:

Clause 5.6 shall be deleted
- 5.7 Provision for use where the Appendix states that all CDM Regulations apply

Clause 5.7 shall be deleted

6.1 Injury to persons and property and indemnity to Employer.

Take out and maintain insurance cover in accordance with statute and in respect of other insurance to the minimum value stated in the Appendix.

6.2 Insurance of Works – alternative clauses.

Clause 6.2.1 insert the words ‘applicable in Montserrat’ after the words ‘relevant legislation’.

7.1 Notices under section 7

7.2 Determination by Employer

7.3 Contractor becoming Bankrupt

Clause 7.3.1 and 7.3.2 delete the words ‘Companies Act 1985 or Insolvency Act 1986’ and insert the words ‘Companies Act or Bankruptcy Act of Montserrat’.

7.4 Corruption

Delete the words ‘The prevention of Corruption Act 1889 to 1916’ and insert the words ‘The prevention of Corruption Act of Montserrat’.

7.5 Insolvency of Contractor – option to Employer

7.6 Consequences of determination under clause 7.2 – 7.4.

Delete the words ‘Companies Act 1985 or Insolvency Act 1986’ and insert the words ‘Companies Act or Bankruptcy Act of Montserrat’

7.7 Employer decides not to complete the Works

7.8 Other rights and remedies

7.9 Determination by Contractor

7.10 Insolvency of Employer

Clause 7.10.1 delete the words ‘Companies Act 1985 or Insolvency Act 1986’ and insert the words ‘Companies Act or Bankruptcy Act of Montserrat’.

7.11 Consequences of determination under clause 7.9 or 7.10

7.12 Other rights and remedies

7.13 Grounds for determination of the employment of the Contractor

7.14 Consequence of determination under clause 7.13.1

8.1 Reference to clauses, etc.

8.2 Articles etc. to be read as a whole

8.3 Definitions

8.4	The Architect/Contract Administrator/Contract Administrator
8.5	Priced Specification or priced Schedules of Work
9.1	Settlement of disputes – Arbitration - legal proceedings

The following shall be inserted in the Appendix against the various clauses and descriptions.

<u>Clause</u>	<u>Description</u>	<u>Insert</u>
Third Recital	CDM Regulations	Does not apply
Fourth Recital	Information release schedule	Does not apply
Articles 9A,9B Clause 9B,9C	Dispute or difference - Settlement of disputes	Clause 9B applies
1.16	Electronic data interchange	Does not apply
2.1	Date of Possession	To be inserted
2.1	Date of Completion	To be inserted
2.2 and 2.4.14 and 4.11 (a)	Deferment of the Date of Possession	Clause 2.2 does not apply.
2.7	Liquidated damages	at the rate of EC\$200.00 per day or part of a day
2.10	Defects liability period	twelve months
4.2	Period of interim payment	As per payment schedule
4.2(b)	Advance payment	The advance payment of 10% of the Contract Sum and, subject to the approval of the Director PIU, will be paid to the Contractor upon Contract Signature and the provision of an Advance Payment Guarantee. It will be reimbursed to the Employer as per payment

		Schedule / Advance Payment Repayment
4.2.1(a)	Valuation	A priced Cash Flow Schedule is attached to this Appendix
Appendix to Conditions of Contract		
4.9 (a)	Tax etc. Fluctuations	Not applicable
4.9 (b)	Formulae fluctuations	not applicable
D1	Formulae Rules	not applicable
5.5	Value Added Tax Supplemental Condition A	not applicable
6.2.1	Insurance cover for any one occurrence or series of occurrences arising out of one event	EC\$1,000,000.00
6.2.4	Insurance liability of Employee	Insurance is Required
6.3.1	Insurance of the Works – alternative clauses	Clause 6.3A Applies
6.3 A.1	Percentage to cover professional fees	12 ½% less any discount
6.3 A.3.1	Annual renewal date of insurance as supplied by Contractor	to be inserted if Applicable
6.3 D	Insurance for Employer's loss of liquidated damages – clause 2.4.3	Insurance is not required
8.3	Base date	The date of return of tenders
9.1	Appointment of Arbitrator	President or a Vice President of the Royal Institute of British

GENERAL MATTERS

A Labour

Provide all skilled, semi-skilled and unskilled labour necessary for the proper execution and completion of the Works. Workmanship is to be of the best quality throughout the Works and is to be entirely to the satisfaction of the Architect/Contract Administrator.

B Materials

Provide all necessary materials for the proper completion of the Works.

C Plant, Tools, Equipment etc

Provide all plant, tools, equipment, ladders, hoists and other apparatus both mechanical and non-mechanical necessary for the proper completion of the Works and any temporary or ancillary works for such proper completion, including altering, adapting and maintaining them as necessary.

D Transport

Provide all necessary transport for materials, plant and labour

E Foreman-in-charge

Include for all charges and costs i.e. home accommodation, transport and telephone for the Foreman-in-charge referred to in Clause 3.4.

F Site Supervisory Staff

Include for all charges and costs i.e. home accommodation, transport, etc for site supervisory staff, other than the Foreman-in-charge, referred to in Clause 3.4 whose salaries and/or wages are not included in other items.

GENERAL MATTERS

A Transportation and Importation of Employees

Include for the cost of transporting any employees to and from the site or from overseas should this be necessary.

B Immigration Regulations

Include for obtaining permission and work permits and for making any payments and deposits of money which the Government may require necessary for the importation of personnel from overseas. Permission for the importation of personnel from overseas must be sought from Government and the Contractor will be subject to the decisions of Government in every case in this respect. No claim for loss and/or expense by reason of the refusal of Government to grant work permits to overseas personnel will be entertained. Montserratian operatives should be given preference for employment opportunities.

C Safety, Health and Welfare

Include for complying with all local statutes and regulations in force relating to the safety, health and welfare of workpeople employed in connection with the Works (including those employed by sub-contractors) on site or in places where work is being prepared for incorporation into the Works, and shall include all costs in connection therewith inclusive of payment to the Social Service Scheme. Allow for keeping and maintaining at all times an adequate First Aid kit on the site.

D Fire Precautions

Before any works is carried out the Contractor is to discuss his proposals with the Chief Fire Officer to ensure that he is fully aware of any fire hazard that may be involved. He is to draw the attention of all his workmen and sub-contractors' workmen to the dangers involved in the careless disposal of matches and cigarettes, etc.

E National Insurance

Include for all contributions and costs in connection with National Insurance, Unemployment, Pensions, Redundancy Benefits and similar Schemes and Statutes in force relating to workpeople employed in connection with the Works on site or in places where work is been prepared for incorporation into the Works. The Contractor shall be responsible for the observation of these conditions by his sub-contractors.

F Registration

After execution of the Contract documents, the Contractor shall register the same with the Registrar at The Court House, Montserrat and pay all registration fees.

GENERAL MATTERS

A Holidays with Pay

Include for making all payments in connection with holidays with pay statutes, regulations and agreements with recognized Trade Unions in force relating to workpeople employed in

connection with the Works on site or in places where work is been prepared for incorporation in the Works.

B Overtime

Include for all costs and expenses in the working of overtime necessary to complete the Works or sections thereof by the date of completion.

C Control of Operatives

The Contractor shall be responsible for any acts of trespass or damage to property and he shall ensure that except in connection with the execution of the Works all persons under his control (including sub-contractors) are kept within the boundaries of the site.

The Contractor's attentions is drawn to the fact that workmen will, at all times, be restricted to within the boundaries of the Works in progress or as further instructed by the Architect/Contract Administrator during the progress of the Works.

The Contractor shall indemnify the Employer against any claims, loss, theft, costs or proceedings whatsoever arising out of any trespass.

D Dismissal of Employees

The Contractor shall within 48 hours of the receipt of written instructions from the Architect/Contract Administrator dismiss from the site any operative who in the opinion of the Architect/Contract Administrator is incompetent or insubordinate and shall immediately substitute others and bear all costs in connection therewith.

GENERAL MATTERS

A Workmen's Compensation

The Contractor shall insure against liability under Workmen's Compensation Ordinance and shall insure that every sub-contractor shall be so insured and he shall indemnify the Employer against any claim under the provisions of this and other related Ordinances for the whole of the Works.

B Contractor's Risk

The Contractor shall undertake all risks and liabilities arising out of, incidental to or connected with the construction, completion and maintenance of the Works. The Contractor's liability shall extend to all risks involved in the execution of the work with regard to temporary supports, struts, braces, shores and other works of support, steadying, restraint or upholding and shall, at his own expense, make good damage or defects resulting from the inadequacy or failure of his actions or work in these respect.

C Care of the Works

The Contractor shall be responsible for the proper care of the Works, materials and plant and shall make good all damage or loss as a result of inclement weather, theft, damage by any person or persons and shall allow for all necessary watching and lighting.

D Maintenance of Property etc .

The Contractor shall be responsible for maintaining and protecting private and public property, private and public roads and that of drainage, electricity, water, telephone, natural gas and similar undertakings and the making good, or paying for all damage caused thereto.

The Contractor shall indemnify the Employer against any claim for damage to public highways and private roads caused by the execution of the Works.

GENERAL MATTERS

A Programme

The Contractor shall within ten (10) days of award of the Contract produce a draft programme for the entire Works and submit it for the Architect/Contract Administrator's information. This programme shall indicate the dates for commencement and completion of all the works including sub-contractors work, the delivery dates of materials from suppliers, the latest dates required for all outstanding Contractor information together with a letter from his bank manager confirming he has sufficient collateral to finance the project and insurance certificates in accordance with the relevant contract clauses, all in an approved form to meet the completion date.

The Contractor shall, within two weeks after the date for possession, produce a detailed programme either of the bar-chart or critical path type for the information of the Architect/Contract Administrator. After making any necessary amendments he shall prepare final copies for all consultants and for his own use.

The Contractor shall allow for preparing any revised programme which may become necessary from time to time, and for notifying all sub-contractors, suppliers and consultants of any changes in programme. The production of revised programmes and their issue to the Architect/Contract Administrator shall not relieve the Contractor of his responsibilities under Clause 2.3 of the Conditions of Contract relating to the giving of written notice of delays.

The Contractor shall allow for keeping and displaying one copy of the programme on the site and indicating with coloured crayon weekly progress achieved for comparison with programmed progress.

B Site Instruction Book

The Contractor shall provide and keep on site a site instruction book for the use of the Architect/Contract Administrator and all other consultants for the purpose of confirming any verbal instruction given.

GENERAL MATTERS

A Police Regulations

The Contractor shall allow for complying with all police regulations whatsoever in the execution of the Works and shall be responsible for the observance of such regulations by his sub-contractors.

The Contractor shall observe and fulfil any obligations and requirements imposed on him by any law, bye-law, Order or otherwise passed by the Government or any department thereof in respect of all persons employed by him or connected with the execution of the Works.

B Ordering Materials

The Contractor shall prepare his own materials ordering schedules and lists based on the construction drawings and schedules issued and site measurement where appropriate.

C Attendance

The Contractor shall allow for the general attendance of one trade upon the other.

D Testing

The Contractor shall include for costs in connection with testing of materials including making and delivering the materials for testing. If the results of any tests are unsatisfactory the Contractor shall bear the cost of any resultant reconstruction which may be ordered by the Architect/Contract Administrator

E Samples

Allow for providing free of charge samples of materials and workmanship requested by the Architect/Contract Administrator.

F Site Meetings

The Contractor must make allowance for attendances at all site meetings which will take place at intervals not exceeding four weeks, but could be more frequent if thought necessary by the Architect/Contract Administrator. Representatives of any sub-contractors and/or suppliers may be requested to attend site meetings.

GENERAL MATTERS

A Noise Control

The Contractor shall take all measures required by any enactment or regulation or by the working rules of any industry to control the noise levels produced by his operations on site and shall indemnify the Employer against any actions concerned therewith arising from the execution of the Works.

The Contractor's attention is further drawn to the fact that all GHQ departments will continue working as normal and the Contractor's fullest efforts must be given to the areas of noise control.

The Contractor shall arrange in respect of all work done under this Contract:-

- (i) That all compressors used on the site are silenced either by using only fully silenced models fitted with effective exhaust silencers, properly lined and sealed acoustic covers all to the design of the manufacturers of the compressors, or by the use of effective acoustic screens around the noise.
- (ii) That ancillary pneumatic percussion tools used on the site are fitted with silencers of a type recommended by the manufacturers of the tools
- (iii) That every such compressor, silencer or other contrivance is maintained in good and efficient working order and shall not have been altered in such a way that noise caused in operation is made greater by alteration.

B Prevention of Pollution

The Contractor shall prevent any pollution arising from the execution of the Works. The cost of rendering harmless or removing any offensive discharge or deposit caused by the Contractor or his workpeople will be borne by the Contractor.

C Site Use

The Contractor shall not use the site for any purpose other than the execution of this Contract; the proposed sitting of all spoil heaps, temporary roads, rail and sleeper tracks, paths, hard standings, sheds and any other structures shall be subject to the approval of the Architect/Contract Administrator.

TEMPORARY WORKS

A Temporary Fences

Provide and maintain all necessary temporary fences, hoardings, planked footways, guard rails, gantries and the like necessary for the protection of the public and the proper execution of the Works and comply with the requirements of all official bodies having authority in connection with the Works.

B Temporary Roads within the Site

Provide and maintain all necessary temporary roads, tracks, gangways, bridges and the like, within the site for the proper completion of the Works.

C Temporary Crossovers and Hard Standings

Provide and maintain all necessary temporary crossovers, hard standings, and the like within the site for the proper completion of the Works. Obtain sanction for and provide and maintain temporary crossovers to public footpaths and light them when required and pay all fees and charges incurred.

D Temporary Drains

Provide and maintain all necessary temporary drains for the efficient drainage of the site during the progress of the Works to the satisfaction of the Architect/Contract Administrator.

E Temporary Water

Provide all necessary water for the Works from an approved source together with all necessary temporary plumbing and storage facilities and altering, adapting, and maintaining as necessary and paying all charges in connection therewith.

F Notice Boards

Provide and maintain for the period of the contract a suitable notice board in a position, as agreed by the Architect/Contract Administrator

TEMPORARY WORKS

A Temporary Lighting and Power

Provide and maintain all temporary lighting and power necessary for the proper completion of the Works together with all necessary temporary wiring and meters, altering, adapting and maintaining the same as necessary and paying all fees and charges, legally demandable in connection therewith.

All electrical installations shall be in accordance with local regulations.

B Temporary Telephone/Facsimile

Provide and maintain a telephone and facsimile machine in the site office including paying the cost of all the Contractor's calls/faxes. Allow for providing free use of the telephone/facsimile

for the Client's Representative, Architect/Contract Administrator and all other consultants or their appointed representatives for local calls/faxes in connection with the Works.

C Latrines

Provide and maintain in a clean and sanitary condition sufficient latrines for the operatives and site staff and deodorize the ground at completion to the satisfaction of the Architect/Contract Administrator and in compliance with the regulations and to the satisfaction of the health authority. **Chemical closet type latrines must be used.**

TEMPORARY WORKS

A Storage Sheds

Provide and maintain proper sheds for the storage of materials, plant and items brought on to the site for use in the Works.

B Rates and Taxes on Temporary Buildings

The Contractor shall pay all rates and taxes legally demandable by an Act of Parliament, any statutory instrument, rule or order made under any Act of Parliament or any regulation of any statutory body in respect of any temporary buildings used in connection with the Works.

C Scaffolding

Provide all general scaffolding necessary for the proper execution and completion of the Works including altering, adapting and maintaining during the progress of the Works.

D Clear away Temporary Works

Clear away at completion all temporary works and all rubbish and debris resulting there from and make good all ground disturbed.

PROTECTION AND CLEANING

A Protection of the Works

Allow for all work in connection with protecting all the Works, by whatever means necessary from any kind of injury or damage.

Provide all necessary temporary roofs, tarpaulins, screens, planks and general protection that may be required and clear away when no longer needed and reinstate any work which has become damaged or stained.

B Protection of Public and Private Services

Before commencing site operations, the Contractor shall notify the various service authorities that work will be proceeding in proximity to their installations and establish the exact positions of all such installations that may be under the site.

The Contractor shall protect and uphold pipes, ducts, sewers, service mains, overhead cables and the like until completion of the Works. The Contractor shall, without delay, make good any damage due to any cause at his own expense or pay any costs and charges in connection therewith.

The Contractor shall not interfere with the operation of existing services such as gas, water, electricity, telephones, buried cables or sewers, drains, field drains and roadside ditches without the permission of the Architect/Contract Administrator and in the case of services of Statutory Authorities and private owners, without their permission.

Any damage to mains or services shall be notified immediately to the Architect/Contract Administrator.

PROTECTION AND CLEANING

A Protection of Trees and Shrubs

The Contractor shall carefully preserve and protect all trees and shrubs on the site from damage until completion of the Works insofar as their removal is not required by reason of the execution of the Works.

Should any tree or shrub which it is intended to preserve, be uprooted, destroyed or in the opinion of the Architect/Contract Administrator be damaged beyond reasonable chance of survival in its original shape due to the Contractor's negligence then the Contractor shall provide and plant a suitable replacement tree or shrub of similar type and age.

B Cleaning

Allow for all costs in connection with removing rubbish and debris as the work proceeds and cleaning the whole of the Works on completion.

The Contractor shall also keep and maintain the site in a neat and tidy condition for the duration of the Contract.

C Handover of Completed Work

A provisional date for handing over the works shall be agreed and approximately two weeks prior to this the Architect/Contract Administrator, subject to his being satisfied that the work is in a suitable state of readiness, shall compile a "snag list" of omitted and/or defective items, and the formal handover shall not take place until all items on the snag list have been completed or remedied.

The Architect/Contract Administrator shall arrange for the formal handover normally within one week after satisfactory completion by the Contractor of all items on the snag list.

At the formal handover, a responsible representative of the Contractor shall accompany the Architect/Contract Administrator, together with such other representatives that the Architect/Contract Administrator and Employer deem necessary, on an inspection of the works, and if such an inspection shows the works to be completed in every respect, the Works shall be taken over. Any minor omission and/or defects found to exist at this point shall be remedied by the Contractor within seven days.

General Specification

Note:

This standard PIU specification shall take precedence should there be minor discrepancies between this and other specifications contained within the tender documents.

Should there be any doubt about specific items; the tenderer shall obtain a ruling from the Project Architect/Contract Administrator before proceeding.

1.00 THE WORKS GENERALLY

1.01 Materials and Workmanship

All materials and workmanship shall be in accordance with current good practice and shall be fit for their purpose.

1.02 British Standards

BS references in this specification are to current British Standard Specifications.

1.03 Manufactured Materials

Strictly observe all manufacturers' instructions. Ensure that the manufacturers' instructions are available at the site. Incompatible materials shall not be mixed (for example, metric and imperial drainage systems). Where proprietary materials are specified on the drawing, the phrase "or equal approved" shall be deemed to be included.

1.04 Alternative Materials

"Or equal approved" means that products other than those specified may be used provided that the contractor satisfies the Architect/Contract Administrator as to their suitability and obtains his/her written approval. **The Architect/Contract Administrator reserves the right to insist on the specified product if such approval is not given.**

1.05 Accuracy

Work within dimensional limits that are suited to the structural stability and final appearance of the works taking account of the need for a good fit for prefabricated components.

1.06 Inspections

Give notices in respect of any work that must be inspected before covering up and do not cover up until inspections have been carried out. Such work includes pipe work, drains and structural elements, e.g., foundations, ground slab and reinforcement for concrete.

1.07 Scaffolds

Properly constructed scaffolds shall be provided for all work that cannot be done safely by workmen standing on permanent or solid construction, except when such work can be done safely on ladders. All such scaffolds shall be substantially constructed, to support at least four times the maximum load and shall be secured to prevent swaying.

Roof brackets, roof scantling, crawling boards and similar forms of support shall be substantial in construction and securely fastened in place when in use.

Planks used in the construction of stationary scaffolds shall not be less than 2" nominal thickness. Where such planks overlap at the ends, the overlap shall be not less than 6". Planks shall be placed so that they cannot tip under the weight of the worker at any point.

Nails used in construction of scaffolds shall be of ample size and length to carry loads they are intended to support and all nails shall be driven full length. No nails shall be subject to direct pull.

Barrels, boxes or other similar unstable objects shall not be used as supports for planking intended as scaffolds or places of work.

No materials or equipment other than required by the workers shall be placed on scaffold platforms.

1.08 Clearing and Cleaning

Remove all timber forms for concrete or other timber not required in the permanent works from the site. Keep the site clean and tidy. On completion, remove all plant, materials, waste and rubbish. Repair any damaged existing features and clean out gutters.

Remove all stains and splashes, clean glass, remove all dust and dirt from surfaces and leave the completed structure(s) to the Architect/Contract Administrator's satisfaction.

2.00 EXCAVATION AND EARTHWORKS

2.01 Site Conditions

Unless otherwise indicated in the tender document, no trial holes or site investigations have been undertaken. The Contractor shall make local inquiries and carry out his own investigations in respect of the ground conditions, water table and other factors affecting the proposed excavations.

2.02 Levels

Set up and maintain an accurate site datum level. Carry out and record a site level grid and agree with the Architect/Contract Administrator. Excavate the site to the reduced levels as shown on the drawings.

2.03 Foundations

Excavate for foundations as shown on the drawings.

Trenches are to be squarely dug and vertically stepped where necessary. Level and ram bottom of foundations to receive concrete. Excavate soft spots and fill with Class D concrete. Excavate, break up and remove all boulders that may be encountered. Keep excavation clear of water. Plug any pipes cut off at the perimeter with Class D concrete, rammed immediately into at least 12" depth.

For foundations, place minimum 2" thick Class D concrete immediately after completing excavation and compact level with the back of the spade.

2.04 Hardcore

Hardcore or fill to consist of hard dry stone or broken concrete or other compactable materials approved by the Architect/Contract Administrator, capable of passing a 4" ring in all directions and thoroughly compacted by maximum 8" layers.

2.05 Damp Proof Membrane / Underlay

Under all concrete ground slabs, lay polythene sheet over the blinded hardcore to be lapped accordance with manufacturers' instructions. Care must be taken to prevent the sheet being punctured before the placing of reinforcement or concrete.

2.06 Backfill

Backfill to all trenches to consist of hardcore or selected excavated material, free from organic matter thoroughly compacted to 95% proctor density, and in layers not exceeding 8". This excludes internal backfill to the building foundation, which shall be hardcore as specified above.

2.07 Disposal

Remove all excavated material not suitable for fill or top soil and cart to approved tip.

2.08 Termite Treatment

Treat the buildings to prevent Termite activity. The work is to be carried out by an approved specialist, using "Torpedo" or other approved proprietary system. The treatment is to be carried out in accordance with the manufacturer's recommendations using the higher concentrations where a range is recommended.

Underground slabs, apply the treatment solution to the entire ground surface with additional applications at the slab perimeters and penetrations such as drains.

At each side of the foundation walls, after soil or fill has been graded to its final level, excavate a 6" X 6" trench, rod to the top of the foundation at 9" centres and apply the solution. Mix the solution with the soil and replace it in the trench.

3.0 CONCRETE WORK

All structural concrete used on this project will be of Class A for columns and beams and Class B for other reinforced concrete work, unless otherwise specified.

3.01 Sand

No sea dredged or beach sand is to be incorporated in any of the structural work covered by this contract.

Sand for concrete work shall be obtained from a source approved by the Architect/Contract Administrator and shall be sifted only where necessary on site for screeds and rendering.

All sand shall be clean and free from soil or deleterious matter and shall comply with BS 882. It shall be well graded between the limits given in BS 882.

3.02 Coarse Aggregate

All coarse aggregate shall consist of clean approved hard stone or gravel, free from soil or deleterious materials and shall comply with BS 882. Sea dredged or beach aggregate shall not be used.

Once the first delivery of coarse aggregate has been received on site graded coarse aggregate, it may be necessary to blend single-sized aggregates on the site.

Both sand and coarse aggregates shall be stored on hard clean surfaces and shall be handled so as to remain clean and well graded and shall be kept separate from one another by separating walls if space is restricted until placed in the mixture.

3.03 Water

All water used throughout the works shall be clean fresh water free from harmful matter in undesirable quantities. Seawater shall not be used.

3.04 Cement

The cement for the whole works shall be Portland Cement (PC42.5) to BS12 of approved manufacture. Cement, which is not manufactured in Trinidad or Barbados, shall have a certified average alkali content of 0.6% or less. Cement shall be delivered in the original sealed bags of the manufacturer and stored in a suitably dry, weatherproof and properly ventilated store.

3.05 Concrete Mixes

Concrete specified by Class shall be mixed in the nominal proportions stated below, the proportion of sand to coarse aggregate being carefully adjusted to provide a dense and workable concrete to the satisfaction of the Architect/Contract Administrator. The water content shall be adjusted so that the slump lies within the limits stated and the quantity of water added to the mix shall be measured accurately. Batch testing shall be carried out before commencement of concreting.

Class of Concrete	Normal Mix	Allowable Slump	Nominal Minimum Strength	Cube	Nominal Average Strength	Cube
A	1 : 1½ : 3	1” to 3”	4500 psi		5500 psi	
B	1 : 2 : 4	1” to 3”	3000 psi		4000 psi	
C	1 : 3 : 6	1” to 2”	1000 psi		1500 psi	
D	1 : 4 : 8	1” to 2”	-		-	

Or as indicated on the Structural Engineering drawings

3.06 Admixtures

Nothing shall be added to the essential ingredients of the concrete (cement, sand and coarse aggregate and water) without the Architect/Contract Administrator’s approval.

3.07 Steel Reinforcement

Steel bar reinforcement shall be deformed high yield steel bars complying with BS 4449, with minimum yield strength of 60 PSI. The drawings may show imperial bar sizes for which equivalent metric sizes may be substituted.

Steel fabric (mesh) reinforcement shall be high yield welded fabric to BS 4483.
All reinforcement shall be free from loose mill scale, loose rust, oil, grease, paint, etc.

Existing exposed reinforcement because of concrete splinter shall be wire brushed and be entirely free from rust, oil, grease, paint, etc. before patching.

The reinforcement shall be bent to the shapes and placed exactly as shown on the drawings and the Contractor before cutting shall check the lengths of all bars. Cutting shall be by sawing or shearing. All bars shall be bent cold. Bars shall not be re-bent.

All intersections of bars shall be bound together with soft pliable 16 SWG wire so that they will not be displaced in the process of depositing the concrete.

The whole of the steel reinforcement shall be spaced with concrete block or other proprietary spacers or suspended from above so that the concrete cover does not deviate by more than 1/4” from that shown on the drawing. Spacers should be as maximum 3’ 0” centres but closer centres may be necessary. For fabric reinforcement, spacers should be at 18” centres. The contractor shall request an inspection by the Architect/Contract Administrator of each section of completely assembled reinforcement. Concreting shall not be carried out until the Architect/Contract Administrator’s final approval is given.

3.08 Formwork Generally

Formwork shall be constructed to the shape and dimensions shown, sufficiently right to prevent leakage and shall be securely braced and shored to prevent displacement, at the same time safely supporting the construction loads.

Formed finishes shall have the appearance of a dense, well-compacted concrete and any minor voids or honeycombing shall be made good as directed.

Vertical formwork for columns, walls, sides of beams and other parts not supporting the weight of the concrete may be removed as soon as the concrete has hardened sufficiently to resist damage from removal operations but not less than 12 hours after concreting.

Formwork for soffits of beams and slabs and other parts that support the weight of the concrete shall remain in place until the concrete has reached the specified 28 days strength and in any case shall remain in place for at least the following periods:

Soffits of Slabs	8	days
Soffits of beams and cantilever slabs	12	days

The contractor shall be solely responsible for the safety of the construction during and after form removal.

3.09 Fair-faced Concrete work

Where fair faced concrete is specified, the members shall be rubbed down before the concrete has set, all holes filled and formwork marks removed as much as possible and the whole smoothed down with concrete filler

3.10 Gauge Boxes

Gauge boxes of suitable sizes shall be employed to give exact volumes of fine and coarse aggregate but due allowance shall be made for the bulking effect of sand in wet weather and the additional water entrained in the aggregates. In all cases, the amount of cement employed in a given mix shall be based on the tables in clause 3.05 and shall be such that it is necessary to divide a full bag of cement.

3.11 Mixing Concrete

The mixing of the concrete shall be carried out by means of a batch machine of approved design and capacity to be agreed with the Architect/Contract Administrator prior to the commencement of the works.

The mixing shall continue until there is a uniform distribution of the materials and the mass is uniform in colour and consistency. The mixing time shall not be less than two minutes and the batch or any part thereof shall not be permitted to remain in the drum longer than ten minutes after being completely mixed.

3.12 Placing Concrete

Before placing commences, all formwork shall be clean and free from construction debris and shall be properly oiled or lime-washed. All reinforcement shall have been placed in proper position and firmly supported and forms for all construction joints and stop ends completely installed. Runaways shall have been placed and any steel disturbed, properly replaced. The formwork shall be wetted down to eliminate suction and all water used for this purpose drained away.

Immediately after mixing, the concrete shall be placed in the work in layers not exceeding 6” thick. Each layer shall be thoroughly vibrated or rammed until it has been made to penetrate and fill all the spaces between and around the reinforcement or other embedded fixtures and has properly and completely surrounded them throughout their entire length in such a manner as to ensure that all surfaces are dense and free from honey-combing or other defects. It is imperative that the work to be done quickly as well as effectively and a sufficient number of men shall be employed to ensure this.

Vibrators must be used for all columns, beams and suspended slabs and for all paths, roads or hard-standings exceeding 4” thickness.

In no circumstances shall the concrete be thrown or dropped from a height or deposited under conditions that would cause the separation of the coarser from the finer portions of the concrete.

When no special placing plant is provided the concrete shall be conveyed from the mixer to the point of deposit in as short a time as possible. It shall be emptied onto a tray from which it shall be carefully placed in its final positions in the forms by shovels. Concrete shall be deposited at several points in line and shall not be permitted to flow along the forms.

In columns and other similar members, the bottom 1” shall be filled with grout which shall consist of cement and water mixed to a thick, creamy consistency. In deep members in which congestion of steel makes placing difficult the lower part of the forms shall be filled with grout in the same way. The grout in each case shall be deposited immediately in advance of the concrete and shall not be permitted to dry out or set so as to lose its mobility before the concrete is placed on top of it.

3.13 Stoppage of Work

No concrete of any kind shall be placed during inclement weather. The Architect/Contract Administrator reserves the right to stop concrete placing during periods of excessive rainfall unless adequate precautions are taken to protect freshly placed concrete from the weather.

3.14 Worked Finishes

Tamped Finish: when no specific finish is required, tamp to a plain or evenly ribbed finish with tolerance suitable for subsequent work or use.

Wood Float Finish: close the surface with a wood float to produce an even slightly coarse texture, free from ridges and depressions.

Steel Trowel Finish: repeatedly trowel by appropriate means (e.g. power float) to produce a dense smooth surface free from ridges and depressions. If a thin floor finishing is to be applied no defect in the concrete should show through the finish. Maximum permissible deviation is 1/8" from a 9" straight edge.

Brush Finish: after working to a smooth finish, draw a stiff bristled brush across the surface to produce an even non-slip finish of fine parallel line free from ridges and depressions. Trowel the margins of the panel with a steel float to produce a uniform band approximately 4" wide.

Generally: Form falls where required to ensure that all areas drain naturally towards outlets and other run-off points. All newly finished surfaces shall match existing finished surfaces.

3.15 Curing of Concrete

Concrete after taking the initial set shall be protected from drying out at all times during the first three days. Acceptable methods of curing are by flooding, by polythene sheeting in close contact, by permanently wet Hessian or by an approved proprietary curing compound which should not affect adhesion of subsequent finishes, not stain exposed concrete. During the curing period the concrete should be shaded from direct sunlight.

3.16 Construction Joints

All joints including day joints should be straight and perpendicular to the surfaces.

Construction joints for slabs and beams may be located at or near the middle of the span. Construction joints for columns and horizontal wall joints shall be made only at the underside of floor members or at floor level unless otherwise approved.

Un-reinforced slabs are to be laid in bays not exceeding 20' 0" in length and no bay should have a length exceeding 1½ times its width. Fabric reinforced slabs are to be laid in bay not exceeding 30' 0" in length.

Hardened concrete faces of joints should be prepared for subsequent concrete by cleaning and roughening the face of the joint to remove laitance and expose but not disturb the larger aggregate. For horizontal surfaces, washing off laitance and fines after concreting may attain exposure, once initial set has occurred.

The Contractor shall submit for approval construction joints scheduled for walls and slabs. The contractor shall not attempt to cast a single pour of more than twenty cubic yards without obtaining the prior approval of the Architect/Contract Administrator.

3.17 Samples and Testing

Testing shall be in accordance with BS 1881.

Samples for compressive strength shall be taken from concrete Classes A and B at the rate of 1 sample per 10 batches, but not less than 1 sample from each Class on each day of casting. A sample shall consist of three standard 6" cubes that shall be cured by immersion in water until tested. One cube from each sample shall be tested at 7 days and the remaining two cubes at 28 days. Each cube shall be marked with a unique reference number and record shall be kept to record the class, date of casting and location of member corresponding to the cube. Slump tests shall be carried out for each batch.

4.00 MASONRY

4.01 Cement, Water, Coarse Aggregate and Reinforcement

To be as specified for Concrete

4.02 Sand

To be as specified for Concrete. Alternatively, use sand to BS 1200

4.03 Concrete Block

The hollow concrete blocks shall be obtained from an approved source and shall be nominally 15 ½ “long by 7 ½” high by the thickness shown on the drawings and shall be handpicked for fair work where required. Actual dimensions shall not vary from nominal dimensions by more than ¼”. Minimum wall thickness shall be 1”.

All blocks shall be cured at the place of manufacture for a minimum of 14 days before being transported to the site and off loading shall be carried out with care – tipping will not be permitted and damaged blocks must not be used.

For laying in half bond, half blocks shall either be purpose made or cut from 3-core full blocks. They shall not be cut from 2-core blocks.

4.04 Mortar

Unless otherwise stated mortar for block work and stonework is to be composed of one part cement to three parts sand, mixed on the site with the minimum quantity of water to achieve a workable consistency. The proportions are to be obtained by actual measurement in gauge boxes, making due allowance for bulking of wet sand.

Mortar is to be made in such quantities as can be used within one hour after mixing and no mortar that has become set or hard must be used on any part of the work. Re-tempering is permitted only up to one hour after mixing.

4.05 Blockwork Reinforcement

Vertical reinforcement is to be ½” diameter high yield ribbed bars except where otherwise specified. Horizontal reinforcement is to be Dur-O-Wal Extra Heavy Duty galvanized “Ladur Type” ladder reinforcement with cross bars at 16” centres and with prefabricated corners and tees or 3/8” diameter bars in alternate courses.

Vertical starter bars are to be anchored in the base concrete with 8” bends located below the top layer of reinforcement, or drilled 4½” deep into the concrete and anchored with Hilti “HIT C100” resin.

At tops of walls, vertical bars are to be bent 8” into slabs or beams cast on top. Freestanding walls are to be capped with a 8” deep concrete beam reinforced with one continuous ½” diameter bar, lapped 2’ 0” at splices and intersections.

Vertical bars are to be lapped 2’ 0”. Horizontal ladder reinforcement is to be lapped 1’0”. Unless otherwise detailed, reinforcement is to be provided as follows:

Vertically: At each corner, end or intersection
 Beside each opening exceeding 2’0” in width or height
 At the following centres, measured horizontally: 6” block work - 32”

Horizontally: At the following centres, measured vertically: 6” block work - 16”

4.06 Grout

Grout for filling the cores of blocks to comply with the concrete specification, is to have a slump of 8 to 10 inches and is to be of the following proportions, volume:

Block Size	Cement	Sand	3/8” Nominal Size Aggregate
6” and 8”	1	3	2

4.07 Workmanship

The concrete blocks shall be laid in half bond in mortar as specified with joints nominally ½” thick covering all concrete areas of the block. Blockwork shall be carefully set out at foundation and floor level so that at jambs of opening only half blocks and full blocks are used: cut blocks may be used where necessary above and below centres of openings, midway between openings and at faces of columns. Where lintels, ring beams, etc are cast over open block cores, place Dur-O-Wal “Dur-O-Stop” mesh over cores to prevent concrete from dropping through. Grout shall be placed and compacted in maximum 4’0” lifts. Excess mortar shall be removed from cavities before grouting. Grout shall be placed to 1” below the top of the blocks to provide a key.

Protection shall be provided at all times as necessary to prevent damage to work done by storms and no part of a wall shall be built higher than 4’0” above the surrounding walls. Cut blocks shall be saw cut and all joints shall be made as even as practical

Generally conduits shall be built into the cores of new work. Otherwise, chases shall be formed as required for the installation of other work. There shall be at least 10” of masonry between the chases and the jambs of openings. Where chasing exposes block cores, they shall be solidly grouted. Chases exceeding 2’ 0” in length shall have expanded metal lath fixed over them before plastering. The lath shall be 6” wider than the chase. Unfinished work shall be stepped back to permit jointing of new work. Chasing shall not take place on both sides of the same wall.

4.08 Samples and Testing

Blocks shall be sampled at the rate of one sample per day of deliveries, but not less than one sample per 1000 blocks. A sample shall consist of three blocks, selected at random by the Architect/Contract Administrator. The strength of the blocks shall be measured over the gross area including voids and shall not be less than 700 psi for a single block

5.00 CARPENTRY & JOINERY

Generally

Comply with BS 5268: Parts 2 and 3

5.01 Timber and Plywood

All timber and plywood is to be clean, sound, merchantable, properly seasoned timber, free from any defects making it unsuitable for its function in the Works. Unless otherwise stated, timber is to be stress graded imported Southern Yellow Pine, Grade No.1 or No.2 to NGRDL rules. Each piece of timber shall be marked with the grade and species. Plywood is to be American construction and industrial A-C or B-C grade sanded plywood, marked “APA: A-C (or B-C) exterior.”

5.02 Preservative

Timber and plywood are to be pressure impregnated with copper/chrome/arsenic (CCA) solution to BS 4072. After cutting or machining, brush on preservative in two applications to cut surfaces.

5.03 Fastenings

All fastenings are to be galvanized or zinc plated. Bolt washers are to be large diameter, i.e., at least 3 times the bolt diameter with a thickness of at least ¼ of the bolt diameter.

5.04 Splices

Do not splice timber members except where shown on the drawing.

5.05 Doors

A specialist manufacturer shall construct doors. Timber shall be specially selected for straightness and is to be well seasoned, tenoned and glued and wedged or pinned together when being fabricated. Plywood faced doors shall be glued and pressed to the framework and suitably dressed and finished with lipped stiles.

5.06 Door and Window Frames

Where not otherwise specified, frames should be fixed to all sides of openings at not more than 12” centres. Fixtures are to consist of built-in cramps, plugs and anchorages at least 2” deep into the adjacent structure.

6.00 ROOF CONSTRUCTION

6.01 Concrete Slab

Reinforced concrete slab (6" thick) with smooth render and 1% water run 6" x 6" roof lip with grade at top and ¾" groove at bottom (as per details on dwg # A-02 and sections dwg # A-03, 04). Provide and fix all formwork etc as to ensure water tightness and stability.

6.02 Concrete Water proof

Single coat of Vulkem 801 or equivalent material on smooth rendered top of roof slab, applied and finished as per manufacturers specifications.

7.00 METAL WORK

7.01 Ironmongery

Provide and fix all screws, nails, bolts, washers, galvanized wall ties, metal flashings etc to complete the contract.

7.02 Finished Hardware

The Contractor shall supply and install all operating gear, finished hardware locking devices and similar appliances.

Locksets and latch sets shall be as secure and fit for their intended purposes. Locks by Schlage or other equal approved manufacturer shall be supplied with master keys. Locks must be provided with two keys that will be handed over to the Architect/Contract Administrator on completion of this Contract.

All hardware, unless otherwise stated, shall be stained chrome on brass or other non-ferrous metal base. All butts, fingerplates, bolts, door closers, stops and holdbacks shall have similar finish.

Unless otherwise specified, locksets and latch sets shall be of cylindrical type with mechanism throughout constructed of rust resistant materials.

7.03 Windows

Windows shall be of Lausell manufacturer or equivalent

8.00 PLASTERING and PAVING

8.01 Materials

As described in Concrete Work, except that sand for plastering shall comply with BS 1199.

Over-sifting of sand shall be avoided.

8.02 Substrates

All surfaces specified or indicated on the drawings to be plastered or rendered are to be thoroughly brushed and cleaned and well wetted before the work is executed. Plaster on concrete surfaces shall be applied to galvanized expanded metal lath, securely fixed and overlapping by 4” onto adjacent block work. Joints between new and existing plaster are to be carefully executed by cutting plaster on a splay as directed by the Architect/Contract Administrator before applying new plaster.

8.03 Proportioning Mixing and Timing

Unless otherwise specified, the proportions shall be one part of cement to between four and six parts of sand. Once an acceptable mix within this range has been determined and approved by the Architect/Contract Administrator, the same proportions shall be used throughout.

Mortar mixes shall be used up within two hours of the first contact of the cement with water. All mixes remaining after this time are to be discarded. No re-tempering shall be carried out.

8.04 Cement Screeds

Lay sand and cement screeds to the thickness necessary, well bonded to the sub-concrete. All screeds shall be smooth and level and approved by the Architect/Contract Administrator prior to applying tiling or finish.

Screeds to floors shall be mixed one part cement to three parts sand; the cement and sand shall be clean and smooth and mixed only with sufficient water to bind the sand and cement. Adequate protection shall be supplied and laid by the Contractors as soon as possible after laying.

9.00 PLUMBING

9.01 Water Authority

The water supply is to be executed in accordance with the requirements, regulations and approval of the Local Water Authority MUL, by qualified and competent workmen.

9.02 Water Pipes

Cold-water service pipes to be copper tubing with fittings to match. Copper pipes shall have compression or capillary fittings. Connections to each sanitary fitting are to be by means of an approved union.

The use of pressure type PVC tubing will be permitted but for cold water services only and shall be installed according to manufacturer’s instructions. Only proprietary brackets shall fix surface mounted pipes.

9.03 Solder

Only lead free solder is to be used. This shall be clearly marked on the product labels.

9.04 Stopcock

Provide and fix a brass pressure screw-down stopcock on the cold-water service at point of entry to buildings showing plumbing installations. Install an isolating valve at every fixture (sinks, washbasins, water closets, urinals, etc.)

9.05 Waste Pipes

Run the pipes so as to discharge the wastewater from basins, etc in a sanitary manner.

9.06 Protection and Fixtures

The Contractor will be responsible for covering up and protecting against damage from building materials, acids, tools and equipment, all plumbing fixtures.

9.07 Water Main

Pay all fees including charges for water meter installation and all water charges during construction.

9.09 Rainwater Pipes and Gutters

All pipes and gutters shall be Leo- Rain UPVC or equivalent to be approve by the Architect/Contract Administrator.

10.00 ELECTRICAL INSTALLATION

10.01 Compliance with Statutory Authorities

The electrical installation is to be executed in accordance with the requirements and regulations of and to the approval of Ministry of Agriculture Lands Housing and the Environment, Electrical Inspectorate Division by qualified and competent workmen.

10.02 Examination of Work

The Contractor is to process the “Application to Wire for Electricity Supply” forms and submit them to the Electrical Inspectorate Division.
Make safe existing electrical installation and liaise with supply authority as necessary. Before starting work and from time to time as the work progresses, the Contractor shall examine the work and materials installed by Subcontractors insofar as it affects his own work and shall promptly notify the Architect/Contract Administrator if any conditions exist that will prevent him from carrying out satisfactory work.
The Contractor will be required to have sufficient workmen on site during the whole period of construction to ensure that all conduits, duct sleeves etc. can be placed in position as the work progresses.

10.03 Approval, Testing, Fees and Permits

The work shall include the provision of all necessary notices, obtaining and paying for all permits, governmental taxes, fees and other costs in connection with their work; filing all necessary plans, preparation of all documents and obtaining all necessary approvals of Government Departments having jurisdiction; obtaining all required Certificates of Inspection for the work and delivery of the same to the Employer before request for acceptance and final payment.

APPENDIX 1: Schedule of Drawings

<u>Schedule of Drawings</u> <u>Ground Floor Post Office Building GHQ Brades</u>	
DWG. No.'s	DRAWING TITLE
000	Cover
A-100	Site Plan
A-101	Foundation Pan
A-102A	Ground Floor Plan
A-103	Rear View, Front View, Left View, Right View
A-104	Section AA
A-105	Section BB
A-106	Door Schedule, Window Schedule, Exterior Star Plan
A-107	Ground Floor Electrical Plan
A-107A	First Floor Electrical Plan
E-108	Grounding
E-109	Electrical Legend & Plumbing Legend
E0110	Electrical Panel * 6 [each unit will have its own panel]
P-111	Ground Floor Plumbing Plan
P-111A	First Floor Plumbing Plan
S-112	C1 Wall Detail
S-113	Beam Plan
S-114	Roof Plan
S-115	Exterior Ramp Retaining Wall, LPG Housing, Exterior Ramp Front View

APPENDIX 2: EXAMPLE Construction Work Programme and Cash Flow Schedule

[illegible]

FINISHES	1																					
	2																					
	3																					
	4																					
	5																					
FIXTURES & FITTINGS	1																					
	2																					
	3																					
	4																					
	5																					
	6																					
	7																					
	8																					
	9																					
EXTERNAL WORKS	1																					
	2																					
	3																					
	4																					
	5																					
	6																					
	7																					
HANDOVER	1																					

CASH FLOW SCHEDULE -																						
		YEAR: 2014	MONTH 1				MONTH 2				MONTH 3				MONTH 4				MONTH 5			
			WK1	WK2	WK3	WK4	WK5	WK6	WK7	WK8	WK9	WK10	WK11	WK12	WK13	WK14	WK15	WK16	WK17	WK18	WK19	WK20
	1	WEEKLY TOTAL																				
	2	MONTHLY TOTAL																				

