

# **REQUEST FOR QUOTATION (RFQ)**

**For**

**CONSTRUCTION OF CALVING SHED AND SICK BAY AT WALIC, ITC.**

**RFQ Reference: 2020/UNDP/GAM/OPS/133**

**Issued on 28-Nov-2020**

**Deadline for the Submission of Quotation: 07 December 2020**

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| RFQ Reference: 2020/UNDP/GAM/OPS/133 | Date: 28 November 2020 |

# **SECTION 1: REQUEST FOR QUOTATION (RFQ)**

UNDP kindly requests your quotation for the Construction of Calving Shed and Sick Bay At WALIC, ITC as detailed in Annex 1 of this RFQ.

This Request for Quotation comprises the following documents:

Section 1: This request letter

Section 2: RFQ Instructions and Data

Annex 1: Schedule of Requirements

Annex 2: Quotation Submission Form

Annex 3: Technical and Financial Offer

When preparing your quotation, please be guided by the RFQ Instructions and Data. Please note that quotations must be submitted using Annex 2: Quotation Submission Form and Annex 3 Technical and Financial Offer, by the method and by the date and time indicated in Section 2. It is your responsibility to ensure that your quotation is submitted on or before the deadline. Quotations received after the submission deadline, for whatever reason, will not be considered for evaluation.

Thank you and we look forward to receiving your quotations.

Issued by:

Signature:

Name: Thomas Mugabiyimana

Title: Team Leader

Date: 28-Nov-2020

## **SECTION 2: RFQ INSTRUCTIONS AND DATA**

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| **Introduction** | Bidders shall adhere to all the requirements of this RFQ, including any amendments made in writing by UNDP. This RFQ is conducted in accordance with the [UNDP Programme and Operations Policies and Procedures (POPP) on Contracts and Procurement](https://popp.undp.org/SitePages/POPPBSUnit.aspx?TermID=254a9f96-b883-476a-8ef8-e81f93a2b38d&Menu=BusinessUnit) Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of the Bid by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this RFQ. UNDP reserves the right to cancel the procurement process at any stage without any liability of any kind for UNDP, upon notice to the bidders or publication of cancellation notice on UNDP website. |
| **Deadline for the Submission of Quotation** | Monday,07 December 2020, @ 5:00 Gambian timeIf any doubt exists as to the time zone in which the quotation should be submitted, refer to <http://www.timeanddate.com/worldclock/>. |
| **Method of Submission** | Quotations must be submitted as follows: [x]  Dedicated Email AddressBid submission address: bids.gm@undp.org* File Format: PDF files only
* File names must be maximum 60 characters long and must not contain any letter or special character other than from Latin alphabet/keyboard.
* All files must be free of viruses and not corrupted*.*
* Max. File Size per transmission: 8MG
* Mandatory subject of email: RFQ 2020/UNDP/GAM/OPS/133 Construction of Calving Shed and Sick Bay At WALIC, ITC
* Multiple emails must be clearly identified by indicating in the subject line “email no. X of Y”, and the final “email no. Y of Y.
* It is recommended that the entire Quotation be consolidated into as few attachments as possible.
* The bidder should receive an email acknowledging email receipt.
 |
| **Cost of preparation of quotation** | UNDP shall not be responsible for any costs associated with a Supplier’s preparation and submission of a quotation, regardless of the outcome or the manner of conducting the selection process. |
| **Supplier Code of Conduct, Fraud, Corruption,**  | All prospective suppliers must read the United Nations Supplier Code of Conduct and acknowledge that it provides the minimum standards expected of suppliers to the UN. The Code of Conduct, which includes **principles on labour, human rights, environment and ethical conduct** may be found at: <https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct>Moreover, UNDP strictly enforces a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical or unprofessional practices, and obstruction of UNDP vendors and requires all bidders/vendors to observe the highest standard of ethics during the procurement process and contract implementation. UNDP’s Anti-Fraud Policy can be found at <http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_andinvestigation.html#anti> |
| **Gifts and Hospitality** | Bidders/vendors shall not offer gifts or hospitality of any kind to UNDP staff members including recreational trips to sporting or cultural events, theme parks or offers of holidays, transportation, or invitations to extravagant lunches, dinners or similar. In pursuance of this policy, UNDP: (a) Shall reject a bid if it determines that the selected bidder has engaged in any corrupt or fraudulent practices in competing for the contract in question; (b) Shall declare a vendor ineligible, either indefinitely or for a stated period, to be awarded a contract if at any time it determines that the vendor has engaged in any corrupt or fraudulent practices in competing for, or in executing a UNDP contract. |
| **Conflict of Interest** | **UNDP requires every prospective Supplier to** avoid and prevent conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, specifications, cost estimates, and other information used in this RFQ. Bidders shall strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. Bidders found to have a conflict of interest shall be disqualified. Bidders must disclose in their Bid their knowledge of the following: a) If the owners, part-owners, officers, directors, controlling shareholders, of the bidding entity or key personnel who are family members of UNDP staff involved in the procurement functions and/or the Government of the country or any Implementing Partner receiving goods and/or services under this RFQ.The eligibility of Bidders that are wholly or partly owned by the Government shall be subject to UNDP’s further evaluation and review of various factors such as being registered, operated and managed as an independent business entity, the extent of Government ownership/share, receipt of subsidies, mandate and access to information in relation to this RFQ, among others. Conditions that may lead to undue advantage against other Bidders may result in the eventual rejection of the Bid. |
| **General Conditions of Contract** | Any Purchase Order or contract that will be issued as a result of this RFQ shall be subject to the General Conditions of ContractSelect the applicable GTC:* [General Terms and Conditions for Works](https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Award%20and%20Management%20of%20Contract_UNDP%20General%20Terms%20and%20Conditions%20for%20Civil%20Works.docx&action=default)

Applicable Terms and Conditions and other provisions are available at [UNDP/How-we-buy](http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html)  |
| **Special Conditions of Contract** | ☐ Cancellation of PO/Contract if the delivery/completion is delayed by 15 working of days |
| **Eligibility** | A vendor who will be engaged by UNDP may not be suspended, debarred, or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization. Vendors are therefore required to disclose to UNDP whether they are subject to any sanction or temporary suspension imposed by these organizations. Failure to do so may result in termination of any contract or PO subsequently issued to the vendor by UNDP.It is the Bidder’s responsibility to ensure that its employees, joint venture members, sub-contractors, service providers, suppliers and/or their employees meet the eligibility requirements as established by UNDP.Bidders must have the legal capacity to enter a binding contract with UNDP and to deliver in the country, or through an authorized representative  |
| **Currency of Quotation** | Quotations shall be quoted in GMD |
| **Joint Venture, Consortium or Association** | If the Bidder is a group of legal entities that will form or have formed a Joint Venture (JV), Consortium or Association for the Bid, they shall confirm in their Bid that : (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the JV, Consortium or Association jointly and severally, which shall be evidenced by a duly notarized Agreement among the legal entities, and submitted with the Bid; and (ii) if they are awarded the contract, the contract shall be entered into, by and between UNDP and the designated lead entity, who shall be acting for and on behalf of all the member entities comprising the joint venture, Consortium or Association. Refer to Clauses 19 – 24 under [Solicitation policy](https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Solicitation%20Process_Solicitation.docx.docx&action=default) for details on the applicable provisions on Joint Ventures, Consortium or Association. |
| **Only one Bid** | The Bidder (including the Lead Entity on behalf of the individual members of any Joint Venture, Consortium or Association) shall submit only one Bid, either in its own name or, if a joint venture, Consortium or Association, as the lead entity of such Joint Venture, Consortium or Association. Bids submitted by two (2) or more Bidders shall all be rejected if they are found to have any of the following:a) they have at least one controlling partner, director or shareholder in common; or b) any one of them receive or have received any direct or indirect subsidy from the other/s; or b) they have the same legal representative for purposes of this RFQ; or c) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Bid of, another Bidder regarding this RFQ process; d) they are subcontractors to each other’s Bid, or a subcontractor to one Bid also submits another Bid under its name as lead Bidder; or e) some key personnel proposed to be in the team of one Bidder participates in more than one Bid received for this RFQ process. This condition relating to the personnel, does not apply to subcontractors being included in more than one Bid. |
| **Duties and taxes** | Article II, Section 7, of the Convention on the Privileges and Immunities provides, inter alia, that the United Nations, including UNDP as a subsidiary organ of the General Assembly of the United Nations, is exempt from all direct taxes, except charges for public utility services, and is exempt from customs restrictions, duties, and charges of a similar nature in respect of articles imported or exported for its official use. All quotations shall be submitted net of any direct taxes and any other taxes and duties, unless otherwise specified below: All prices must:[x]  be inclusive of VAT and other applicable indirect taxes |
| **Language of quotation**  | Must be expressed in English Including documentation including catalogues, instructions and operating manuals. |
| **Documents to be submitted** | Bidders shall include the following documents in their quotation:[x]  Annex 2: Quotation Submission Form duly completed and signed[x]  Annex 3: Technical and Financial Offer duly completed and signed and in accordance with the Schedule of Requirements in Annex 1☒ Company Profile.☒ Registration certificate;☒ List and value of projects performed for the last 3 years plus client’s contact details who may be contacted for further information on those contracts;☒ List and value of ongoing Projects with UNDP and other national/multi-national organization with contact details of clients and current completion ratio of each ongoing project;[x]  Completed and signed CVs for the proposed key Personnel; |
| **Quotation validity period** | Quotations shall remain valid for 60 days from the deadline for the Submission of Quotation. |
| **Price variation** | No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted at any time during the validity of the quotation after the quotation has been received.  |
| **Partial Quotes** | [x]  Not permitted |
| **Alternative Quotes** | [x]  Not permitted |
| **Payment Terms** | [x]  100% within 30 days after receipt of goods, works and/or services and submission of payment documentation. |
| **Conditions for Release of****Payment** | [x]  Passing Inspection Complete Installation☒ Written Acceptance of Works, based on full compliance with RFQ requirements  |
| **Contact Person for correspondence, notifications and clarifications** | E-mail address: getachew.araya@undp.orgAttention: Quotations shall not be submitted to this address but to the address for quotation submission above. Otherwise, offer shall be disqualified.Any delay in UNDP’s response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers. |
| **Clarifications** | Requests for clarification from bidders will not be accepted any later than 3 days before the submission deadline. Responses to request for clarification will be communicated 03 December 2020 |
| **Evaluation method** | [x] The Contract or Purchase Order will be awarded to the lowest price substantially compliant offer |
| **Evaluation criteria** | [x] Full compliance with all requirements as specified in Annex 1 [x] Full acceptance of the General Conditions of Contract[x] Earliest Delivery /shortest lead time  |
| **Right not to accept any quotation** | UNDP is not bound to accept any quotation, nor award a contract or Purchase Order |
| **Right to vary requirement at time of award** | At the time of award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five per cent (25% ) of the total offer, without any change in the unit price or other terms and conditions. |
| **Type of Contract to be awarded** | [x]  Purchase Order [x]  [Contract for Works](https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Award%20and%20Management%20of%20Contract_Model%20Contract%20for%20Civil%20Works.docx&action=default)  |
| **Expected date for contract award.** | 07 December 2020 |
| **Publication of Contract Award** | UNDP will publish the contract awards valued at USD 100,000 and more on the websites of the CO and the corporate UNDP Web site.  |
| **Policies and procedures** | This RFQ is conducted in accordance with [UNDP Programme and Operations Policies and Procedures](https://popp.undp.org/SitePages/POPPBSUnit.aspx?TermID=254a9f96-b883-476a-8ef8-e81f93a2b38d&Menu=BusinessUnit)  |
| **UNGM registration** | Any Contract resulting from this RFQ exercise will be subject to the supplier being registered at the appropriate level on the United Nations Global Marketplace (UNGM) website at [www.ungm.org](http://www.ungm.org). The Bidder may still submit a quotation even if not registered with the UNGM, however, if the Bidder is selected for Contract award, the Bidder must register on the UNGM prior to contract signature. |

**ANNEX 1: SCHEDULE OF REQUIREMENTS**

**TECHNICAL SPECIFICATIONS FOR THE CONSTRUCTION OF CALVING SHED AND SICK BAY AT WALIC, ITC**

**SPECIFICATION**

**FOR**

**GENERAL CIVIL, STRUCTURAL**

**&**

**ARCHITECTURAL WORKS**

 **INTENT OF SPECIFICATION**

This specification is intended to cover setting out the buildings at site, design, preparation of drawings, supply of materials and construction of all civil, structural and architectural works for installation and commissioning of the proposed buildings.

 **SCOPE OF WORK**

 The scope of work of civil, structural and architectural works shall include all works related to the installation and commissioning of the buildings and its auxiliaries whether specifically mentioned or not.

 The work to be performed under this specification consists of providing all labour, materials, plants, equipment, temporary work, construction of buildings and maintenance till handing over, transportation and all incidental items not specifically stated but reasonably implied or necessary for the proper and successful completion of the work.

**A. GENERAL REQUIREMENTS & PRELIMINARIES SPECIFICATIONS**

1. **GENERAL**

 **1.1 Regulations**

 The Works shall comply with the provisions of the Gambia Physical Planning and Development Control Act 1991.

 **1.2 Material and Workmanship**

 Materials and workmanship shall comply with the relevant British Standards (BS)

 And/or codes of Practice (CP) or other internationally recognized standards/codes.

 Where goods or materials of a manufacturer are demanded the contractor shall

 Allow for these. Similar goods or materials of different manufacturer may be approved

 for use if equal in quality, properties and design.

 Goods and material used shall be compatible with one another and be kept clean free from

 damage during the courses of the Works.

 Workmanship shall be to the satisfaction of the Consultant and any work rejected shall

 be taken down, removed completely from site and re-executed by the contractor at his

 own expense.

 Each part of the works and the whole of the Works shall be left clean upon completion.

* 1. **Testing**

Contractor must submit samples to be tested at a time, which will enable the results of the test to be assessed by the consultant before the relevant material, or component is used in the works.

* 1. **Inspection of Site**

Contractor is instructed to visit the site prior to tendering and to acquaint himself with work environment, accessibility of the premises limited space for storage of materials, the availability of the water supply and electricity, sand and stone aggregate sources, and conditions under which the work has to be done.

No claim for variations, alteration or additional payments will at any time be considered or admitted on the grounds of lack of knowledge in such respects.

* 1. **Setting Out**

The Contractor shall set the works in accordance with the dimension shown on the Drawings and to the requirements of the Engineer/Consultant. Where a discrepancy or error is noted, notice must be given to the Consultant and a period of at least 3 days allowed for the consultant to prescribe a solution.

* 1. **Order of works**

The works shall be carried out within the time stated in the form of tender.

* 1. **Form of Contract**

The form of contract will be a prepared UNDP’s Standard format of contract for works, a copy of which will be issued to the Contractor with the other tender documents.

* 1. **Labour Costs**

The Contractor is to allow in his price for all payment and obligation under any labour agreement and legislation including all allowance for guaranteed day, leave pay, sick leave with pay.

* 1. **Overtime**

No claim for overtime payment shall be entertained unless the overtime has been specifically noted to and agreed, in writing, with the engineer/consultant before its commencement, any other overtime worked shall be at the contractor’s expense.

* 1. **Existing Services**

Existing drains, pipes cables and other services if any are to be protected from injury by the Contractors and maintained by him in full and uninterrupted use during the construction period.

* 1. **Temporary Roads**

Provide any temporary roads or tracks required for the proper execution of the works and maintain, alter adapt as necessary and clear away and make good on completion.

* 1. **Plant, Tools, Scaffolding, etc**

Provide paint scaffolding, tools, labour and materials together with everything necessary for the proper execution of the works. Adopt, shift and maintain in proper sequence and remove away any plant, tools, surplus material upon completion of the works.

* 1. **Transport**

Provide all transport to and from the site and pay all costs connected therewith.

* 1. **Ordering Materials**

On receipt of the order to commence work, the contractor is to make a review of the materials required for the proper execution of the works and is to place orders for such materials without delay.

* 1. **Filling in Holes and Trenches**

Immediately on completion of any of the work, and following inspection of same, the Contractor shall fill in all holes and trenches and clear away any surplus material or rubbish arising there from.

* 1. **Water**

 Provide and maintain a proper clean water supply together with drinking water for workman and pay all charges in connection therewith.

Allow for use of water to all trades and any sub-contractor and nominated suppliers. Clear away and make good on completion

* 1. **Materials other than Specified**

All materials not fully specified herein shall be of first-class quality and the Engineer/consultant shall have the right to determine whether materials may be suitable for the works.

* 1. **Handling and Storage of Materials**

The materials for incorporation into the works shall be handled with due care, and when not required for immediate use shall be adequately stored and protected having particular regard to the type of materials, climate, position of store and other relevant matter.

* 1. **Nuisance**

No nuisance shall be committed upon or around the works such as interfering with or blocking any right of way or light to adjoining property.

* 1. **Pest Control**

The Contractors shall open up any termite nests on the site and take effective measures to exterminate and prevent such pests.

* 1. **Keep site Clean and Sanitary**

The site must be kept in a clean and sanitary condition and no ground shall be fouled or disturbed so as to become a breeding ground for mosquitoes, termites or other pests.

* 1. **Toilet Facilities**

The Contractor shall provide/make arrangements for and maintain adequate and satisfactory toilet facilities for the use of site staff and clear away and make good on completion.

* 1. **Welfare and safety Measures**

The Contractor is to allow for providing, maintaining and clearing away upon completion, safety measures and amenities to an approved standard for workmen on the site. The Contractor’s attention is drawn on the relevant legislations, and he is to allow for fulfilling his obligations under these legislations.

* 1. **Temporary Office for Engineer’s Representative**

Provide and maintain a suitable temporary office for an Engineer/Consultant representative with desk, stool, and washing facilities and attendance and clear way on completion.

* 1. **Lighting and Power for the Works**

The Contractor is to provide and maintain temporary lighting and power of required, for the whole of the works including sub-contractors work and pay all charges in connection therewith and clear away and make good on completion.

* 1. **Temporary Watching, Lighting and Fencing**

The Contractors shall provide all temporary watching, lighting, fencing etc. that may be required in connection with the works for the proper protection of the public and his workmen. The Contractor shall maintain and keep clear any public footpath and highway adjacent to the site.

* 1. **Attendance**

Provide all necessary attendance on general and nominated sub-contractors.

* 1. **Trespass**

The Contractor shall take the necessary steps to prevent the access of unauthorized persons to the works, and shall see to it that his own workmen must not enter upon adjoining property, without the necessary permission first being obtained by the Contractor in writing, and he shall see to it that such encroachment it strictly limited.

* 1. **Care of the Works**

The charge and care of the works shall be at the expense of the Contractor until such time as they are handed over and accepted as completed. The Contractor is to provide all requisite security by day and night and will be required to make good loss by theft or damage done to the works at his own expense.

* 1. **Protection of the Works**

The Contractor shall provide all proper and sufficient cover and protection for the whole of the works from damage by weather, traffic of otherwise. Any work damaged or soiled by weather traffic or other causes shall be taken down and re-executed or otherwise made good at the Contractor’s expense.

* 1. **Protection for Working During the Rains**

The Employer shall require the Contractor to maintain, whenever practicable, continuity of working and productivity during the rains. The Contractor will be expected to avail himself of all reasonable means and aids to building during the rains and to use his best Endeavour’s to minimize any delay. Consideration will be given to this by the Engineer/Consultant in assessing claims for extension of time under the contract.

* 1. **Diversion of Storm Water**

Provide as necessary for the diversion and disposal of storm water from the site during the progress of the works

* 1. **Keep Records**

The Contractor is to keep an accurate record, with dates, of the weather, temperature, visitors and any other events influencing the progress and quality of work.

* 1. **Removal of Rubbish**

The Contractor must clear up and remove rubbish as it accumulates during the progress of the works, including that of sub-contractors, and nominated sub-contractors as directed by and to the entire satisfaction of the Engineer/Consultant.

* 1. **Figured Dimensions**

Figure dimensions on the drawings are to take preference over scale dimensions in all cases.

* 1. **Notice of Inspection**

The Contractor is to give written notice to the Engineer/Consultant as least 24 hours before any work that must be specially inspected is ready for inspection. The Contractor will be required to uncover any such work, which may have been covered up without such notice being given and reinstate after inspection at his own expense.

* 1. **Progress Schedule**

The Contractor shall produce a time and progress schedule. One copy of this shall be given to the Engineer/Consultant, and one copy shall be retained in the contractor’s Office on site and kept up to date by him.

* 1. **Checking Schedules, Drawings etc.**

The Contractor shall submit to the engineer/Consultant, within one week from the date of the order to commence, all drawings of specially manufactured items, (roof trusses, burglar proofing and any other factory made items) which required the Engineer/Consultant at least 14 days before the works concerned are to be executed.

* 1. **Chases, Holes, Plugs etc.**

The Contractor shall check from the drawings or by consulting the Engineer/Consultant and all nominated sub-contractors and specialist tradesmen

Appointed by the employer, the positions of all holes, recesses, plugs, etc., which may be required, in time to form these as the works, proceed. If, through the Contractor’s neglect in this respect, alterations must be affected, the contractor shall carryout the alterations at his own expense or at the expense of the sub-contractor’s work.

* 1. **Returns**

The Contractor is not to display any other notice or advertisement in any form on any part of the site detailing the number of people employed on site and their appropriate trade and category and also copies of delivery notes for all materials delivered including work accomplished.

* 1. **Advertisements**

The contractor is not to display any other notice or advertisement in any form on any part of the site, buildings or adjoining ground without the prior approval of the Engineer/Consultant.

* 1. **Importation of Goods**

All the materials, stores and equipment required for the full performance of the contract by the contractor must be obtained through normal trade channels unless otherwise stated. The contractor must include in his prices for all expenses for charges in connection with the lading and shipment of plant, with materials and other things loaded or brought into or dispatched from the Gambia by the contractor for the purpose of this contract port dues, lighter age, carnage and other similar charges shall be borne by the contractor whether included in the shipping costs or not.

Customs duty waiver applies to all materials imported for this work and contractor must allow for these in its prices.

1. **CLADDING / COVERING**

**2.1 Trapezoidal Profile Sheeting**

Roofing sheets will be `Single span`, Prepainted GCI Sheets with a thickness of 0.40mm, and a profile height of at least 22mm.

Sheeting shall be laid and fixed in accordance with the manufacturer’s printed instructions or as directed by the Consultant. Side laps shall be of not less than one corrugation and shall be turned away from the prevailing wind.

Fixing holes to roof sheets shall be drilled from above in all cases and sheets fixed through the crowns of the profile with hook bolts, nuts, screws, capped nails and plastic weatherproof washers.

* 1. **2.2 Accessories**

Accessories will suit the profile of the cladding. Ridge capping will be in lengths not less than 1.8m, and shall be lapped at least 150mm at ends. Fixing shall be in accordance with the manufacturer’s printed instruction.

* 1. **2.3 Roof Slab**

The roof slab shall be adequately screeded with a rich mix of basalt chipping and cement mortar and finished in 3 layers of bituminous asphalt laid to slope into drain PVC pipes embedded in columns.

* 1. **2.4 Protect the Works**

Ladders or crawl boards shall be used to avoid any walking on the sheets and rolls of the felt. The Contractor is to case up, cover and adequately protects all roofing work and delivers the roof in a sound and clean condition.

**B. TECHNICAL TRADES SPECIFICATIONS**

**3. DEMOLITION / ALTERATION**

**3.0 Survey**

Before starting work, carry out a survey and submit a report and method statement covering all relevant matters listed below and health and Safely Implication.

* Condition and demolition methods of the structure(s)
* Removal methods of any hazardous materials.
* Type and location of adjoining or surrounding premises which

The Works may adversely affect.

* Identification and location of services.
	1. **Extent of Demolition**

Subject to the retention of features, structures, etc., specified elsewhere, demolish structure(s) down to slab level.

* 1. **Location of Services**

Locate and mark the positions of services affected by the work. Arrange with the appropriate authorities for the location and marking of the positions of mains services.

* 1. **Disconnection of Services**

Before starting demolition arrange with the appropriate authorities for the disconnection of services and removal of fittings and equipment.

* 1. **Services which are to remain**

Notify the Consultant and Service Authority or owner of any damage. Make all arrangements for repair to the satisfaction of the Consultant and service Authority or owner. Bear any costs arising.

* 1. **Workmanship generally**

Demolish structure(s) in accordance with BS 61897

* Site staff responsible for supervision and control of the work

are to be experienced in the assessment of the risks involved

and in the methods of demolition to be used.

* 1. **Site Hazards**
* Prevent fire or explosion caused by gas or vapours
* Reduce dust by periodically spraying with water
* Take adequate precautions to protect site operatives

and the general public from dangerous fumes and

dust arising during the course of the Works

 **3.7 Adjoining Property**

* Provide adequate temporary support and protection to adjoining property at each stage.
* Prevent damage to adjoining property and leave no unnecessary or unstable projections
* Do not disturb support to foundations of adjoining property.
* Prevent debris from overloading any part of the structure which is not to be demolished.

**3.8 Structure(s) to be retained**

* Adequately protect parts of existing structure(s) which are to be kept in place
* Cut away and strip out the minimum necessary
* Prevent debris from overloading any part of the structure which is not to be demolished.

**3.9 Partly Demolished Structure(s)**

* Leave partly demolished structure(s) in a stable condition, with adequate temporary support at each stage to prevent risk of uncontrolled collapse
* Prevent debris from overloading scaffolding platforms.
* Prevent access of unauthorized persons to partly demolished structure(s). Leave safe outside working hours.

**3.10 Asbestos Based Materials**

Report immediately any suspected asbestos based materials discovered. Avoid disturbing such materials and observe methods for safe removal.

**3.11 Completion**

Clear away all debris and leave the site tidy on completion

 **3.12 Protection**

 Protect all completed works from damage until the final handing over to client.

**3.13 Hardcore**

Brick, stone and concrete rubble or other hardcore materials arising from demolition work

may be reused as hardcore subject to compliance with the architects instruction..

1. **EXCAVATION AND SITE WORKS**
	1. **Site Clearance**

The building area and its immediate surroundings will be cleared of all rubbish.

Trees and other vegetation to be preserved shall be protected against any damage during the course of construction.

* 1. **Levels**

The contractor shall check whether levels indicated on the Drawings are correct and give notice to the Consultant before any excavation.

* 1. **Excavations**

All vegetation including roots shall be removed from the building area, which shall then be stripped of topsoil to the depths required.

Topsoil shall be deposited, spread and levelled as directed.

* 1. **Preparation for Foundations**

Excavations shall be to the depths and widths indicated on the drawings or as directed by the Consultant to give a firm base. No backfilling with excavated material will be allowed for over excavation. Any over excavation, soft spot or loose material encountered during excavation shall be filled with lean mix concrete.

* 1. **Kept free from Water**

Excavations shall be kept free from water, silt and mud.

* 1. **Filling**

When foundations have been approved by the Consultant, clean laterite from the excavations or other approved hardcore shall be filled in around foundations and to make up levels, carefully rammed and consolidated in layers not exceeding 150mm and with the minimum addition of water. The top layers shall be fine stone, sand or other approved material to receive polythene sheet, as damp proof membrane and/or course (d.p.m/d.p.c), and /or ground floor slab concrete.

* 1. **Anti-termite Treatment**

Anti-termite soil poisoning shall be DURSBAN TC, diluted at the rate of one part concentrated solution to 40 parts water. Diluted solution shall be applied at the rate of 5 Ltrs per square meter to ground or hardcore over the whole area of the building immediately before (max. 36 hrs) concrete is poured.

**4.7 Proportions of Concrete**

The concrete mix proportions for each class shall be as given in the table below:-

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Class**  | **Cement (kg)** | **Fine Aggregate** **(kg)** | **Coarse Aggregate** **(kg)** | **Cube Crushing****Strength (N/mm2)** |
| 7/40 | 50 | 195 | 300 | 7 |
| 10/10 | 50 | 150 | 125 | 10 |
| 20/20 | 50 | 115 | 190 | 20 |
| 25/20 | 50 | 90 | 170 | 25 |

The quantity of cement must be proportioned by weight, either by weighing at the mixer or by using unbroken 50kg bags, or purpose made gauge boxes for volume batching

* 1. **Mixing Concrete**

Materials for concrete shall be measured in approved gauge boxes on a boarded platform. The proportions referred to above are for dry aggregate and due allowance shall be made for the moisture content, to the satisfaction of the Consultant. Materials for concrete shall be mixed by machine and shall be thoroughly mixed together.

The amount of mixing water shall be sufficient to give a good workable mix but in no case shall the slump, as measured in accordance with BS 1881, exceed 50mm. Mixing shall continue until there is a uniform distribution of materials and the mass is uniform in colour and consistency.

Prior to the commencement of any concrete work, the contractor shall carryout such design and preliminary test procedures as are necessary to determine the most suitable relative proportion of coarse aggregate, fine aggregate, cement and water to produce a concrete which satisfies the requirement of this specification.

No concrete shall be placed in the permanent works until the approval of the consultant has been given.

* 1. **Work Cube Test**

Four 150mm test cubes shall be made on each relevant site for testing in accordance with CP 110 & BS 1881 and also the instructions of the Consultant. A record of the location, date and time of placing concrete in the structure, and of all tests made shall be kept on site. Failure is so regarded if:-

1. any one single test result is less than the minimum strength specified by greater than 3N/mm2

or

1. The average of four consecutive test results fails to exceed the specified strength by 3N/mm2
	1. **Compacting Concrete**

The recommended form of compacting is by poker vibrator.

Concrete may be compacted by hand after approval of Consultant. Concrete shall be deposited in layers of 200mm maximum thickness and be well worked with special tools and rods until the aggregate has settled and concrete is free from air bubbles.

* 1. **Curing of Concrete**

Special care shall be taken to avoid concrete drying out too quickly. The exposed faces of newly placed materials shall be immediately protected from sun, wind and rain. All new concrete shall be kept moist by means approved by the Consultant for a curing period of seven full days commencing after the initial setting has taken place.

* 1. **Placing Concrete**

 Placing of concrete must be planned and executed in such a manner as to avoid cold joints in the works.

All concrete shall be transported and placed as rapidly as possible after mixing and in all cases within thirty minutes, by approved means, to prevent segregation and loss of ingredients. Mixing shall be carried out within 25 meters of the building.

* 1. **Construction Joints**

Construction joints shall be arranged in approved positions. Before any new concrete is placed on old, all excess water, laitance etc., shall be removed from the surface of the join. The surface shall then be well roughened, cleaned and thoroughly wetted immediately before the next placing.

* 1. **Form Work**

The design and construction for form-work is to be in accordance with CP110 clauses 6.11.3.1. All form-work shall be rough sawn to provide a suitable key for rendering except exposed concrete faces to the edges of slabs and precast cells which shall be required smooth fair faced from a planned or steel board.

The form-work shall be sufficiently tight to prevent loss of liquid from the concrete and sufficiently stable to preserve the concrete from damage and distortion during setting. The Contractor shall treat the inside of the form-work with an approved lubricant which should avoid contact with reinforcement.

The formwork and the time, which shall elapse before striking, shall be according to the table below:-

|  |  |
| --- | --- |
| **Type of Formwork** | **Minimum period before Striking** |
| Side of beams, walls, columns | 3 days |
| Slabs (props left under) | 4 days |
| Removal of props to slabs | 14 days |
| Beams soffits (props lefts under) | 8 days |
| Removal of props to beams | 21 days |

* 1. **Reinforcement**

The condition of the reinforcement should be view (clean and free from rust and loose mild scale).

Reinforcement shall be properly lapped and fixed in position to form a rigid case. Rods shall be secured at laps and intersections with binding wire or other approved means.

* 1. **Concrete Cover**

Concrete cover to rod reinforcement shall be:-

 Foundation - 40mm

 Columns - 25mm

 Beams - 25mm

 Slabs - 25mm

**5. MASONRY**

* 1. **Blocks**

Materials for block-work shall be as specified under concrete work.

Blocks shall be produced of cement/sand (1:4 mix) substructure and superstructure blocks in an approved method.

The compressive strength shall not be less than 2N/mm2 gross area on average of twelve blocks for cement/sand blocks after 30 days. The Contractor shall ascertain the mix necessary to attain the required strength, ensure that the blocks meet all the requirements and provide sample blocks from each delivery or batch made to be tested on site or laboratory by the Consultant.

Curing of blocks should be under shade and shielded against drying from direct sunlight. Blocks shall be kept moist on a daily basis for at least three weeks before incorporating into the works.

The sizes to be used are 150x200x400mm for substructure walls (cement/sand) and 150x200x400mm for superstructure walls with 5% optimum stabilization.

* 1. **Mortar**

The proportions for mortar constituents shall be 1:3 cement/sand mix by volume.

Block work shall be built in accordance with the Drawings in 200mm for cement/sand vertical courses in stretcher bonds, uniformly true to line and level.

No vertical joint shall be within less than 100mm of another in course immediately above or below. Alternate courses shall be carried through to full thickness of adjoining walls at angles and intersections.

Block work shall be well wetted immediately before being laid, where left off the top of walling shall be wetted before work is recommenced. All block work shall be kept wet for at least three weeks following erection.

Walls shall be carried up evenly and no part of the block work shall be raised more than 800mm above another at any one time. Columns shall always be carried up first and kept at least two courses above the surrounding block work. Any wall left at different levels is to be raked back.

* 1. **Joints**

Joints shall be 10mm thick vertically, 10mm thick horizontally and shall be completely filled with mortar. All block work to be rendered shall have horizontal joints raked out 10mm to form a key.

* 1. **Holes and Chases**

Holes and Chases required in walling shall be carefully set out and cut to the minimum necessary. Holes and Chases shall be carefully closed flush prior to the application of wall finish.

* 1. **Block Filling**

Blocks to be filled shall be laid with the open voids upper most at the following locations the voids adjacent shall be filled with concrete class 10/10

* Abutting a concrete column
* Below a lintel bearing
* Below a cill
* At a lamb
* Block work below ground floor level
	1. **CLADDING / COVERING**
	2. **Corrugated Iron Sheeting**

Roofing sheets will be `single Span`, Prepainted GCI Sheets with a thickness of 0.40mm, and a profile height of at least 22mm.

Sheeting shall be laid and fixed in accordance with the manufacturer’s printed instructions or as directed by the Consultant. Side laps shall be of not less than one corrugation and shall be turned away from the prevailing wind.

* 1. **Accessories**

Accessories will suit the profile of the cladding. Ridge capping will be in lengths not less than 1.8m, and shall be lapped at least 150mm at ends. Fixing shall be in accordance with the manufacturer’s printed instruction.

* 1. **Roof Slab**

The roof slab shall be adequately screeded with a rich mix of basalt chipping and cement mortar and finished in 3 layers of bituminous asphalt laid to slope into drain PVC pipes embedded in columns.

* 1. **Protect the Works**

Ladders or crawl boards shall be used to avoid any walking on the sheets and rolls of the felt. The Contractor is to case up, cover and adequately protect all roofing work and deliver the roof in a sound and clean condition.

1. **STRUCTURAL / CARCASSING METAL/TIMBER**

**7.1 Roof Trusses**

Trusses will be square hollow cored steel trussed rafters to dimensions and details as shown on the drawings. The rafters should be truly aligned; the purlins shall be fixed with screws.

* 1. **Generally**

 All steel is to comply with the general requirements of BS 4360

 Unless otherwise specified fastenings to be of the same metal as the item being

 fixed with a matching coating or finish.

 Bolts, screws and nuts to BS 4190. All bolts, screws and nuts to be galvanized.

 after tightening at least one thread shall show outside the nut.

Self-tapping: work to be from warping, buckling and fractures. Form bends with a brake press or by cold rolling.

Cold formed: work to be free from warping, buckling and fractures. Form bends with a brake press or by cold rolling.

Corners: unless specified otherwise, mitre junctions of identical sections.

 Holes: form without distortion of surrounding metal.

 Cleaning: remove all burrs and sharp arises, which would be visible after fixing or a

hazard to the user.

* 1. **Welding**

Preparation: remove dirt, grease, moisture and oxide from edges to be welded. Remove scale and residue from arc and powder cutting by machining or hand grinding.

Accuracy:

* Ensure accurate fit using clamps and jigs where practical
* Use tack welds for temporary attachment where jigging is not practical

Tack welding: use only for temporary attachments unless otherwise specified.

Welds: Make joints with parent and weld metal fully fused throughout with no inclusions, holes porosity or cracks.

Spatter: prevent weld spatter falling on surfaces of material which will be self-finished and visible in completed word.

Residues: ensure complete removal of flux residues and slag.

Butt welds: which will be visible in completed work to be finished smooth, flush with adjacent surfaces? Hollow sections are not to be flattened for jointing.

Welding of steel: to be one of the following:-

1. Metal arc welding to BS 5135 for mild steel
2. Projection welding to BS 2630
3. Seam welding to BS 6265 for mild steel sheets
4. Other methods subject to approval
	1. **Doors**

The steel doors shall be fabricated or obtained from an approved or nominated manufacturer and shall be of sizes and sections specified on the Drawings. Steel doors shall be manufactured from rectangular hollow sections and flat plates, complete with steel angle frames for fixing to insitu cast concrete fixing blocks with proprietary plastic plugs and metal wedges/packing to details shown on the drawings.

Doors shall be complete with ironmongery including hinges and locks. Locks shall

Be `Union` type complete with lever handles and shall be screw fixed to the leaf with front plates finished flush with the adjacent steel work. Handles shall be screw fixed or bolted through the leaf.

All locks shall fifer and where scheduled, shall be grouped into shites and provided with master keys.

* 1. **Steel Windows**

The steel windows shall be obtained from an approved or nominated manufacturer and shall be or sizes and sections specified on Drawings.

Window frames shall be fixed strictly according to the manufacturer’s directions or as instruction by the Engineer/Consultant.

* 1. **Fixing Doors and Windows Frames**

The doors and windows frames shall be fixed to the block work and the fixing brackets properly embedded and surrounded with concrete. The frames shall be fixed upright square and free from twist and left free from mortar splashing. Handles and stays shall be fixed after painting, hinges oiled and the doors and windows shall be left in good work order.

* 1. **Glazing**

Glass for the doors shall be 4mm thick, while for louver windows shall be 6mm thick edge bevelled clear glass.

* 1. **Finishing**

**Galvanizing to be to BS 729**

Protection: prevent distortion of metal work during transit, handling and storage. Prevent damage to arises, projecting features and surfaces which will be exposed in the finished work and prevent contact with mud, ashes, plaster and cement. Retain protective coverings in place for as long as practicable and keep dry.

Place in position and maintain metalwork plumb, level and square.

Loading: metalwork must not carry any structural loads unless specifically designed to do so.

Tightening: do not distort metalwork when tightening

DO NOT WELD, braze or solder on site without approval.

* 1. **Protective Netting**

Provide neat insect protective netting by the outer side of all windows, drawn taut and supported by 25mm thick wrought timber frame screwed to the timber window frames at the heads and cills.

* 1. **Burglar Proofing**

Provide burglar metal grillages of the design to be approved by the Project manager.

1. **WOODWORK**
	1. **Materials**

All timber is to be best quality obtainable and to the approval of the Consultant, thoroughly seasoned, free from sapwood, large loose or dead knots, waned edges, shakes and all other defects. They shall be treated with `So lignum~ anti-termite solution.

Sawn timbers shall hold to the full sizes specified or noted in the drawings.

MOISTURE CONTENT of timber at time or erection to be not more than 20%

* 1. **Flush Doors**

Internal doors shall be semi-solid cored, internal quality to conform to BS459 Part 2.

All flush doors shall be supplied by an approved specialist dealer in accordance with descriptions in the schedule. The doors shall be hung in the frames on butts with a gap not exceeding 3mm between the edges of any side of the door at any point.

1. **PLUMBING INSTALLATION**
	1. **Water Service Pipes**

Below ground water supply shall be polyethylene type 32 and shall comply with BS 1972 Class C. All accessories shall be performed of the same manufacture as the pipe to conform to BS 864 Part B.

Exposed external pipes shall be copper and shall comply with BS 7871. Copper pipes shall be connected to polyethylene below ground services at the full depth of its covering trench.

Internal pipe services shall be copper and shall conform to BS 2871. Fitting shall be capillary type throughout except for connections to taps and appliances or as otherwise directed and shall conform to BS 864 Part 2.

* 1. **Taps**

Bidets and pillar type taps shall be chromium plated `easy clean` pattern unless otherwise stated colour marked blue/cold with males threaded tail with chromium plated sink column as manufactured by Messrs Armitage Shanks ``nimbus`` range or equal and approved.

* 1. **Valves**

Gunmetal-bodied ball valves shall conform to BS 1212 Part 2 and shall be of the diaphragm type.

Plastic floats for ball valves shall conform to BS 2456 and shall have heavy bosses fitted with copper alloy corrosion resistant inserts to carry the thread.

Ball valves shall be suitable for medium pressure use.

All ball valve fittings shall be proceeded on the incoming supply with an isolating valve. Isolating to WC cisterns or to easily accessible locations shall be ``Ball fix`` valve screwdriver operated in non-dezincifiable chrome finish as manufactured by Messrs. Worley, West midlands or equal and approved.

* 1. **Soil and Waste**

Soil and waste pipe work shall be suitable in all respects to underground drainage as defined in specification for underground drainage.

Pipe work for soil installations shall be grey coloured PVC to BS 4514 and shall be supplied complete with all necessary performed push-fit accessories which shall be used throughout.

Pipe for wasters, inclusive of overflows, shall be upvs coloured white throughout unless otherwise indicated to conform to BS 5255 inclusive of all performed solvent weld accessories which shall be used throughout.

Waste traps are to be polypropylene 75mm water seal traps with ring junctions to comply with BS5572. Unless otherwise stated, all as manufactured by Messrs. Marley Ltd. or equal and approved.

* 1. **Sanitary Ware**

The Sanitary fittings shall be as specified on the Drawings and to the Engineer’s /Consultant’s approval.

**9.6** **Water Services**

The Contractor shall provide, lay, run, joint, assemble and fix in the position shown, pipes specials, materials, fittings and accessories of the kinds and dimensions shown together with all items, whether shown or not, necessary to complete the installation.

It is intended that all pipe work shall be chased into walls at appropriate levels and positions.

* 1. **Underground Water Services**

Unless otherwise directed underground pipes shall be laid with a minimum cover of 750 below finished ground level.

Care shall be taken to ensure that the bed on which the pipes are laid and the backfilling immediately adjacent to the pipes does not contain any sharp edge stones.

* 1. **Soil, Waste, Ventilating and rainwater Installations**

Branch, main branch and main soil-waste, waster and ventilating pipes and rainwater pipes shall be of the materials and diameters shown and shall be fixed in accordance with the pipe manufacturers written instructions.

They shall be connected as **shown** and shall have all necessary accessories and other fittings, including bends and junction of the correct angle swept in the direction of flow.

Provision shall be included in the fixing of branch pipes connection to mains vertical pipes to prevent damage of deformation due to vertical movement of the main pipe.

No connection shall be made to a soil stack within 200mm vertically of another connections being made to a soil stack with their excises at the same vertical level.

Pipe vents shall be carried up full bore to 300mm above any concrete upstand or the highest point of a pitched roof though which they have pass whichever is applicable. The top of the vent pipe shall be fitted with a manufacturers recommended vent terminal (Marley SVA2) with PVC coated glass fibre mosquito mesh fixed over its open and to the pipe and glued with solvent cement.

**10. ELECTRICAL ENGINEERING INSTALLATION**

* 1. **Scope of Work**

The Electrical installation shall include the supply, installation, commissioning and testing of the whole of the electrical engineering services described below and shown in Drawings:-

* Internal and external lighting installation
* General purpose power outlet system
* Provision and installation of all sub-main cables, switches, distribution and control equipment
* Provisions and installation of earth rod and associated bonding
	1. **Regulations**

The whole of the electrical installation shall be carried out strictly in accordance with the following:

* The regulations for Electrical Equipment of buildings 14th Edition incorporating reprints and latest amendments issued by Institution of Electrical Engineers.
* The regulations and conditions of the Gambia National Water and Electricity Company (NAWEC)
* Statutory requirements of the Government of the Gambia

**10.3 Consumer Control Unit**

Consumer unit shall be a combination of main switch and distribution fuse board to BS 1454. The units shall be tropically rated metal clad TP and N combined switch and breaker unit of surface pattern with earth bonding bar and terminal fitted with shell clam washers controller by a double pole switch.

Switches shall be 100mm x 100 miles amp current operated trip earth leakage circuit breakers to BS 3871. The enclosures shall be at high level. The necessary number of ways shall be provided for 5 amp and 13 amp circuits with an additional two spare ways with blank covers.

* 1. **Cable**

Shall be PVC insulated to BS 6004: 1975 of 450, 750 volt grade 2.5m2 for power socket circuits and 16mm2 between service outlets and Consumer Unit with earth continuity conductor cables throughout.

* 1. **Conduits**

Conduit and conduit fittings shall comply with BS 6099 and shall be in white high-impact PVC of a diameter not less than 200mm for use with standard draw-in boxes and fittings.

Conduit shall be concealed in wall chases, floor screeds and in ceiling voids and as a surface system where walls are un-plastered, floor unscreened and ceiling left unlined.

 **10.6 Lighting Installation**

From the distribution Boards single core cable enclosed in conduit shall be installed to serve the lighting outlets and switches, fans and regulators on a loop-in principle run generally in the slab/ceiling void.

Switches shall be `MK Logic` series or similar complete with plastic moulded boxes.

 Fluorescent light fittings shall be single tube fittings 1.20 x 60 Watts with warm white tubes

Bi-pin caps fixed to so fits of suspended ceilings.

 **10.7 Power Installation**

The distribution board single core PVC insulated cables enclosed in conduit shall be

Installed as a concealed or surface system to serve the socket outlet points indicated on the

drawing on a ring system.13 amp switched socket outlet shall be MK `logic` series or similar complete with metal boxes and ivory insulated cover plates in one or two gang assemblies for mounting as indicated on the drawing.

* 1. **Earth Installation**

A main earthling system is to be provided in a position clear of each building and

Connected to the consumer unit earth terminal by a 6mm2 green PVC insulated cable. KA

copper red earth terminal is driven into the ground to a minimum length of 2400mm and

protected by an earth box of internal size 300 x 300mm precast concrete cover slab with the

letter `E` marked in its upper surface.

 **10.9 Testing**

The following tests shall be applied by the contractor to the installation in the manner set

out in the relevant section of the IEE Regulations: (14th Edition).

1. Insulated Resistance Tests
2. Continuity Tests
3. Polarity Tests
4. Ring Circuit Continuity Test
5. Earth Pole Resistance Test
6. Earth Impedance Test

 **11.1 Materials Generally**

Cement and water shall be as described in the concrete work section of this specification.

Sand shall be as described in the concrete work section of this specification and it shall be selected.

* 1. **Rendering**

Shall be carried out using a mixture of one part cement; four (4) parts of sand gauged by volume.

Renderings shall be in single coat work and as described in the workmanship section of this section for internal work and two coats for external work.

* 1. **Screeds and Backing**

Screeds and backings shall be carried out in mix comprising one part cement; four parts sand gauged by dry volume.

* 1. **Timber**

All timber shall comply with the woodwork section of this specification.

* 1. **Wall Tiles**

The glazed tiles comply with BS 1281 class 2 type B and shall be of sizes and colours approved by the Employer.

Wall tiles shall be laid using cement mortar. The tiles shall be pointed with white cement grout. All internal and external angles shall be formed in purpose made rounded fittings. The tops of tiling shall be laid in similar titles unless otherwise.

* 1. **Granolithic Paving**

The work shall be carried out in accordance with the requirements of C.P. 204.

The cement aggregate ratio by volume shall be 1:1:2 and a smooth dense surface of satisfactory workability shall be obtained with basalt chip aggregates. The water content of the mix shall be the minimum necessary to permit spreading and compaction.

The flooring 50mm thick shall be laid in two courses of which the upper course shall be at least 20mm thick. The lower course shall be thoroughly compacted prior to laying the upper course and the upper courses follow on before initial setting of the lower course in complete.

The upper surface of the flooring shall be brought to a smooth, level and even surface, having no depression exceeding 3mm in any 3 meters and finished with a steel trowel. Second and third trowelling shall be carried out when the granolithic is in a suitable condition.

All surfaces shall be clean and dry before treatment, and the first dressing applied immediately after curing is completed.

* 1. **Ceramic Tiles Flooring**

Shall comply with BS 1286 class 2 type B. Tiles shall be bedded by the cement/sand (1:4) semi-dry thick bed method. The bed shall be laid direct on the concrete base and the tiles tamped into 3mm slurry spread on the bed.

Unless otherwise stated elsewhere the tiles shall be laid in uniform pattern with straight joints.

* 1. **Workmanship Rendering**

Rendering shall be applied by manual means. The rendered surface shall be plumb and true to within 2mm in any distance of 3 meters.

The thickness of two coat external works, exclusive of keys etc. shall be 24mm both coats being 12mm thick,

With the top coat finished by polishing hard and smooth with a steel trowel with added water as required until set.

The first coat of two coat renders shall be well scored to provide a key for the top coat.

* 1. **Workmanship – Cement and Sand Screed and Backing**

The water content of the mixes shall be the minimum necessary to permit spreading and compaction. Slabs shall be maintained touch wet for a 24 hour period to laying screeds and immediately before laying any screeding any free water shall be brushed off and cement/sand slurry (1:1) shall be well brushed to the surface and the screen shall be applied to the wet slurry.

Screeds shall be finished smooth generally with a steel float.

Screeds shall be laid in bays not exceeding 15m2 in area, with no side exceeding

4 meters in length; the bays shall be laid alternatively or staggered and the fill-in bays shall not be laid until the alternative bays have hardened. Joints to bays shall not coincide with any joints in the sub-floor.

* 1. **Protection of floor Finishes and Paving**

All floor finishes and paving shall be covered up and protected during the course of the works and thoroughly cleaned of the left sound and true to level upon completion.

Screeds shall be cured as for concrete – specification.

Screeds are to be kept dry for a minimum period of 14 days before the commencement of any follow on painting works.

Screeds are generally for paint finishing as specification for Painting and Decorating.

**11.11 Ceilings**

Ceiling shall be hardboard supported to timber brandying with intermediate ceiling joints spanning to external walls with noggins from the purlins.

Hardboard shall be fixed at 600mm centres in both directions (or as stated in measured works) and shall be centred to form full sheet equal margins to and at no time less than 300mm.

Timber cover beads with 10mm chamfered edges shall be fixed to all hardboard junctions to form a 600 x 600mm square panelled ceiling (or as stated in measured works). Junctions to cover beads shall be mitred to corners and cut to suit the timber profile at all square meters. Cornice beads shall be chamfered to the one free edge only. Cover beads shall be nail fixed with oval nails through ceiling boards to brandying support. All nails are to be punched and holes filled before painting.

* 1. **Approvals**

Before decoration commences, all rendering shall be approved by the Engineer/Consultant and any hollow areas, cracks, blisters or other defects shall be cut out and made good at the Contractor’s expense.

* 1. **Sample panel**

A sample panel of any finishing shall be prepared and approved if directed. The finishing shall not vary in colour or quality from the approved sample.

**12.** **PAINTING**

**12.1 Materials**

All materials shall comply with the appropriate British standard and BS Code of Practice CP 231 and shall be of best quality and from approved manufacturers.

Colours of paints shall be as directed by Engineer and the Contractor shall provide, if required and at his own expense, sample panels of paintwork showing the respective tints selected for the work.

Woodwork and steelwork that requires priming shall be coated with approved priming paint.

Block work and concrete surfaces internally that require painting shall be given on coat of ``Plastron`` or other equal and approved primer.

Paint is to be of the acrylic paint type and is to be applied in two coats (after priming) externally, to block work on concrete surfaces.

Gloss paint is to be external quality full gloss alkyd resin type and to be applied in on coat (after on undercoat) both externally and internally, to all wood and metal work, where specified.

The varnish and cellulose are to be obtained from an approved manufacturer and varnish, whether for internal or external application shall be of external quality. The varnish and cellulose shall be applied in two coats and sufficient care shall be taken to ensure a dust free hard surface on completion.

* 1. **Workmanship Generally**

All surfaces to be painted shall be properly prepared according to approved practice and if painting of exterior work is to be done during the wet weather or upon surfaces that are not thoroughly dry.

All painting work shall be done according to good practice, and each coat shall be allowed to become hard dry before the application of the next coat.

* 1. **Painting Iron and Mild Steel**

Surface shall be thoroughly cleaned down to remove all dirt, grease etc. thoroughly scraped and wire-brushed to remove all rust and loose scale back to bright metal. The surfaces shall be primed immediately with one coat of red lead primer to BS 2521/2523. After the priming apply two coats undercoat and one coat gloss.

* 1. **Painting Concrete Block work**

Surfaces shall be allowed to dry out completely. Any efflorescence shall be removed. When the surfaces are dry they shall be treated with on coat matt emulsion applied as a mist coat, then two coats silk one coat matt emulsion for interior work. A mist coat shall be mixture of ½ paint / 1/2 clean water.

For exterior surface work treat with on coat multipurpose primer (off-white) and two coats masonry paint.

* 1. **Painting Wood Work**

All hardwoods shall be finished smooth with a fine glass paper. Round off any sharp arises and remove dry grease or other marks with fine glass paper as required.

After fabrication overfill al nail holes etc. with poly-filler exterior grad and rub down to smooth finish after setting up.

Apply one coat wood primer, two coats undercoat and one coat between coats only with a fine glass paper

* 1. **Varnishing Woodwork**

All hardwoods for varnishing shall be finished with fine glass paper. Round of any sharp arises and remove dry grease or other marks with a fine glass paper as required.

1. **EXTERNAL DRAINAGE**
	1. **Generally**

The excavation, cement, and block work etc. shall be as previously specified.

Granular bedding shall be 10mm maximum laterite aggregate or an equivalent approved granular materials.

* 1. **Materials**

Un-plasticised PVC underground drain pipes, fittings and accessories shall conform to BS 4660 and shall be `poly-drain` as manufactured by Yorkshire Imperial Plastics Ltd. or other equal and approve. They shall be jointed by the ring seal joint.

* 1. **Pipe Laying**

The drain shall be laid in straight lines and rows even gradients, to the levels shown with pipes and specials of the kind and diameters shown. Connecting drains from gullies, fittings etc. shall be laid to a gradient of not less than 1 in 40 unless otherwise directed.

The pipes shall be laid singly, the whole length of the barrel of each pipe being supported on its bed.

Sockets shall face up the gradient: the spigot of each pipe shall be pushed home into the pipe previously laid.

The bedding material shall be carefully placed and evenly spread over the full width of the trench. The material shall be thoroughly compacted in layers not more than 100mm thick to give a uniform bed true to gradient on which laid and tested further granular bedding material shall be placed around them and thoroughly compacted by hand in 100mm layers.

The thickness of granular bedding for the pipes shall be 100mm for pipes up to 200mm diameter.

The depth of the granular fill above the pipe shall be 100mm for 110mm diameter pipes, selected fill shall then be used, thoroughly compacted by hand to provide a minimum cover of 300mm above the barrel of the pipe.

Pipe runs below buildings are to be backfilled with the granular material to the underside of the floor slab. Where pipes runs pass through foundation walls they are to be protected by relieving lintels or approved sleeves and provided with a flexible joint to prevent fracture due to settlement.

**13.4. Manholes**

 Manholes shall be constructed in hollow 150mm blockwork with voids filled with

 Concrete (1:3:6).

The depth of the main channel shall be not less than the diameter of the outgoing pipe. Main channel inverts shall be informed UPVC: branch bends shall be curved in the direction of flow.

Benching shall be formed in concrete trowel led smooth and shall slope towards the main channel at a slope of 1 in 6.

Manholes shall be rendered internally with cement and sand (1; 4) mix 12mm thick.

Pipe passing through walls shall be solidly built in with lintels or relieving arches and the wall made water tight throughout. The pipes shall be provided with flexible joints immediately adjacent to the wall where they enter leave the manhole.

Step irons shall conform to BS 1247 built in block work at 300mm vertical intervals.

* 1. **Testing**

The Contractor shall check the whole of the drainage from manhole to manhole.

Manholes will be tested separately. The tests shall be applied before the pipes are hunched or covered with concrete and shall be repeated after backfilling.

**13.6 Soak-away**

Soak-a ways shall be constructed under the direction of the Engineer.

They shall be constructed of open block work in cement mortar as indicated on the Drawings. The space between the outer face of the soak away and the face of the large rubble to pass a 75 – 150mm gauge sieve.

* 1. **Septic Tank**

Septic tanks, separating chambers etc, shall be of a construction at least to D.T.S.

Standard drawing code. The sizes shall be as directed in the above standard drawing.

* Internal Volume 2.5m minimum
* Internal depth of water 1.00 minimum
* Two compartments with volumetric proportions of 1:2
* Completely watertight
* One or Two access covers
* 110mm vent pipes in UPVC taken to the nearest building and terminating above roof level.

Tanks shall be constructed in block work; the walls shall be rendered in cement and sand 20mm thick. Tanks shall be filled with water upon completion.

**ANNEXES TO THE SCHEDULE OF REQUIREMENTS**

|  |  |  |
| --- | --- | --- |
| No. |  Location Name | Attachment |
| 1 | BILL 1 - CALVING SHEDSix (6) attachment  |  |
| 2 | BILL 2 - SICK BAYFour (4) attachment  |  |

**ANNEX 2: QUOTATION SUBMISSION FORM**

*Bidders are requested to complete this form, including the Company Profile and Bidder’s Declaration, sign it and return it as part of their quotation along with Annex 3: Technical and Financial Offer. The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.*

|  |  |
| --- | --- |
| Name of Bidder: | Click or tap here to enter text. |
| RFQ reference: | 2020/UNDP/GAM/OPS/133 | Date: 28 November 2020 |

**Company Profile**

|  |  |
| --- | --- |
| **Item Description** | **Detail** |
| Legal name of bidder or Lead entity for JVs | Click or tap here to enter text. |
| Legal Address, City, Country | Click or tap here to enter text. |
| Website | Click or tap here to enter text. |
| Year of Registration | Click or tap here to enter text. |
| Legal structure | Choose an item. |
| Are you a UNGM registered vendor? | [ ]  Yes [ ]  No If yes, insert UNGM Vendor Number |
| Quality Assurance Certification (e.g. ISO 9000 or Equivalent) *(If yes, provide a Copy of the valid Certificate):* | [x]  Yes [ ]  No  |
| Does your Company hold any accreditation such as ISO 14001 or ISO 14064 or equivalent related to the environment? *(If yes, provide a Copy of the valid Certificate):* | [x]  Yes [ ]  No |
| Does your Company have a written Statement of its Environmental Policy? *(If yes, provide a Copy)* | [x]  Yes [ ]  No |
| Does your organization demonstrate significant commitment to sustainability through some other means, for example internal company policy documents on women empowerment, renewable energies or membership of trade institutions promoting such issues *(If yes, provide a Copy)* | [x]  Yes [ ]  No |
| Is your company a member of the UN Global Compact  | [x]  Yes [ ]  No |
| Bank Information | Bank Name: Click or tap here to enter text.Bank Address: Click or tap here to enter text.IBAN: Click or tap here to enter text.SWIFT/BIC: Click or tap here to enter text.Account Currency: Click or tap here to enter text.Bank Account Number: Click or tap here to enter text. |
| **Previous relevant experience: 3 contracts** |
| **Name of previous contracts** | **Client & Reference Contact Details including e-mail** | **Contract Value** | **Period of activity**  | **Types of activities undertaken** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**Bidder’s Declaration**

| **Yes** | **No** |  |
| --- | --- | --- |
|[ ] [ ]  **Requirements and Terms and Conditions:** I/We have read and fully understand the RFQ, including the RFQ Information and Data, Schedule of Requirements, the General Conditions of Contract, and any Special Conditions of Contract. I/we confirm that the Bidder agrees to be bound by them. |
|[ ] [ ]  I/We confirm that the Bidder has the necessary capacity, capability, and necessary licenses to fully meet or exceed the Requirements and will be available to deliver throughout the relevant Contract period. |
|[ ] [ ]  **Ethics**: In submitting this Quote I/we warrant that the bidder: has not entered into any improper, illegal, collusive or anti-competitive arrangements with any Competitor; has not directly or indirectly approached any representative of the Buyer (other than the Point of Contact) to lobby or solicit information in relation to the RFQ ;has not attempted to influence, or provide any form of personal inducement, reward or benefit to any representative of the Buyer.  |
|[ ] [ ]  I/We confirm to undertake not to engage in proscribed practices, , or any other unethical practice, with the UN or any other party, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the UN and wehave read the United Nations Supplier Code of Conduct :<https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct> and acknowledge that it provides the minimum standards expected of suppliers to the UN. |
|[ ] [ ]  **Conflict of interest:** I/We warrant that the bidder has no actual, potential, or perceived Conflict of Interest in submitting this Quote or entering a Contract to deliver the Requirements. Where a Conflict of Interest arises during the RFQ process the bidder will report it immediately to the Procuring Organisation’s Point of Contact. |
|[ ] [ ]  **Prohibitions, Sanctions:** l/We hereby declare that our firm, its affiliates or subsidiaries or employees, including any JV/Consortium members or subcontractors or suppliers for any part of the contract is not under procurement prohibition by the United Nations, including but not limited to prohibitions derived from the Compendium of United Nations Security Council Sanctions Lists and have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization. |
|[ ] [ ]  **Bankruptcy**: l/We have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against them that could impair their operations in the foreseeable future. |
|[ ] [ ]  **Offer Validity Period:** I/We confirm that this Quote, including the price, remains open for acceptance for the Offer Validity.  |
|[ ] [ ]  I/We understand and recognize that you are not bound to accept any Quotation you receive, and wecertify that the goods offered in our Quotation are new and unused. |
|[ ] [ ]  By signing this declaration, the signatory below represents, warrants and agrees that he/she has been authorised by the Organization/s to make this declaration on its/their behalf. |

Signature:

Name: Click or tap here to enter text.

Title: Click or tap here to enter text.

Date: Click or tap to enter a date.

## **ANNEX 3: TECHNICAL AND FINANCIAL OFFER – WORKS**

*Bidders are requested to complete this form, sign it and return it as part of their quotation along with Annex 2 Quotation Submission Form. The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.*

|  |  |
| --- | --- |
| Name of Bidder: | Click or tap here to enter text. |
| RFQ reference: | Click or tap here to enter text. | Date: Click or tap to enter a date. |

**Technical Offer**

*Provide the following:*

* *a brief description of your qualification and capacity that is relevant to the Scope of Works;*
* *a brief method statement and implementation plan;*
* *team composition and CVs of key personnel*

**Financial Offer**

|  |
| --- |
| **AMOUNT SUMMARY FOR** **CONSTRUCTION OF CALVING SHED AND SICK BAY AT WALIC** |
|  Description of Works |  Total Price[GMD]  |
|  |   |
|  BILL 1 - CALVING SHED |   |
| BILL 2 - SICK BAY |   |
| **TOTAL AMOUNT: GMD** |  **-**  |
|   |   |

**Detail Bill of Quantity are attached as Annexures for your further reference**

|  |  |  |
| --- | --- | --- |
| **S.N.** | Description of Works | Bill of Quantity (BOQs **)**  |
| **1** | BILL 1 - CALVING SHED |  |
| **2** | BILL 2 - SICK BAY |  |

The bidder is strongly advised to follow the below instructions when filling out Bill of Quantities (BOQ)

* Relevant Bill of Quantity (BOQs) are enclosed with this Bid in a separate annexure as well
* The bidder is strongly advised to fill in the cells under the column “Rate/Unit Price” corresponding to works description in Local Currency GMD
* You are not allowed to change any works description on this BOQ
* Please note that this BOQ forms is part of the “Returnable Bid Schedules” and as such should be returned (BOTH THE PRINTED AND DULY SIGNED FORM; and the Excel Soft copy for Arithmetic check) along with all other documents when submitting your tender. Sample description has been indicated below.

**Compliance with Requirements**

|  |  |
| --- | --- |
|  | **You Responses** |
|  | **Yes, we will comply** | **No, we cannot comply** | **If you cannot comply, pls. indicate counter - offer** |
| Delivery Lead Time |[ ] [ ]  Click or tap here to enter text. |
| Validity of Quotation |[ ] [ ]  Click or tap here to enter text. |
| Payment terms |[ ] [ ]  Click or tap here to enter text. |
| Other requirements *[pls. specify]* |[ ] [ ]  Click or tap here to enter text. |

|  |
| --- |
| I, the undersigned, certify that I am duly authorized to sign this quotation and bind the company below in event that the quotation is accepted. |
| *Exact name and address of company*Company NameClick or tap here to enter text.Address: Click or tap here to enter text. Click or tap here to enter text.Phone No.: Click or tap here to enter text.Email Address: Click or tap here to enter text. | Authorized Signature: Date: Click or tap here to enter text.Name: Click or tap here to enter text.Functional Title of Authorised Signatory: Click or tap here to enter text.Email Address: Click or tap here to enter text. |