



**THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF TRANSPORT
AIR TANZANIA COMPANY LIMITED**



REQUEST FOR TENDER

TENDER NO.: TR128/2024/2025/W/20

FOR

**The Proposed Construction of the Aircraft Maintenance Hangar at Julius Nyerere International Airport,
Terminal One, Dar es salaam**

31/01/2025

LIST OF ABBREVIATIONS

AGC	Attorney General Chamber
AQRB	Architects and Quantity Surveyors Registration Board
BAFO	Best and Final Offer
Cap	Chapter
ERB	Engineers Registration Board
ES	Environmental and Social
FY	Financial Year
GCC	General Conditions of Contract
ICT	International Competitive Tendering
IFT	Invitation for Tenders
ITT	Instruction to Tenderers
JV	Joint Venture
JVCA	Joint Venture, Consortium, or Association
NCC	National Construction Council
NCT	National Competitive Tendering
NeST	National e-Procurement System of Tanzania
PE	Procuring Entity
PPAA	Public Procurement Appeals Authority
PPRA	Public Procurement Regulatory Authority

PART 1 – TENDERING PROCEDURES

SECTION I: INVITATION FOR TENDERS



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The Proposed Construction of the Aircraft Maintenance Hangar at Julius Nyerere International Airport, Terminal One, Dar es salaam

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1. This Invitation for Tenders follows the General Procurement Notice for this Project which appeared in the National e-Procurement System of Tanzania (NeST) dated 05/07/2024.
2. The Government of Tanzania has set aside funds for the operation of the AIR TANZANIA COMPANY LIMITED during the financial year 2024/2025. It is intended that part of the proceeds of the fund will be used to cover eligible payment under the contract for the The Proposed Construction of the Aircraft Maintenance Hangar at Julius Nyerere International Airport, Terminal One, Dar es salaam.
3. The AIR TANZANIA COMPANY LIMITED now invites tenders from contractors registered or capable of being registered in ONE for The Proposed Construction of the Aircraft Maintenance Hangar at Julius Nyerere International Airport, Terminal One, Dar es salaam.
4. Tendering will be conducted through the International Competitive Tendering specified in the Public Procurement Act, Cap 410.
5. A complete set of tendering document(s) in English may be accessed through NeST.
6. Tenderers are required to register through NeST and pay the tender participation fees indicated in the NeST to be able to participate in this Tendering process.
7. All tenders must be accompanied by a Tender Security in form of Tender Security - Insurance Bond in the currency of The Tanzanian Shilling or freely convertible currencies in case of foreign Tenderers worth 950,000,000.00.
8. All tenders must be properly filled in and submitted through NeST at or before 2:00 PM hours local time on 12/02/2025. Tenders will be opened promptly thereafter through NeST. Tender opening details will be available to the public through NeST.
9. Tenders not received through NeST shall not be evaluated irrespective of the circumstances.

Chief Executive Officer

P.O Box 543

SECTION II: INSTRUCTIONS TO TENDERERS (ITT)

A: INTRODUCTION

1. Scope of Tender and Tendering Method	1.1	The Procuring Entity (PE) indicated in the Tender Data Sheet (TDS) invites Tenders for the construction of works, as described in the TDS . The name and identification number of the Contract is provided in the Special Conditions of Contract (SCC).
	1.2	Tendering will be conducted through the method of procurement indicated in TDS and is open to all Tenderers who meet the eligibility criteria stated in ITT 3 [Eligible Tenderers]. The successful Tenderer will be expected to complete the Works within the period stated in the TDS .
	1.3	Unless otherwise stated, throughout this tendering document definitions and interpretations shall be as prescribed in General Conditions of Contract.
2. Source of Funds	2.1	The Government of the United Republic of Tanzania has set aside sufficient funds for the operations of the PE named in the TDS during the Financial Year indicated in the TDS. It is intended that part of the proceeds of the funds will be applied to cover eligible payments under the contract for the works as described in the TDS. Or, The Government of the United Republic of Tanzania through the PE named in the TDS has applied for/received/ intends to apply for a [loan/ credit/grant] from the financing institution named in the TDS towards the cost of the Project named in the TDS. The United Republic of Tanzania intends to apply part of the proceeds of this loan/credit to payments under the Contract described in the TDS.
	2.2	Payments will be made directly by the PE (or by the financing institution specified in the TDS upon request of the PE to so pay) and will be subject in all respects to the terms and conditions of the resulting contract placed by the PE.
3. Eligibility of Tenderers	3.1	<p>A Tenderer may be a Natural Person, Private Entity, Government-owned Entity, subject to ITT 3.4 or any combination of them with a formal intent to enter into an agreement or under an existing agreement in the form of a Joint Venture, Consortium, or Association (herein referred as a JVCA).</p> <p>In the case of a JVCA, unless otherwise specified in the TDS, all parties shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms. The JVCA shall nominate a Lead Member as specified in TDS, who shall have the authority to conduct all business for and on behalf of any and all the members of the JVCA during the Tendering process and, in the event the JVCA is awarded the Contract, during contract execution. Unless specified in the TDS, there is no limit on the number of members in a JVCA.</p>
	3.2	The appointment of a Lead Member in the JVCA shall be

	confirmed by submission of a valid Power of Attorney to the PE.
3.3	Any agreement that form a JVCA shall be required to be submitted as part of the Tender and shall be attested.
3.4	Any Tender from a JVCA shall indicate the part of proposed contract to be performed by each party and each party shall be evaluated or post qualified with respect to its contribution only and the responsibilities of each party and shall not be substantially altered without prior written approval of the PE.
3.5	The invitation for Tenders is open to all Tenderers as specified in the TDS
3.6	National Tenderers shall satisfy all relevant licensing and/or registration requirements with the appropriate statutory bodies in Tanzania. Foreign Tenderers are exempted from this requirement but where selected as having submitted the lowest evaluated tender the successful tenderer shall register with the appropriate statutory body and shall be required to submit evidence of registration as an approved contractor in Tanzania before signing the contract.
3.7	<p>A Tender shall not have a conflict of interest. All Tenderers found to have a conflict of interest shall be disqualified. A Tenderer may be considered to have a conflict of interest with one or more parties in this tendering process, if they:</p> <ul style="list-style-type: none"> a) Are associated or have been associated in the past, directly or indirectly with a firm or any of its affiliates which have been engaged by the PE to provide consulting services for the preparation of the design, specifications and other documents to be used for the procurement of the works to be purchased under this Invitation for Tenders. b) have controlling shareholders in common; or c) receive or have received any direct or indirect subsidy from any of them; or d) have the same legal representative for purposes of this Tenders; or e) 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 Tender of another Tenderer, or influence the decisions of the PE regarding this tendering process; or f) submit more than one Tender in this tendering process, However, this does not limit the participation of subcontractors in more than one Tender, or as Tenderers and subcontractors simultaneously; or g) Participated as a consultant in the preparation of the design or technical specifications of the goods and related services that are the subject of the Tender.

3.8	<p>A Tenderer may be ineligible if –</p> <ul style="list-style-type: none"> (a) the Tenderer is declared bankrupt or, in the case of company or firm, insolvent; (b) payments in favour of the person, company or firm is suspended in accordance with the judgment of a court of law other than a judgment declaring bankruptcy and resulting, in accordance with the national laws, in the total or partial loss of the right to administer and dispose of its property (c) legal proceedings are instituted against such person, company or firm involving an order suspending payments and which may result, in accordance with the national laws, in a declaration of bankruptcy or in any other situation entailing the total or partial loss of the right to administer and dispose of the property (c) the Tenderer is convicted, by a final judgment, of any offence involving professional conduct; (d) the Tenderer is debarred and blacklisted in accordance with Public Procurement Act, Cap 410 or ineligible from participating in public procurement for corrupt, coercive, fraudulent or obstructive practices, company or firm is found guilty of serious misrepresentation with regard to information required for participation in an invitation to tender or to submit Tenders, failure to abide with a Tender Securing Declaration, breach of a procurement contract, making false representation about his qualifications during tender proceeding or other grounds as may be deemed necessary by the Authority. (d) the Tenderer is from ineligible country as specified under Section VI [ineligible country] of this tendering document.
3.9	<p>Public or Semi-public owned enterprises in the United Republic of Tanzania may participate only if they can establish that they (i) are legally and financially autonomous; and (ii) operate under commercial law. No dependent agency of the Public authority under public financed project shall be permitted to Tender or submit a proposal for the procurement of goods or works under the project.</p>
3.10	<p>Tenderers shall provide to the PE evidence of their eligibility, proof of compliance with the necessary legal, technical and financial requirements and their capability and, adequacy of resources to carry out the contract effectively.</p>
3.11	<p>Tenderers shall submit proposals relating to the nature, conditions and modalities of sub-contracting wherever the sub-contracting of any elements of the contract amounting to more than ten percent (10%) of the Tender price is envisaged.</p>

4. One Tender per Tenderer	4.1	A Tenderer shall submit only one tender, in the same tendering process, either individually or as a partner in a joint venture.
	4.2	No Tenderer can be a subcontractor while submitting a Tender individually or as a partner of a joint venture in the same tendering process.
	4.3	A Tenderer, if acting in the capacity of subcontractor in any Tender, may participate in more than one Tender but only in that capacity.
	4.4	A Tenderer who submits or participates in more than one Tender (other than as a subcontractor or in cases of alternatives that have been permitted or requested) will cause all the tenders in which the Tenderer has participated to be disqualified.
5. Cost of Tendering	5.1	The Tenderer shall bear all costs associated with the preparation and submission of its Tender, and the PE shall in no case be responsible or liable for those costs, except where the PE is ordered by the Public Procurement Appeals Authority (PPAA) to compensate the Tenderer following a successful Tenderer's appeal of the procurement proceedings.
6. Site Visit and Pre-Tender Meeting	6.1	The Tenderer, at the Tenderer's own responsibility and risk, is advised to visit and examine the Site of Works and its surroundings and obtain for itself all information that may be necessary for preparing the Tender and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Tenderer's own expense.
	6.2	The Tenderer and any of its personnel or agents will be granted permission by the PE to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Tenderer, its personnel, and agents will release and indemnify the PE and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection
	6.3	The PE may conduct a site visit and a pre-Tender meeting, whose purpose shall be to provide specific project information, to explain any unusual aspects of the project and to address any questions on any matter that may be raised at that stage.
	6.4	The Tenderer's designated representative is invited to attend a site visit and pre-Tender meeting which, if convened, will take place at the venue and time stipulated in the TDS. Non-attendance at the site visit and pre-tender meeting will not be a cause for disqualification of a tenderer.
	6.5	The Tenderer is requested to submit any questions through NeST, to reach the PE before pre-Tender meeting. It may not be practicable at the meeting to answer all questions, but

		<p>questions and responses will be transmitted in accordance with ITT 6.6.</p>
	<p>6.6</p>	<p>Minutes of the pre-tender meeting, if applicable, including the questions raised by the Tenderers, without identifying the source and the responses given together with any responses prepared after the pre-tender meeting, will be transmitted within three (3) working days to all participating tenderers through NeST. Any modification of the Tendering Documents listed in ITT 7.1 [Content of Tendering Documents] that may become necessary as a result of the pre-tender meeting shall be made by the PE exclusively through the issue of an Addendum pursuant to ITT 9.2 [Amendment of the Tendering Documents] and not through the minutes of the pre-tender meeting.</p>

B. TENDERING DOCUMENTS

<p>7. Content of Tendering Documents</p>	<p>7.1</p>	<p>The works required, tendering procedures, and contract terms are prescribed in the Tendering Documents. In addition to Section I [Invitation for Tenders], Tendering Documents which should be read in conjunction with any addenda issued in accordance with ITT 9.2 [Amendments of the Tendering Documents] include:</p> <p>PART1: TENDERING PROCEDURES</p> <p style="padding-left: 40px;">Section II Instructions to Tenderers(ITT) Section III Tender Data Sheet(TDS) Section IV Qualification and Evaluation Criteria Section V Tendering Forms Section VI Eligible Countries</p> <p>PART 2: PROCURING ENTITY'S REQUIREMENTS</p> <p style="padding-left: 40px;">Section VII Works Requirements</p> <p>PART 3: CONDITIONS OF CONTRACT AND CONTRACT FORMS</p> <p style="padding-left: 40px;">Section VIII General Conditions of Contract(GCC) Section IX Special Conditions of Contract (SCC) Section X Contract Forms</p>
	<p>7.2</p>	<p>The Invitation for Tenders (Section I) issued by the PE is not part of the Tendering Documents and is included as reference only. In case of discrepancies between the Invitation for Tender and the Tendering Documents listed in ITT 7.1, said Tendering Documents will take precedence.</p>
	<p>7.3</p>	<p>The Tenderer is expected to examine all instructions, forms, terms and specifications in the Tendering Documents. Failure to furnish all information required by the Tendering Documents or to submit a Tender substantially responsive to the Tendering Documents in every respect will be at the Tenderer's risk and may result in the rejection of its Tender.</p>
<p>8. Clarification of Tendering Documents</p>	<p>8.1</p>	<p>A prospective Tenderer requiring any clarification of the Tendering Documents may notify the PE through NeST at least seven (7) days for open competitive methods and three (3) days in the case of other tendering methods prior to tender submission deadline.</p>
	<p>8.2</p>	<p>The PE will within one (1) to three (3) days after receiving the request for clarification for non-competitive tendering methods and open competitive methods respectively respond and publish through NeST.</p>
	<p>8.3</p>	<p>PE's response will be posted through NeST to all participating tenderers, including a description of the inquiry, but without identifying its source.</p>
	<p>8.4</p>	<p>Should the PE deem it necessary to amend the Tendering Documents as a result of a clarification, it shall do so following the procedure under ITT 9 [Amendments of the Tendering Documents].</p>
<p>9. Amendment of Tendering Documents</p>	<p>9.1</p>	<p>Before the deadline for submission of tenders, The PE for any reason, whether at its own initiative or in response to a clarification requested by a prospective Tenderer, the PE may modify the Tendering Documents by issuing addenda.</p>
	<p>9.2</p>	<p>Any addendum issued including the notice of any extension of the deadline shall be part of the Tender Documents pursuant to ITT 7.1 [Content of Tendering Documents] and shall be communicated through NeST to participating tenderers.</p>
	<p>9.3</p>	<p>In order to allow prospective Tenderers reasonable time in which to take an addendum into account in preparing their Tenders, the PE at its</p>

		discretion shall extend, as necessary, the deadline for submission of tenders, in accordance with ITF22.2 [Deadline for Submission of Tenders]
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C. PREPARATION OF TENDERS

10. Language of Tender	10.1	<p>The tender, and all correspondence and documents related to the Tender exchanged by the Tenderer and the PE, shall be written in language specified in TDS . Supporting documents and printed literature furnished by the Tenderer may be in another language provided they are accompanied by an accurate translation of the relevant passages in the above stated language, in which case, for purposes of interpretation of the Tender, the translation shall prevail.</p>
11. Documents Constituting the Tender	11.1	<p>The Tender prepared and submitted by the Tenderer shall constitute the following components:</p> <ul style="list-style-type: none"> a) The Form of Tender and Tender Price completed in accordance with ITT14 [Forms of Tender], ITT15 [Tender Prices and Discounts], and ITT16 [Tender Currencies]; b) Tendering Forms; c) Tender security or Tender securing declaration in accordance with Instructions to Tenderers ITT18 [Tender Security]; d) Priced Bill of Quantities; e) Alternative offers where invited in accordance with Instructions to Tenderers ITT19[Alternative Tenders by Tenderers]; f) Dully Notarized Power of Attorney authorizing signatory of the Tender to commit the Tenderer in accordance with ITT20 g) A Technical Proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section V [Tendering Forms] in sufficient detail to demonstrate the adequacy of the Tenderer proposal to meet the work requirements and the completion time, and h) Any information, other than the documents under ITT 11.1(a) – (g) above required to be completed and submitted by Tenderers as specified in TDS document. <p><i>The list of additional documents may include the following:</i></p> <p>Code of Conduct for Contractor’s Personnel (ES) The Tenderer shall submit its Code of Conduct that will apply to Contractor’s Personnel (as defined in Sub- Clause 1 (ii) of the General Conditions of Contract), to ensure compliance with the Contractor’s Environmental and Social (ES) obligations under the Contract (if required). The Tenderer shall use for this purpose the Code of Conduct form provided in Section IV. No substantial modifications shall be made to this form, except that the Bidder may introduce additional requirements, including as necessary to take into account specific Contract issues/risks.</p> <p>Management Strategies and Implementation Plans (MSIP) to manage the (ES) risks The Tenderer shall submit Management Strategies and Implementation Plans (MSIPs) to manage the following key Environmental and Social (ES) risks: <i>[Note: insert name of any specific plan and risk/s informed by the relevant environmental and social assessment]:</i> <i>[e.g. Sexual Exploitation, and Abuse (SEA) prevention and response action plan] [e.g. Traffic Management Plan to ensure safety of local communities from construction traffic];</i></p>
12. Documents Establishing Eligibility and Qualifications of the Tenderer	12.1	<p>Pursuant to ITT 11 [Documents Constituting the Tender], the Tenderer shall upload, as part of its Tender, documents establishing the Tenderer’s eligibility to Tender and its qualifications to perform the contract if its Tender is accepted in accordance with Section IV – Qualification and Evaluation Criteria.</p>
	12.2	<p>In the event that pre-qualification of potential Tenderers has been undertaken, only Tenders from pre-qualified Tenderers will be considered for award of Contract. These qualified Tenderers should upload with their Tenders any information updating their original pre-qualification applications or, alternatively, confirm in their Tenders that the originally uploaded pre-qualification information remains essentially correct as of the</p>

		date of Tender submission. The update or confirmation should be provided in Section V –Tendering Forms.
	12.3	If the PE has not undertaken pre-qualification of potential Tenderers, to qualify for award of the contract, Tenderers shall meet the minimum qualifying criteria specified in the Section IV [Qualification and Evaluation Criteria]
	12.4	To qualify for award of the Contract, Tenderers shall meet the minimum qualifying criteria stated in Section IV – Qualification and Evaluation Criteria.
	12.5	a) Tenders submitted by a JVCA shall comply with the following requirements: the Tender shall include all the information listed pursuant to ITT 12.3 above for each joint venture partner; b) the Tender shall be signed so as to be legally binding on all partners; c) one of the partners will be nominated as being in charge, and this authorization shall be evidenced by uploading a Power of Attorney signed by legally authorized signatories of all the partners; d) the partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of a joint venture and the entire execution of the Contract, including payment, shall be done exclusively with the partner in charge; e) all partners of the joint venture shall be liable jointly and severally for the execution of the contract in accordance with the contract terms and a statement to this effect shall be included in the authorization mentioned under (c) above as well as in the Tender and in the Agreement (in case of a successful Tender); and f) a copy of the joint venture agreement entered into by all partners shall be uploaded with the Tender. Alternatively, a Letter of Intent to execute a joint venture agreement shall be signed by all partners and uploaded with the Tender, together with a copy of the proposed Agreement; and g) the Tender Security as stated in accordance with ITT 18 [Tender Security], and in case of a successful Tender, the Agreement, shall be signed so as to be legally binding on all partners. h) Any exception to documents listed in (a) – (g) above unless stated in TDS .
	12.6	Domestic Tenderers and joint ventures of domestic and foreign Tenderers applying for eligibility for a margin of preference in tender evaluation shall supply all information to satisfy the criteria for eligibility as described in ITT 32 [National Preferences].
13. Slices or Lots and Package	13.1	When tendering for more than one contract under the slice and package arrangements, the Tenderer must provide evidence that it meets or exceeds the sum of all the individual requirements for the slices or lots being tendered as provided in Section IV -Qualification and Evaluation Criteria.
	13.2	In case the Tenderer fails to fully meet any of these criteria, it may be qualified only for those slices for which the Tenderer meets the above requirement.
14. Form of Tender	14.1	The Tenderer shall fill the Form of Tender using the provided format and no substitute shall be accepted.
15. Tender Prices and Discounts	15.1	The tender price shall be for the whole Works, as described in ITT 1.1 [Scope of Tender], based on the priced Bill of Quantities submitted by the Tenderer.
	15.2	The Tenderer shall fill in rates and prices for all items of the Works described in the Bill of Quantities.
	15.3	All duties, taxes, and other levies payable by the Contractor under the Contract as provided under this clause, or for any other cause, as of the date 28 days prior to the deadline for submission of Tenders, shall be included in the rates, prices, and total Tender price submitted by the Tenderer. The following taxes shall be payable by contractor under this contract. the list of all duties, taxes, and other levies payable by the Contractor will be indicated in TDS .
	15.4	The Tenderer shall quote any discounts and the methodology for their application in the Form of Tender, in accordance with ITT 14 [Form of Tender]

	15.5	The rates and price quoted by the Tenderer shall be fixed unless stated in TDS and the Tenderer shall upload with the Tender all the information required in the Appendix to Tender-Schedule of Cost Indexation. The Tenderer shall be required to justify its proposed weighting. If the Price is Adjustable the PE should Ensure that they Provide the Information required in the Appendix to Tender-Schedule of Cost Indexation.
	15.6	In the case of National, International and Restricted Competitive Tendering on Fixed Budget Method, the Tender Price quoted by the Tenderer shall not exceed the budget fixed by PE as shown in TDS . Any Tenderer, whose Tender Price exceeds the provided budget, shall be rejected.
16. Tender Currencies and Payment	16.1	The unit rates and prices shall be quoted by the Tenderer in Tanzania Shillings or in foreign currencies. With respect to this tender, the applicable currency(ies) shall be as specified in TDS
	16.2	The rates of exchange to be used by the Tenderer in arriving at the local currency shall be the selling rates for similar transactions established by the Bank of Tanzania (BoT) prevailing on the date 28 days prior to the latest deadline for submission of Tenders.
	16.3	If the Tenderer uses other rates of exchange, the provisions of ITT 30.1 [Conversion to Single Currency] shall apply. In any case, payments will be computed using the rates quoted in the Tender.
	16.4	Tenderers may be required by the PE to clarify their foreign currency requirements and to substantiate that the amounts included in Lump Sum and in the SCC are reasonable and responsive to ITT 16.1 [Tender Currencies].
17. Tender Validity Period	17.1	Tenders shall remain valid for the period specified in TDS after the deadline for tender submission Specified in ITT 22 [Deadline for Submission of Tenders]. A tender valid for a shorter period shall be rejected by the PE as non-responsive.
	17.2	In exceptional circumstances, prior to expiry of the original Tender validity period, the PE may request that the Tenderers to extend the period of validity for a specified additional period. The request and the Tenderers' responses shall be made through NeST. A Tenderer may refuse the request without forfeiting its Tender security or causing to be executed its Tender securing declaration.
	17.3	A Tenderer agreeing to the request for extension of Tender Validity Period will not be required or permitted to otherwise modify the Tender but will be required to extend the validity of its Tender Security or Tender Securing Declaration for the period of the extension, and in compliance with ITT 18 [Tender Security] in all respects.
	17.4	In the case of fixed price contracts, if the award is delayed by a period exceeding sixty (60) days beyond the expiry of the initial Tender validity period, the contract price may be adjusted by a factor specified in the request for extension.
18. Tender Security	18.1	The required type of security for Tender is specified in TDS Pursuant to ITT 11 [Documents Constituting the Tender], the Tenderer shall furnish as part of its Tender, a scanned Tender Security through NeST in a Form and in the amount and currency specified in TDS in the format provided in Section V-Tendering Forms.
	18.2	The Tender Security is required to protect the PE against the risk of Tenderer's conduct which would warrant the security's forfeiture, pursuant to ITT 18.9 .
	18.3	The Tender security shall be denominated in the currency of the Tender or in another freely convertible currency, and it shall be in the form specified in TDS which shall be in any of the following: a) Unconditional bank guarantee, an irrevocable letter of credit issued by a reputable bank, or an insurance bond issued by a reputable insurance firm located in the United Republic of Tanzania or abroad valid for twenty-eight (28) days beyond the end of the validity of the Tender. This shall also apply if the period for Tender validity is extended. In either case, the form must include the complete name of the Tenderer; or b) An irrevocable letter of credit;

		c) A Cashier's or certified cheque;
	18.4	The Tender Security shall be payable promptly upon written demand by the PE in case any of the conditions listed in ITT 18.9 are invoked.
	18.5	Any Tender not accompanied by a Tender Security in accordance with ITTs 18.1 or 18.3 [Tender Security] shall be rejected by the PE as non-responsive, pursuant to ITT 28 [Preliminary Examination of Tenders].
	18.6	Unsuccessful Tenderers' Tender Security will be discharged or returned as promptly as possible but not later than thirty (30) days after the expiration of the period of Tender validity prescribed by the PE pursuant to ITT 41 [Signing of Contract]. The PE shall make no claim to the amount of the Tender security, and shall promptly return the Tender security document, after whichever of the following that occurs earliest: (a) the expiry of the Tender security; (b) the entry into force of a procurement contract and the provision of a security for the performance of the contract if such a security is required by the solicitation documents; (c) the rejection by the PE of all tenders; (d) the withdrawal of the Tender prior to the deadline for the submission of tenders, unless the solicitation documents stipulate that no such withdrawal is permitted.
	18.7	The successful Tenderer's Tender Security will be discharged upon the Tenderer signing the contract, pursuant to ITT 40 [Notification of Award], and furnishing the performance security, pursuant to ITT 41 .
	18.8	The Tender Security of a JVCA shall be in the name of the JVCA that submits the Tender. If the JVCA has not been constituted into a legally enforceable JVCA , at the time of Tendering, the Tender Security shall be in the names of all future partners.
	18.9	The Tender Security may be forfeited: a) if a Tenderer; i) withdraws its Tender during the period of Tender validity specified by the Tenderer on the Form of Tender except as provided for in ITT17.2 [Tender Validity Period]; or b) in the case of a successful Tenderer, if the Tenderer fails to: i) furnish performance security, and if required, the Environmental and Social (ES) Performance Security in accordance with ITT41 [Performance Security]. The requirement for Environmental and Social (ES) Performance Security is indicated in TDS ii) sign the contract in accordance with ITT42 [Signing of Contract];
19. Alternative Tenders by Tenderers	19.1	Tenderers shall submit offers that comply with the requirements of the Tendering Documents, including the basic Tenderer's technical design as indicated in the employer's requirements. Alternatives if allowed will be indicated in TDS , and ITT 19.2 and 19.3 shall govern.
	19.2	When alternative times for completion are explicitly invited, a statement to that effect as the method of evaluating different schedules for completion.
	19.3	Technical alternatives are not allowed. If so allowed <i>as indicated in TDS</i> , Tenderers wishing to offer technical alternatives to the requirements of the Tendering documents must also submit a Tender that complies with the requirements of the Tendering documents, including the basic technical design as indicated in the drawings and specifications. In addition to submitting the basic Tender, the Tenderer shall provide all information necessary for a complete evaluation of the alternative by the PE, including design calculations, technical specifications, breakdown of prices, proposed construction methods and other relevant details. Only the technical alternatives, if any, of the lowest evaluated Tenderer conforming to the basic technical requirements shall be considered by the PE.
	19.4	When alternative technical solutions are allowed under ITT 19.3 , Tenderers are permitted to submit alternative technical solutions for specified parts of the Works, and such parts will be identified in this clause, with method for their evaluating, as described in Section VI, Works Requirements. If so allowed, the technical solutions parts of the works will be specified in TDS .
20. Format and Signing of Tender	20.1	The Tenderer shall prepare documents constituting the Tender as described in ITT 11 [Documents Constituting the Tender].

	20.2	The Tender shall be signed by a person or persons duly authorized to sign on behalf of the Tenderer and the authorization documents shall be submitted together with the Tender indicating position of each signatories in accordance to the requirements of the NeST. The authorization document(s) shall be a duly notarized Power of Attorney in the format provided in Section V: Tendering Forms. <i>Other acceptable</i> authorization is listed in TDS
	20.3	The Tenderer shall furnish information as described in the Form of Tender on commissions or gratuities, if any, paid or to be paid to agents relating to this Tender and to Contract execution if the Tenderer is awarded the Contract.

D. SUBMISSION OF TENDERS

21. Submission of Tenders	21.1	All Tenders shall be submitted through NeST. Tenders submitted through NeST shall be considered to be true and legal version, duly authorized and duly executed by the Tenderer and intended to have binding legal effect. The tenderer shall properly name his soft copies of documents before submission through NeST.
	21.2	The Tender shall bear e-signature or digital signatures for identity and authentication purposes and the identity of the Tenderer may be verified with a follow-up due diligence process.
	21.3	Tenders submitted through NeST shall be received in full prior to the closing time, and the Tenderers shall receive an acknowledgement of receipt of tender or amendment through the system.
	21.4	Tenderers must ensure the integrity, completeness and authenticity of their submission; and in case of electronic records entered online and files containing the Tender being unreadable for any reason, the Tender submitted shall not be considered.
22. Deadline for Submission of Tenders	22.1	Tenders shall be received by the PE through NeST not later than the date and time specified in the NeST
	22.2	The PE may, in exceptional circumstances and at its discretion, extend the deadline for the submission of Tenders by amending the Tendering Documents in accordance with ITT9 [Amendment of Tendering Documents], in which case all rights and obligations of the PE and Tenderers previously subject to the deadline will thereafter be subject to the new deadline.
	22.3	The extension of the deadline for submission of Tenders shall be made not later than number of days indicated in TDS before the expiry of the original deadline
23. Late tenders	23.1	NeST does not allow a Tenderer to submit its tender after the deadline for submission of tenders in accordance with ITT22 [Deadline for Submission of Tenders]
24. Modification, Substitution and Withdrawal of Tenders	24.1	A Tenderer may modify or substitute or withdraw its Tender after it has been submitted to the PE. Such modification or substitution or withdrawal should be made prior to the deadline for submission of Tenders. Tenderers shall receive an acknowledgement of receipt of any amendment of its submitted tender through the system.
	24.2	Tenderers may only offer discounts to or otherwise modify the prices of their Tenders by substituting Tender modifications in accordance with this Clause or included in the original Tender submission.
	24.3	No Tender may be withdrawn, replaced or modified in the interval between the deadline for submission of Tenders and the expiration of the period of Tender validity specified by the Tenderer on the Form of Tender. Withdrawal of a Tender during this interval shall result in the Tenderer's forfeiture of its Tender security pursuant to the ITT 18.9 [Tender Security].

E. OPENING AND EVALUATION OF TENDERS

25. Opening of Tenders	25.1	The opening shall be done automatically by the system after the deadline date and time. Read out prices shall be displayed automatically in the NeST portal. Automated opening report shall be sent to all involved parties including the PE and Tenderers.
	25.2	A Tenderer or any other person with interest in the tender process can access tender opening records on the appropriate section of NeST.
26. Confidentiality	26.1	Information relating to the examination, clarification, evaluation, and comparison of Tenders and recommendations for the award of a Contract shall not be disclosed to Tenderers or any other persons not officially concerned with such process until the award to the successful Tenderer has been announced.
	26.2	Any effort by a Tenderer to influence the PE's processing of Tenders or award decisions may result in the rejection of his Tender.
27. Clarification of Tenders	27.1	In order to assist in the examination, evaluation, and comparison of Tenders and post-qualifications of Tenderers, the PE may, at its discretion, ask any Tenderer for clarification of its Tender including breakdown of prices. Any clarification submitted by a Tenderer that is not in response to a request by the PE shall not be considered.
	27.2	The request for clarification shall be communicated through NeST and the Tenderers shall respond through NeST. No change in the prices or substance of the Tender shall be sought, offered, or permitted except to confirm the correction of arithmetic errors discovered by the PE in the evaluation of Tenders in accordance with ITT29 [Correction of Errors].
	27.3	From the time of Tender opening to the time of Contract award if any Tenderer wishes to contact the PE on any matter related to the Tender it should do so through NeST
28. Preliminary Evaluation of Tenders	28.1	Prior to the detailed evaluation of tenders, the PE will determine whether each Tender; (a) meets the eligibility criteria defined in ITT3 [Eligible Tenderer]; (b) has been properly signed; (c) is accompanied by the required securities; and (d) is substantially responsive to the requirements of the Tendering Documents. The PE's determination of a Tender's responsiveness will be based on the contents of the Tender itself.
	28.2	A substantially responsive Tender is one which conforms to all the terms, conditions, and specifications of the Tendering Documents, without material deviation, omission or reservation. A material deviation or reservation is one that: - a) affects in any substantial way the scope, quality, or performance of the Works; b) limits in any substantial way, inconsistent with the Tendering Documents, the PE's rights or the Tenderer's obligations under the Contract; or c) if rectified, would affect unfairly the competitive position of other Tenderers presenting substantially responsive Tenders. For the purpose of this section, the following definitions apply: "Deviation" is a departure from the requirements specified in the Tendering Document; "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Tendering Document; and "Omission" is the failure to submit part or all of the information or documentation required in the Tendering Document.
	28.3	The PE will confirm that the documents and information specified under ITT11 [Documents Constituting the Tender], ITT12 [Documents Establishing Eligibility and Qualification of the Tenderer], ITT13 [Slices and Package] and ITT14 [Form of Tender] have been provided in the Tender. If any of these documents or information is missing or is not provided in accordance with the Instructions to Tenderers, the Tender shall be rejected.

	28.4	The PE may waive any minor informality, nonconformity, or irregularity in a Tender which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Tenderer.
	28.5	Provided that a Tender is substantially responsive, the PE may request that the Tenderer submit the necessary information or documentation, within a reasonable period of time, to rectify non-material non-conformities in the Tender related to documentation requirements. Requesting information or documentation on such non-conformities shall not be related to any aspect of the price of the Tender. Failure of the Tenderer to comply with the request may result in the rejection of its Tender.
	28.6	Provided that a Tender is substantially responsive, the PE shall rectify quantifiable non-material non-conformities related to the Tender Price. To this effect, the Tender Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component. The adjustment shall be made using the method specified in Section IV, Qualification and Evaluation Criteria.
	28.7	Material deviations to commercial terms and conditions, which justify rejection of a tender shall include the following: a) failure to sign the Form of Tender and price schedules by the authorized person or persons; b) failure to satisfy eligibility requirements; c) failure to submit a tender security as specified in the Tendering documents; d) failure to satisfy the Tender validity period; e) inability to meet the critical delivery schedule or work schedule clearly specified in the Tendering documents, where such schedule is a crucial condition with which tenderers must comply; f) conditional tenders such as conditions in a tender which limit the Tenderer's responsibility to accept an award; g) inability to accept the price adjustment formulae of the Tendering documents; h) stipulating price adjustment when fixed price tenders were invited; i) subcontracting in a substantially different amount or manner than that permitted; j) failure to submit major supporting documents required by the Tendering documents to determine substantial responsiveness of a tender
	28.8	All tenders shall be checked for substantial responsiveness to the technical requirements of the Tendering documents and non-conformity to technical requirements, which are justifiable grounds for rejection of a tender includes the following: a) failure to tender for the required scope of work as instructed in the Tendering documents and where failure to do so has been indicated as unacceptable; b) failure to meet major technical requirements, such as offering completely different types of equipment or materials from the types specified, plant capacity well below the minimum specified, equipment not able to perform the basic functions for which it is intended. c) Presentation of absolutely unrealistic and inadequate implementation plans and schedules regarding performance, technical or service factor If a Tender is not substantially responsive to the requirements of the Tendering Documents, it shall be rejected by the PE and may not subsequently be made responsive by correction of the non-conformity
29. Conversion to Single Currency	29.1	To facilitate evaluation and comparison, the PE will convert all Tender prices expressed in the amounts in various currencies in which the Tender prices are payable in Tanzania Shillings at the selling exchange rate established for similar transactions by the Bank of Tanzania on the tender publication date.
	29.2	The currency selected for converting Tender prices to a common base for the purpose of evaluation and comparison, along with the source and date of the exchange rate, are specified in the TDS .
30. Detailed Evaluation and Comparison of Tenders	30.1	The PE shall evaluate and compare only the Tenders determined to be substantially responsive in accordance with ITT28 [Preliminary Examination of Tenders].

	30.2	In evaluating the Tenders, the PE will determine for each Tender the evaluated Tender Price by adjusting the Tender Price as follows: - a) excluding provisional sums and the provision, if any, for contingencies in the Bill of Quantities, but including Day work, where priced competitively; b) making appropriate adjustment for any other acceptable variations, deviations, or alternative offers submitted in accordance with ITT19 [Alternative Tenders by Tenderers]; making an allowance for varying times of completion offered by Tenderers, Tender price may be adjusted by making an allowance for varying times of completion unless otherwise specified in TDS c) making appropriate adjustments to reflect discounts or other price modifications offered in accordance with ITT24.4 [Modification and Withdrawal of Tenders]; and d) applying any discounts offered by the Tenderer for the award of more than one Contract, if tendering for this Contract is being done concurrently with other contracts (ITT 31.5); and e) the additional evaluation factors are specified in Section IV (Qualification and Evaluation Criteria).
	30.3	The PE reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the Tendering Documents or otherwise result in unsolicited benefits for the PE will not be taken into account in Tender evaluation.
	30.4	The estimated effect of any price adjustment provisions of the Conditions of Contract, during the period of implementation of the Contract, will not be taken into account in Tender evaluation.
	30.5	In the case of several Lots, pursuant to ITT 31.2(f) , the PE will determine the application of discounts so as to minimize the combined cost of all the lots.
	30.6	If this Tendering Document allows Tenderers to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated price of the contract combinations, including any discounts offered in the Form of Tender, is specified in Section IV. Qualification and Evaluation Criteria.
	30.7	If the Tender, which results in the lowest Evaluated Tender Price, is unbalanced or front loaded in relation to the Predetermined Tender Value of the items of work to be performed under the Contract, the PE may require the Tenderer to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analysis, taking into consideration the schedule of estimated Contract payments, the PE may: a) Accept the Tender; or b) require that the amount of the performance security set forth in ITT 41 be increased at the expense of the Tenderer, to a level not exceeding twenty percent (20%) of the tender Price; or c) Reject the Tender.
31. National Preferences	31.1	Margin of preference for local firms shall be indicated in TDS if the margin of preference applies, works utilizing this Standard Tendering Document shall provide Local Contractors with margin of preference in tender evaluation.
	31.2	Local contractors shall, in order to be considered for margin of preference, be registered in accordance with Procurement Act, Cap 410.
	31.3	The PE shall, in applying margin of preference, shall be guided by Procurement Act, Cap 410 to determine whether or not tenderers are qualified for margin preference.
	31.4	A JVCA between a foreign and local firm shall also be eligible to participate in the exclusive preference scheme in accordance with Procurement Act, Cap 410.
	31.5	Alternative offers, where solicited or permitted, will be evaluated separately, in accordance with the provisions of ITT19 [Alternative Tenders], and shall

		be subject to the margin of preference in accordance Section IV- Qualification and Evaluation Criteria.
32. Subcontractors	32.1	Sub-contracting is not allowed, unless otherwise stated in TDS at the percentage of works indicated in TDS
	32.2	In case of Prequalification, the Tenderer's Tender shall name the same specialized subcontractor as submitted in the prequalification application and approved by the PE.
	32.3	In case of Post qualification, the PE may permit subcontracting for certain specialized works as indicated in Section IV- Qualification and Evaluation Criteria. When subcontracting is permitted by the PE, the specialized subcontractor's experience shall be considered for evaluation. Section IV- Qualification and Evaluation Criteria describes the qualification criteria for sub-contractors.
	32.4	Tenderers may propose subcontracting up to a certain percentage of the total value of contracts or the volume of works indicated in TDS .
33. Determination of Lowest Evaluated Tender	33.1	The Tender with the lowest evaluated price from among those that are eligible, compliant and substantially responsive shall be the lowest evaluated Tender.
	33.2	In the case of National, International and Restricted Competitive Tendering on Fixed Budget Method, the lowest evaluated price shall not exceed the provided budget. If the price of the Lowest Evaluated Tender exceeds the provided budget, it shall be rejected.
34. Post-qualification of Tenderer	34.1	If pre-qualification was undertaken, the PE shall conduct partial post-qualification to verify pre-qualification information.
	34.2	Where the Tender price of the lowest evaluate Tenderer is considered to be abnormally low, the PE shall perform price analysis as part of the post-qualification. The following process shall apply: (a) The PE may reject a tender if the PE has determined that the price in combination with other constituent elements of the Tender is abnormally low in relation to the subject matter of the procurement (scope of works or services) and raise concerns with the PE as to the ability of the Tenderer that presented that tender to perform the contract. (b) Before rejecting an abnormally low tender the PE shall: request the Tenderer an explanation of the Tender or of those parts which it considers contribute to the Tender being abnormally low; take account of the evidence provided in response to a request in writing or in electronic forms that provide record of the content of communication; and subsequently verify the Tender or parts of the Tender being abnormal (c) The decision of the PE to reject a tender and reasons for the decision shall be recorded in the procurement proceedings and promptly communicated to the Tenderer concerned; (d) The PE shall not incur liability solely by rejecting abnormally low tender. Abnormally low tender" means, in the light of the PE's estimate and of all the Tenders submitted, the Tender appears to be abnormally low by not providing a margin for normal levels of profit.
	34.3	The PE will determine to its satisfaction whether the Tenderer that is selected as having submitted the lowest evaluated and substantially responsive Tender either continues to meet (if prequalification applies) or meets (if post qualification applies) the qualifying criteria specified in Section IV, Qualification and Evaluation Criteria.
	34.4	The determination will take into account the Tenderer's financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the Tenderer's qualifications submitted by the Tenderer, pursuant to ITT 12.3 [Documents Establishing Eligibility and Qualifications of the Tenderer], as well as such other information as the PE deems necessary and appropriate. Factors not included in these Tendering Documents shall not be used in the evaluation of the Tenderers' qualifications.
	34.5	A PE may seek independent references of a Tenderer and the results of reference checks may be used in determining award of contract.
	34.6	In case of a foreign company, a PE shall seek independent reference of legal

		existence of a Tenderer from Tanzania diplomatic missions abroad or from any other reliable source.
	34.7	An affirmative determination will be a prerequisite for award of the Contract to the lowest evaluated Tenderer. A negative determination will result in rejection of the Tenderer's Tender, in which event the PE will proceed to the next-lowest evaluated Tenderer to make a similar determination of that Tenderer's capabilities to perform contract satisfactorily.
35. Post-qualification of Tenderer	35.1	If pre-qualification was not undertaken, post-qualification shall be performed as indicated in the TDS .
	35.2	Where the Tender price of the lowest evaluate Tenderer is considered to be abnormally low, the PE shall perform price analysis as part of the post-qualification. The following process shall apply: (a) The PE may reject a tender if the PE has determined that the price in combination with other constituent elements of the Tender is abnormally low in relation to the subject matter of the procurement (scope of works or services)and raise concerns with the PE as to the ability of the Tenderer that presented that tender to perform the contract. (d) The PE shall not incur liability solely by rejecting abnormally low tender.

F. AWARD OF CONTRACT

36. Criteria of Award	36.1	Subject to ITT 35 [Post-qualification of Tenderer] and 37 [Negotiations], the PE will award the Contract to the Tenderer whose Tender has been determined to be substantially responsive to the Tendering Documents and who has offered the lowest Evaluated Tender Price, provided that such Tenderer has been determined to be - (a) eligible in accordance with the provisions of ITT 3 [Eligible Tenderers], and (b) is determined to be qualified to perform the Contract satisfactorily (c) Successful negotiations have been concluded.
	36.2	If, pursuant to ITT 13.1 [Slice and Package], this Contract is being let on a slice and package basis, the lowest evaluated Tender price will be determined when evaluating this Contract in conjunction with other Contracts to be awarded concurrently, taking into account any discounts offered by the Tenderers for award of more than one Contract.
37. Negotiations	37.1	Negotiations may be undertaken with the lowest evaluated. Tender relating to the following areas: (a) a minor alteration to the technical details of the statement of requirements; (b) reduction of quantities for budgetary reasons, where the reduction is in excess of any provided for in the solicitation documents; (c) a minor amendment to the special conditions of Contract; (d) finalizing payment arrangements; (e) mobilization arrangements; (f) agreeing final delivery or work schedule to accommodate any changes required by the PE; (g) the methodology or staffing; (h) Clarifying details that were not apparent or could not be finalized at the time of tendering; or (i) Reduction of Tender Price to match the PEs Estimate, and commensurate with the market prices and provided such reduction shall not make the tender abnormally low in accordance ITT 35.2 [Post-qualification of Tenderers]. This provision is not applicable for tenders invited under the National, International and Restricted Competitive Tendering on Fixed Budget method
	37.2	Where negotiation fails to result into an agreement, the PE may invite the next ranked Tenderer for negotiations. Where negotiations are commenced with the next ranked Tenderer, the PE shall not reopen earlier negotiations.
38. PE Right to Accept any Tender and to Reject any or all Tenders	38.1	Notwithstanding ITT36 [Criteria of Award], the PE reserves the right to accept or reject any Tender, and to cancel the Tendering process and reject all Tenders, at any time prior to the award of Contract, without thereby incurring any liability to the affected Tenderer or Tenderers or any obligation to inform the affected Tenderer or Tenderers.
	38.2	Notice of the rejection of all Tenders shall be given promptly to all Contractors that have submitted Tenders through NeST.
	38.3	The PE shall upon request communicate to any Tenderer the grounds for its rejection of its tenders but is not required to justify those grounds.
39. PE Right to Vary Quantities at the Time of Award	39.1	The PE reserves the right at the time of Contract award to increase or decrease the scope of works or related services originally specified in these Tendering Documents (Bill of Quantities) provided this does not exceed by the percentage indicated in the TDS , without any change in unit price or other terms and conditions of the Tender.
40. Notification of Award	40.1	Prior to awarding of the contract, the PE shall issue a notice of intention to award the contract in the format provided in Section V [Tendering Forms], The notice shall be issued through NeST to all Tenderers who participated in the Tender in question giving them seven

		(7) working days within which to submit complaints to the PE thereof, if any. The condition shall not apply where only one Tender has been received by PE in competitive method or where single source, national shopping, Minor value procurement method has been used.
	40.2	Where no complaints have been lodged, the Tenderer whose Tender has been accepted will be notified through NeST of the award by the PE prior to expiration of the Tender validity period. The Letter of Acceptance will state the sum that the PE will pay the successful Tenderer in consideration for the execution of the scope of works as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price).
	40.3	The notification of award will be part of the documents forming the Contract, subject to the Tenderer furnishing evidence of registration with relevant statutory bodies within the country and furnishing the Performance Security in accordance with ITT41 [Performance Security] and signing the Contract in accordance with ITT 42.2 [Signing of Contract].
41. Performance Security	41.1	Within Twenty-Eight (28) days after receipt of the Letter of Acceptance, the successful Tenderer shall deliver to the PE a Performance Security in the amount and in the form stipulated in the TDS and the SCC , denominated in the type and proportions of currencies in the Letter of Acceptance and in accordance with the Conditions of Contract. The Performance Security shall also include the Environmental and Social Performance Security in the form of a “demand guarantee” in the percentage amount(s) specified in TDS . <i>[Note: The ES Performance Security shall normally be required where ES risks are high. Both ES Security and Performance Security Shall not exceed 10 Percent]</i>
	41.2	If the Performance Security is provided by the successful Tenderer, it shall be in the form specified in the TDS which shall be in any of the following (a) cash, certified cheque, cashier ‘s or manager’s cheque, or bank draft; (b) irrevocable letter of credit issued by a reputable commercial bank or in the case of an irrevocable letter of credit issued by a foreign bank, the letter shall be confirmed or authenticated by a reputable local bank; (c) bank guarantee confirmed by a reputable local bank or, in the case of a successful foreign tenderer, bonded by a bonded by a local bank ; or (d) Surety bond issued by any reputable surety or insurance company. Any Performance Security submitted shall be enforceable in the United Republic of Tanzania.
	41.3	Failure of the successful Tenderer to comply with the requirement of ITT 41.1 shall constitute sufficient grounds for the annulment of the award and forfeiture of the Tender Security, in which event the PE may make the award to the next lowest evaluated Tenderer or call for new Tenders.
42. Signing of Contract	42.1	Promptly after notification of award, PE shall send the successful Tenderer the draft Agreement, incorporating all terms and conditions as agreed by the parties to the contract.
	42.2	Within fourteen (14) working days after furnishing the performance security, the successful Tenderer and the PE shall sign the contract.
	42.3	Upon both parties signing the Agreement, the PE will promptly notify unsuccessful Tenderers, the name of the winning Tenderer and the Contract amount and will discharge the Tender security or Tender securing declaration of the unsuccessful Tenderers pursuant to ITT 18.7 [Tender Security or Tender Securing Declaration].
43. Advance Payment	43.1	The PE will provide an Advance Payment as stipulated in the Conditions of Contract, subject to a maximum amount, as stated in the

		TDS.
	43.2	The Advance Payment request shall be accompanied by an Advance Payment Security (Guarantee) in the form provided in Section XI.
	43.3	For the purpose of receiving the Advance Payment, the Tenderer shall make an estimate of, and include in its Tender, the expenses that will be incurred in order to commence work. These expenses will relate to the purchase of equipment, machinery, materials, and on the engagement of labour during the first month beginning with the date of the PE's —Notice to Commence as specified in the Special Conditions of Contract.
44. Dispute Avoidance and Resolution Board	44.1	<p>IF SOLE MEMBER IS TO BE APPOINTED TO BE DARB The PE proposes the person named in the TDS to be appointed as Sole Member of Dispute Avoidance and Resolution Board (DARB) under the Contract. If the Tenderer disagrees with this proposal, the Tenderer should so state in the Tender. If, in the Letter of Acceptance, the PE has not agreed on the appointment of the Sole Member of DARB, the Adjudicator shall be appointed by the Appointing Authority named in the TDS and designated in the Special Conditions of Contract at the request of either party OR IF THREE MEMBERS ARE TO BE APPOINTED TO BE DARB The PE proposes three names shown in the TDS and SCC, and whose CVs are Appended, to be members of Dispute Avoidance and Resolution Board. The Tenderer, shall in his Form of Tender, propose three names as well. If the names are not agreed, the Appointing Authority named in the TDS shall be consulted to appoint members of Dispute Avoidance and Resolution Board1.</p> <p><i>For Large Contracts it may be desirable to use Dispute Avoidance and Resolution Board instead of an Adjudicator</i></p>
45. Fraud Corruption, Coercion, Collusion, Fraudulent and Obstructive Practices	45.1	<p>The Government requires that Procuring entities (including beneficiaries of Government funded projects and procurement) as well as Tenderers/Suppliers/Contractors under Government financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Government:</p> <p>a) defines, for the purpose of this provision, the terms set forth below as follows: -</p> <p>i. corrupt practice means the offering, giving receiving or soliciting of anything of value to influence the action of a public officer in the procurement process or contract execution;</p> <p>ii. coercive practice means impairing or harming, or threatening to impair or harm directly or indirectly, any party or the property of the party for the purpose of influencing improperly the action or that party in connection with public procurement or in furtherance of corrupt practice or fraudulent practice;</p> <p>iii) fraudulent practice means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Government or a public body and includes collusive practices among Tenderers, prior to or after submission designed to establish tender prices at artificial non-competitive levels and to deprive the Government of the benefits of free and open competition;</p> <p>iv) obstructive practice means acts intended to materially impede access to required information in exercising a duty under this Act;</p> <p>b) Will reject a proposal for award if it determines that the Tenderer recommended for award has engaged in corrupt, coercive, collusive, fraudulent or obstructive practices in competing for the contract;</p> <p>c) In pursuit of the policy defined in ITT 45.1 the Government will cancel the portion of the funds allocated to a contract for goods, works, or services if it at any time determines that corrupt, coercive, collusive, fraudulent or obstructive practices were engaged in by representatives of the PE or approving authority or of a beneficiary of the funds during the procurement or the execution of that contract, without the PE or approving authority having taken timely and appropriate action</p>

		<p>satisfactory to the Government of the united Republic of Tanzania to remedy the situation</p> <p>d) Declare a firm ineligible for a period of ten years, to be awarded a public-financed contract if it at any time it determines that the firm has engaged in corrupt, coercive, collusive, fraudulent or obstructive practices in competing for, or in executing, a public – financed contract</p>
	45.2	<p>The Government of the United Republic of Tanzania reserves the right, where a firm has been found by a foreign country, international organization or other foreign organization to have engaged in corrupt, coercive, collusive, fraudulent or obstructive practices, to declare that such a firm is ineligible, for a period of ten years to be awarded a public financed Contract in the United Republic of Tanzania</p>
	45.3	<p>The Government of the United Republic of Tanzania will have the right to require that, in contract financed by the Government of the United Republic of Tanzania a provision be included requiring suppliers and contractors to permit the Government of the United Republic of Tanzania to inspect their accounts and records relating to the performance of the contract and to have them audited by auditors appointed by the Government of the United Republic of Tanzania.</p>
	45.4	<p>Any communications between the Tenderer and the PE related to matters of alleged corruption, coercion, collusion, fraudulent or obstruction practices must be made through NeST or in writing where electronic facilities are not available.</p>

G. REVIEW OF PROCUREMENT DECISIONS

46. Right to review	46.1	A Tenderer who claims to have suffered or that may suffer any loss or injury as a result of breach of a duty imposed on a PE or an approving authority in the course of these procurement proceeding may seek a review in accordance with the procedure set out under this Section.
47. Time limit on review	47.2	The Tenderer shall submit an application for review within Seven (7) working days of the Tenderer becoming or should have become aware of the circumstances giving rise to the complaint or dispute.
48. Submission of applications for review	48.1	Any application for administrative review shall be submitted through NeST to the Accounting Officer of a PE and a copy shall be served to the Public Procurement Regulatory Authority (PPRA).
	48.2	For PEs with delegated Procurement functions, applications for administrative review for tenders floated by the delegated Accounting Officer shall be submitted through NeST to the Accounting Officer with a copy served to delegated Accounting Officer and PPRA.
	48.3	The application for administrative review shall include: a) details of the procurement requirements to which the complaint relates; b) details of the provisions of the Act, Regulation or provision that has been breached or omitted; c) an explanation of how the provisions of the Act, Regulation or provision has been breached or omitted, including the dates and name of the responsible public officer, where known; d) documentary or other evidence supporting the complaint where available; e) remedies sought; and e) any other information relevant to the complaint
	48.3	The Accounting Officer (AO) of a PE shall not entertain a complaint or dispute or continue to do so after the procurement Contract has entered into force.
49. Decision by the AO of PE	49.1	The AO of a PE shall, within Seven (7) working days after receipt of the complaint or dispute, deliver a written decision through NeST that shall indicate: a) whether the application is upheld in whole, in part or rejected; b) the reasons for the decision; and c) any corrective measures to be taken.
	49.2	Where the AO of PE does not issue a decision within the time specified in ITT 49.1 , the Tenderer submitting the complaint or dispute or the PE shall be entitled to institute proceedings under ITT 50.1 [Review by the Public Procurement Appeals Authority (PPAA)] within seven (7) working days after such specified time and upon instituting such proceedings, the competence of the of AO a PE to entertain the complaint or dispute shall cease.
50. Review by the Public Procurement Appeals Authority	50.1	Complaints or disputes which, (a) are not settled within the specified period under ITT 49.1 [Decision by the AO of PE]; (b) the Tenderer is not satisfied with the decision of the accounting officer; or (c) arise after the procurement contract has entered into force pursuant to ITT 42 [Signing of Contract], shall be referred to the Appeals Authority within seven (7) working days from the date when the Tenderer received the decision of the accounting officer or, in case no decision is issued after the expiry of the time stipulated under ITT 49.1 [Decision by the AO of PE] or when the Tenderer become aware or ought to have become aware of the circumstances giving rise to the complaint or dispute pursuant to ITT 47.1 [Time Limit on Review]. The Appeals Authority shall, within forty-five (45) days issue a written decision concerning the complaint or dispute stating the reasons for the

		decisions and the remedies granted if any. The decision of the Appeals Authority shall be binding to the parties on complaint or appeal and such decision may be enforced in any court of competent jurisdiction.
	50.2	PPAA may be contacted at the address shown in the TDS .

TENDER DATA SHEET (TDS)

The following specific data for the works to be procured shall complement, supplement, or amend the provisions in the Instructions to Tenderers (ITT). Whenever there is a conflict between ITT and the Tender Data Sheet (TDS), the provisions of TDS shall prevail over those in ITT.

A. Introduction

TDS No	Required Information/Data	ITT Clause	Information/Data to be filled by the PE
1	Name of the PE	1.1	AIR TANZANIA COMPANY LIMITED.
2	Expected Completion Period	1.2	1095 days.
3	Tendering Method	1.2	International Competitive Tendering.
4	Name of the project	2.1	The Proposed Construction Of The Aircraft Maintenance Hangar At Julius Nyerere International Airport, Terminal One, Dar Es Salaam .
5	Financial year	2.1	2024/2025
6	Financing Institution	2.1	Not Applicable
7	The Loan /Credit Number	2.1	Not Applicable
8	Tender Description	2.1	The Proposed Construction of the Aircraft Maintenance Hangar at Julius Nyerere International Airport, Terminal One, Dar es salaam
9	Members of JVCA and Limit of numbers of JVCA	3.1	Maximum number of members of JVCA shall be: 2.
10	Eligibility of Tenderers	3.5	Only Tenderers registered as Building Contractor in ONE with the Contractors Registration Board (CRB) are eligible in the case of local contractors. Foreign Contractors are exempted from this requirement but if selected for award they will be required to be registered in the appropriate Class of Registration with CRB.
11	Site Visit	6.4	Site visit will be held at Air Tanzania Office, Julius Nyerere International Airport Terminal one (I), Site visit will be on 05th February, 2025 from 10:00 am . To have access to the air side, you are required to submit through email a copy of any of the following identity cards (NIDA, Driving License or Passport) send the document to rajab.mbano@airtanzania.co.tz and copy to hamisi.luziga@airtanzania.co.tz. The deadline for submitting above requested ID copy is on Tuesday 04th February, 2025 at 11:00 am. on 05/02/2025 from 11:00 Hours Local Time
12	Pre-tender Meeting	6.4	Pre-tender meeting will take place at Air Tanzania Office, Airport Terminal One on 05/02/2025 at 10:00 Hours Local time

B: Preparation of Tenders

13	Language of the Tender	10.1	Language of Tender and all correspondence shall be English.
14	Other required documents	11.1(h)	Additional documents: Not Applicable Not Applicable
15	Information to be submitted by JVCA	12.5(h)	Extra information to be submitted by the JVCA other than the information required: Not Applicable
16	Duties and taxes to be paid by the contractor	15.3	List down all duties, taxes, and other levies payable by the Contractor under the Contract: Value added Tax, withholding Tax, Import duty Value added Tax, withholding Tax, Import duty
17	Price Adjustment	15.5	The price shall be Fixed
18	Fixed Budget Tender	15.6	Not Applicable.
19	Currency of the Tender	16.1	The currency in which the prices shall be quoted shall be in The Tanzanian Shilling.
20	Tender Validity Period	17.1	The Tender validity period shall be 120 days.
21	Form of Tender Security	18.1 18.3	Tender Security shall be in the form of Tender Security - Insurance Bond in the currency of The Tanzanian Shilling or freely convertible currencies in case of foreign Tenderers worth 950,000,000.00.
22	Alternative tenders	19.1, 19.2, 19.3 & 19.4	AlternativeTenders are: Not Applicable. Not Applicable.
23	Authorization to Sign on Behalf of the Tenderer	20.2	Written confirmation of authorization to sign on behalf of the Tenderer is: Notarized Power of Attorney

C. Submission of Tenders

24	Extension of Deadline for Submission of Tenders	22.3	The extension of the deadline for submission of Tenders shall be made not later than 7 days before the expiry of the original deadline.
25	Currency for Converting Tender Prices	29.2	The rates of exchange to be used by the Tenderer shall be those established by the Bank of Tanzania prevailing on the tender invitation date. Currency for Tender Conversion: The Tanzanian Shilling.
26	Adjustment of Tender Price for Allowance for Varying Times of Completion	30.2 (b)	FIXED.
27	Adjustment of Tender Price for Allowance for Varying Times of Completion	32.1	Refer to Section for Qualification and Evaluation Criteria

D. Opening and evaluation of tenders

28	Domestic Preference	31.1	Preference Scheme type applicable to this tender is National Preference - local ownership.
29	Sub-Contracting Arrangements	32.1 & 32.4	Subcontracting is applicable. The percentage of sub-contracting works is 30 percent.
30	Post qualification performance	35.1	Post Qualification will be undertaken.

E. Award of contract

31	The percentage for Increase and Decrease for Quantities	39.1	The percentage for Increase and Decrease for Quantities will be 15 Percent.
32	Performance security	41.1	Performance Security - Bank Guarantee of 10 Percent of Contract Price.
33	Environmental and Social Performance Security	41.1	Environmental and Social Performance Securing Declaration.
34	Advance Payment	43.1	The Advance Payment shall be limited to 10 Percent of the Contract Amount.
35	Appointment of Members of the Dispute Avoidance and Resolution Board	44.1	Dispute Avoidance and Resolution Board shall be composed of: Three DARB The proposed Appointing Authority for the Dispute Avoidance and Resolution Board appointment is To be Known after Award.

F. Right to review

36	Address to Submit an Appeal to PPAA	50.2	The address for Appeal to PPAA: The Executive Secretary, Public Procurement Appeals Authority, Ministry of Finance and Planning, Mkandarasi Place, 4th Floor Jakaya Kikwete Road P.O. Box 1385, Dodoma Tanzania Telephone +255 26 2962411 Mobile:+255743505505 Fax + 255 022 2120460 Email: info@ppaa.go.tz or es@ppaa.go.tz Website www.ppaa.go.tz
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**SECTION IV: QUALIFICATION AND
EVALUATION CRITERIA**

QUALIFICATION AND EVALUATION CRITERIA

Commercial Evaluation

1. Eligibility

Litigation History (SCORE: N/A)

Tenderers are required to provide litigation records resulting from contracts completed or ongoing under their execution (In case of Joint Venture, compliance requirements are all Parties Combined – Must Meet requirements and Each Member – Must Meet requirements).

Litigation History Start Year	2019-01-01
Litigation History End Year	2024-12-31

Completion Period (SCORE: N/A)

Tenderers are required to comply with the completion period as proposed by the procuring entity unless alternative completion period is allowed.

Completion Time (Days)	1095
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2. Standard Tender Forms

Tender Validity Period (SCORE: N/A)

Contractors are required to confirm with the tender validity period specified by the Procuring Entity.

Tender Validity Period (Days)	120
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Notarized Special Power of Attorney (SCORE: N/A)

Tenderers must fill in Standard Power of Attorney as per the required format and upload into the system.

Tender Security (SCORE: N/A)

Tenderer should submit tender security as per instructions to tenderers.

3. Financial Situation and Performance

Financial Statement (SCORE: N/A)

Audited balance sheets or, if not required by the laws of the Tenderer's country, other financial statements acceptable to the PE, for mentioned duration shall be submitted and must demonstrate the current soundness of the Tenderer's financial position and indicate its prospective long-term profitability. (In case of Joint Venture, compliance requirements are: Each Member – Must Meet requirements).

Financial Statement Start Date	2014-01-01
Financial Statement End Date	2023-12-31
Minimum Current Ratio [Current Assets(CA)/Current Liabilities(CL)]	1
Minimum Cash Ratio [Cash and Bank(C&B)/Current Liabilities(CL)]	N/A
Minimum Working Capital [Current Assets(CA)-Current Liabilities(CL)]	N/A

Minimum Gross Profit Margin [Gross Profit(GP)/Total Revenue(TR)*100]	N/A
Minimum Debt to Equity Ratio [Total Liabilities(TL)/Total Equity(TE)]	N/A
Minimum Return on Assets [Profit before Tax(PBT)/Total Assets(TA)*100]	N/A

Average Annual Turnover (SCORE: N/A)

Average Annual Turnover of the mentioned amount, calculated as total certified payments received for contracts in progress and/or completed within the mentioned duration. (In case of Joint Venture, compliance requirements are: All Parties Combined – Must Meet requirements, Each Member – Must Meet percentage requirements and if One Member – Must Meet percentage requirements stated).

Average Annual Turnover Amount in TZS or any other freely convertible currency	50000000000
Turnover Start Date	2014-01-01
Turnover End Date	2024-12-31

Access to Financial Resources (Sources of Fund) (SCORE: N/A)

Tenderers are required to demonstrate details of their sources of finance that show their ability to access adequate finances to meet the cash flow requirements of current and future contracts. (In the case of a Joint Venture, compliance requirements are all Parties Combined – Must Meet requirements).

Average fund amount from all sources (any freely convertible currency proposed by bidder)	10000000000
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Technical Evaluation

1. Experience

Current Contract Commitment (SCORE: N/A)

Tenderer must demonstrate that it has adequate sources of finance to meet the cash flow requirements on contracts currently in progress and for future contract commitments. (In case of Joint Venture, compliance requirements are: All Parties Combined – Must Meet requirements).

Current Commitment Start Year	2019-01-01
Current Commitment End Year	2024-12-31

General Experience in Construction Activities (SCORE: N/A)

General Construction Experience: Experience under construction contracts in the role of prime contractor, JVCA member, sub-contractor, or management contractor for at least the duration stated. (In case of Joint Venture, compliance requirements are: Each member – Must Meet requirements).

Key Construction Activities	Design and Construction of wide span metal Buildings
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Specific Experience (SCORE: N/A)

Specific and Contract Management Experience: A minimum number of similar contracts based on the physical size, complexity, methods/technology and/or other characteristics described in the PE Requirements on contracts that have been satisfactorily and substantially completed (substantial completion shall be based on 80% or more of completed assignments under the contract) as a prime contractor/supplier/service provider, joint venture member, management contractor/supplier/service provider or sub-contractor/supplier/service provider for mentioned duration. (In case of Joint Venture, compliance requirements are: All Parties – Must Meet requirements). In the case of JVCA, the value of

contracts completed by its members shall not be aggregated to determine whether the requirement of the minimum value of a single contract has been met. Instead, each contract performed by each member shall satisfy the minimum value of a single contract as required for single entity. In determining whether the JVCA meets the requirement of total number of contracts, only the number of contracts completed by all members each of value equal or more than the minimum value required shall be aggregated.

Specific Experience	Extensive Construction of Pre -engineered Metal/Steel buildings.(Hangar Construction)
Specific Experience Start Year	2014-01-01
Specific Experience End Year	2024-12-31
Number of Specific Experience Contracts	3
Value of each specific experience contract in the specified tender currency	50000000000

General Experience (SCORE: N/A)

Tenderer should provide details of their previous and on-going contracts to evidence their general experience in construction.

General experience start date	2014-01-01
General experience end date	2024-12-31
Number of contract	3
Contract value in the specified currency	50000000000

General Experience in Key Activities (SCORE: N/A)

Experience in Key Activities: For any other contracts completed and/or under implementation as prime contractor/supplier/service provider, within the duration and with the minimum experience requested for the key activities. The minimum experience requirement for multiple contracts will be the sum of the minimum requirements for respective individual contracts, unless specified otherwise. (In case of Joint Venture, compliance requirements are: All Parties combined – Must Meet requirements and One Member - Must meet the requirements for the key activities listed and the corresponding minimum requirements).

Employer's Name and Contact	Contractor To submit Name and Contact
Project Description	Contractor To submit Project Description
Project Amount	Contractor To submit Project Amount
Project Start Date	2019-01-01
Project End Date	2024-12-31
Key Activities	Contractor To submit Key Activities
Roles in Contract	Contractor To submit their Roles in Contract
Key Personnel	Contractor To submit details of Key Personnel involved in key activities.

2. Technical Specifications

Risk Management Plan (SCORE: N/A)

Tenderers are required to submit a risk management plan that shows risk identification and impact assessment, risk response and control strategy, and roles and responsibilities in managing risks.

Contractor's Equipment Strategy (SCORE: N/A)

Tenderers are required to specify strategy for acquiring and maintaining the key equipment needed to execute the works in accordance with the work program.

3. Key Personnel**Key Personnel (SCORE: N/A)**

Tenderer should provide details of their personnel with adequate qualifications as required by the procuring entity.

Categories of Key Personnel	Education Level	Experience of Key Personnel	Number of Required Key Personnel
Electrical Engineer	To be a graduate Electrical Engineering. Must be registered with respective board	3 years in similar works, 3 years as In charge for respective Position.	1
Environmental Officer	Degree in Environmental Engineering or Sciences, with broad range of experience (registered by the recognized board	3 years in similar works, 3 years as In charge for respective Position.	1
Site Agent	To be Professional Structural/Civil Engineer or Construction Manager Registered with respective registration boards	3 years in similar works, 3 years as In charge for respective Position.	1
Site Structural/Civil Engineer	To be a Graduate in Structural/Civil Engineering. Must be registered with respective board	3 years in similar works, 3 years as In charge for respective Position.	1
Social Officer	Degree in Social Sciences, Development Studies, Community Development or related fields (registered by the recognized board	3 years in similar works, 3 years as In charge for respective Position.	1
Structural/Civil Technician	Diploma or FTC in Structural/Civil Technician	5 years in similar works, 5 years as In charge for respective Position	1
Project Manager	To be either Professional Engineer, Architect or Quantity Surveyor Registered with respective Registration Boards	5 years in similar works, 5 years as In charge for respective Position.	1
Health and Safety Officer	To be certified by Occupational Safety and Health Authority (OSHA) of Tanzania	3 years in similar works, 3 years as In charge for respective Position.	1
Structural/Civil Technician	Diploma or FTC in Structural/Civil Technician	3 years in similar works, 3 years as In charge for respective Position.	1
Site Quantity Surveyor	To be a Graduate in Building Economics, Construction Management, Building Survey	3 years in similar works, 3 years as In	1

	or Quantity Surveying. Must be registered with respective board	charge for respective Position.	
Structural/Civil Technician	Diploma or FTC in Structural/Civil Technician	5 years in similar works, 5 years as In	1
Mechanical Engineer	To be a Graduate Mechanical Engineering. Must be registered with respective board	3 years in similar works, 3 years as In charge for respective Position.	1
Mechanical (Air Conditioning, Plumbing and Lift) Installation Technician	Diploma or FTC in Mechanical (Air Conditioning, Plumbing and Lift	5 years in similar works, 5 years as In charge for respective Position	1
Electrical Engineering Technician	Diploma or FTC in Electrical Engineering	5 years in similar Works,5 years as in charge for respective Position	1

4. Technical Submission

Site Organization (SCORE: N/A)

The Tenderer shall include an organizational diagram indicating his proposed project organization, including Head Office management and possible sub-contractors.

Equipment (SCORE: N/A)

The Tenderer shall demonstrate ownership or ability to obtain the required key equipment as listed by the procuring entity.

Type of Key Equipment Required	Equipment Capacity	Start Year of Equipment Manufacture	End Year of Equipment Manufacture	Number of Equipment
Water pumps	20m3/hr	2007-01-01	2019-12-31	2
Steel cutting machine	Standard	2007-01-01	2019-12-31	3
Tipping truck	15m3	2007-01-01	2019-12-31	4
Steel scaffolding	SQM	2007-01-01	2019-12-31	3500
Poker vibrator	Standard Capacity	2007-01-01	2019-12-31	4
Generator	set (100 ? 150KVA)	2007-01-01	2019-12-31	1
Diesel Engine Concrete Pumps	(at least 35m1/h) 30m high	2007-01-01	2019-12-31	1
Concrete dumpers	2 meter cubic	2007-01-01	2019-12-31	2
Dust screen	SQM	2007-01-01	2019-12-31	10000
Temporary steel staircases	Standard	2007-01-01	2019-12-31	2
Steel bending machine	Standard	2007-01-01	2019-12-31	3
Concrete mixer trucks	10 meter Cubic	2007-01-01	2019-12-31	2
Pickup minimum	7tons	2007-01-01	2019-12-31	1

Excavator	3 meter cubic	2007-01-01	2019-12-31	1
Roller Compactor	10tons	2007-01-01	2019-12-31	1
Mobile Tower Crane	Rotating Radius of 50m	2007-01-01	2019-12-31	1
Builder Hoist	External Lifts	2007-01-01	2019-12-31	2
Air compressor	2 bar	2007-01-01	2019-12-31	1

Construction Management Strategy (SCORE: N/A)

Tenderer is required to submit Construction Schedule showing time taken and resources required in execution of various tasks, presented in bar chart. The Construction Schedule must reflect construction period stipulated in the Tendering Documents.

Construction Management Strategy	Contractors to submit Construction Management Strategy
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Mobilization Schedule (SCORE: N/A)

Tenderers are required to submit Mobilization Schedule for Personnel, Equipment and Materials.

Mobilization Schedule	Contractor to submit mobilization schedule for the assignment
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Method Statement (SCORE: N/A)

Tenderers are required to submit clear details on how works will be executed and completed in accordance with the proposed program, thereafter upload the document into the system for submission.

Financial Evaluation

1. Priced Bills of Quantities

Priced Bill of Quantities (SCORE: N/A)

Tenderers are required to quote each item in the Bills of Quantities as per procuring entity's requirements.

SECTION V: TENDERING FORMS

Schedule of Cost Indexation

The formulae for price adjustment shall be of the following general type:

$$P_n = a + bL_n/L_0 + cE_n/E_0 + dM_n/M_0 + ..$$

where:

“P_n” is the adjustment multiplier to be applied to the estimated contract value in the relevant currency of the work carried out in period “n”, this period being a month unless otherwise stated in the SCC;

“a” is a fixed coefficient, stated in the relevant table of adjustment data, representing the non-adjustable portion in contractual payments;

“b”, “c”, “d”, ... are coefficients representing the estimated proportion of each cost element related to the execution of the Works as stated in the relevant table of adjustment data; such tabulated cost elements may be indicative of resources such as labour, equipment and materials;

“L_n”, “E_n”, “M_n”, ... are the current cost indices or reference prices for period “n”, expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the date 30 days prior to the last day of the period(to which the particular Payment Certificate relates); and

“L₀”, “E₀”, “M₀”, are the base cost indices or reference prices, expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the Base Date.

The cost indices or reference prices stated in the Table of Adjustment Data shall be used. If their source is in doubt, it shall be determined by the Project Manager. For this purpose, reference shall be made to the values of the indices at stated dates(quoted in the fourth and fifth columns respectively of the table).

If the currency in which the Contract price is expressed is different from the currency of the country of origin of the indices, a correction factor will be applied to avoid incorrect adjustments of the Contract price. The correction factor shall be: Z_0 / Z_1 , where,

Z_0 = the number of units of currency of the origin of the indices which equal to one unit of the currency of the Contract Price on the Base date, and

Z_1 = the number of units of currency of the origin of the indices which equal to one unit of the currency of the Contract Price on the Date of Adjustment.

Schedule of Adjustment Data

[In Tables A, B, and C, below, the Tenderer shall (a) indicate its amount of local currency payment, (b) indicate its proposed source and base values of indices for the different foreign currency elements of cost, (c) derive its proposed weightings for local and foreign currency payment, and (d) list the exchange rates used in the currency conversion. In the case of very large and/or complex works contracts, it may be necessary to specify several families of price adjustment formulae corresponding to the different works involved.]

Table A. Local Currency

Index code	Index description	Source of index	Base value and date	Tenderer's related currency amount	Range of weighting Proposed by the Procuring Entity	Tenderer's proposed weighting
					a: * b: ----- to ---- --* c: ----- to --- ---* d: ----- to --- --* e: ----- to --- ---* etc.	a: * b: c: d: e: etc.
TOTAL						1.00

[* To be entered by the PE. Whereas “a” should a fixed percentage, b, c, d and e should specify a range of values and the Tenderer will be required to specify a value within the range such that the total weighting = 1.00]

Table B. Foreign Currency (FC)

State type: [If the Tenderer is allowed to receive payment in foreign currencies this table shall be used. If Tenderer wishes to quote in more than one foreign currency (up to three currencies permitted) then this table should be repeated for each foreign currency.]

Index code	Index description	Source of index	Base value and date	Tenderer's related source currency in type/amount	Equivalent in Foreign Currency 1	Range of weighting Proposed by the Procuring Entity	Tenderer's proposed weighting
	Non-adjustable	-	-	-		a: * b: ----- to -- ----* c: ----- to - ----* d: ----- to - ----* e: ----- to - ----* etc.	a: * b: c: d: e: etc.

[*To be entered by the PE. Whereas "a" should a fixed percentage, b, c, d and e should specify a range of values and the Tenderer will be required to specify a value within the range such that the total weighting = 1.00]

Table C. Summary of Payment Currencies

Table: Alternative A

For.....[insert name of Section of the Works]

Name of payment currency	A Amount of currency	B Rate of exchange (local currency per unit of foreign)	C Local currency equivalent $C = A \times B$	D Percentage of Total Tender Price (TTP) $\frac{100 \times C}{TTP}$
Local currency		1.00		
Foreign currency #1				
Foreign currency #2				
Foreign currency #				
Total Tender Price				100.00
Provisional sums expressed in local currency	[To be entered by the PE]		[To be entered by the PE]	
TOTAL TENDER PRICE (including provisional sum)				

Table: Alternative B

To be used only with Alternative B Prices directly quoted in the currencies of payment. (Clause ITT 16.1)

Summary of currencies of the **Tender** for _____ [insert name of Section of the Works]

Name of currency	Amounts payable
Local currency:	
Foreign currency #1:	
Foreign currency #2:	
Foreign currency #3:	
Provisional sums expressed in local currency	[To be entered by the PE]

3. Bills of Quantities

(Tenderer shall fill in rates and prices for all items of the Works described in the Bill of Quantities.)

Special Power of Attorney

(Form is available in the system during tender submission)

5. Tender Security (Bank Guarantee) or Tender Security (Tender Bond)

(Form is available in the system during tender submission)

Financial Situation and Performance

(Tenderers are required to fill and update information concerning their financial situation and performance in their profile to enable submission of the same during tender application.)

SECTION VI: ELIGIBLE COUNTRIES

Procurement Reference Number:

All countries are eligible except countries subject to the following provisions.

A country shall not be eligible if:

- (a) as a matter of law or official regulation, the Government of the United Republic of Tanzania prohibits commercial relations with that country, provided that the Government of the United Republic of Tanzania is satisfied that such exclusion does not preclude effective competition for the provision of goods or related services required; or
- (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Government of the United Republic of Tanzania prohibits any import of goods from that country or any payments to persons or entities in that country.

SECTIONVII - WORKS REQUIREMENTS

Scope of Works

(This information is provided in the Tender Data Sheet)

ATTACHMENTS (SPECIFICATIONS AND DRAWINGS)

Tender Number: TR128/2024/2025/W/20

List of related files, including specifications, drawings, etc.

LOT NO. TR128/2024/2025/W/20
The construction of new hangar at JNIA by June, 2027

S/N	Description	File Name	Attachment Type	Download Link
1	STRUCTURAL	STRUCTURAL DRAWINGS - HANGAR MAIN BUILDING AT JNIA AIRPORT.pdf	Drawings	Download
2	ARCHTECTURAL	01-ATCL-NEW HANGAR-GA.pdf	Drawings	Download
3	ARCH	02-ATCL-NEW HANGAR-RCP.pdf	Drawings	Download
4	ARCH	05-ATCL-DARK STORE-COMplete DRAWINGS.pdf	Drawings	Download
5	ARCH	07-ATCL- SERVICE BUILDING-COMplete DRAWINGS.pdf	Drawings	Download
6	PLUMBING	PLUMBING & FIREFIGHTING DRAWINGS - HANGAR DSM.pdf	Drawings	Download
7	ARCH	04-ATCL-NEW HANGAR-AS.pdf	Drawings	Download
8	ICT	ICT & SECURITY SYSTEM DRAWINGS - HANGAR DSM.pdf	Drawings	Download
9	ARCH	03-ATCL-NEW HANGAR-FINISHES.pdf	Drawings	Download
10	ELECTRICAL	ELECTRICAL DRAWINGS - HANGAR DSM.pdf	Drawings	Download
11	MECHANICAL	MECHANICAL HVAC DRAWINGS - HANGAR DSM.pdf	Drawings	Download
12	STRUCTURAL	STRUCTURAL DRAWINGS - HANGAR SUPPORTING AREAS.pdf	Drawings	Download
13	ARCH	06-ATCL-GUARD OFFICE-	Drawings	Download

		COMPLETE DRAWINGS.pdf		
14	PRELIMINARIES	BILL NO. 1 - PRELIMINARIES.pdf	Other	Download
15	ELECTRICAL PREAMBLES	BILL NO. 8 - ELECTRICAL BOQ PREAMBLES.pdf	Specifications	Download

BILLS OF QUANTITIES
Lot Description: The construction of new hangar at JNIA by June, 2027

Code/SN	Description	Unit of Measure	Quantity	Unit Rate	Total
AIRCRAFT MAINTENANCE HANGAR					
BILL No 3	MEASURED WORKS				
ELEMENT No.1	SUBSTRUCTURE (ALL PROVISIONAL)				
1	Excavation and Earthworks;				
A	PILLING WORKS EXCAVATION AND EARTHWORKS STARTING LEVELS UNLESS OTHERWISE STATED ALL EXCAVATIONS AND PLANKING AND STRUTTING START AT Natural ground level EXCAVATION EXCAVATE PITS TO RECEIVE PILE CAP Not exceeding 1.50m deep	M3	331.00		
B	PILING WORKS SITE ESTABLISHMENT Preparation of facilities for the piling works	Sum	1.00		
C	Provide and mobilize all necessary equipment required for the execution of pile works and subsequently removal.	Sum	1.00		
D	Allow for providing and assembling the piles equipment on the site and subsequent removal	Sum	1.00		
E	Prepare site ready for the construction.	Sum	1.00		
F	DISPOSAL SLURRY AND SOIL FROM BORED HOLES Removing from site	M3	295.00		
G	PILE TESTING Conduct all pile tests as described in the pile specifications and as directed by the Engineer.	Item	1.00		
2	Disposal of water:				
A	DISPOSAL OF WATER KEEPING EXCAVATIONS FREE OF General water	Lumpsum	1.00		
6	Damp Proof Membrane				
7	CONCRETE WORK:				
	Plain insitu concrete grade '15'				
A	PILLING WORKS (Cont'd) CONCRETE WORK PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 15; 20MM MAXIMUM AGGREGATE SIZE 100MM THICK BLIND BORING 500mm diameter in 100Nr.;15000mm long	M2	20.00		
	Reinforced insitu concrete grade '30'; vibrated; including vibrating around reinforcements:				
B	PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 30; 20MM AGGREGATE MAXIMUM SIZE BORING PILE HOLES AND FILLING BORES WITH CONCRETE Bored piles 500mm diameter ; 15000mm long(100Nr.)	M	1,500.00		
C	PILE CAP Over 300mm wide	M3	240.00		

D	PRELIMINARY PILES 500mm diameter. Boring to approximately 15000mm deep;1Nr.	M	15.00		
8	REINFORCEMENTS:				
I	High tensile steel bar reinforcements with a strength of 500N/mm² to BS 4449:1969: including bends, hooks, tying wire, ordinary spacers and distance blocks:				
E	REINFORCEMENT; BARS; BS4461; COLD WORKED DEFORMED HIGH YIELD STEEL STRAIGHT OR BENT 10mm diameter bars	Kg	2,074.00		
F	25mm diameter bars	Kg	50,443.00		
G	FORMWORK; SAWN FORMWORK PILE CAP; VERTICAL Generally	M2	280.00		
H	SUNDRIES ASSOCIATED WITH IN- SITU WORKS CUT AWAY TOP OF REINFORCED CONCRETE PILES;APPROXIMATELY 350MM;TRIM TO LEVEL;BEND OUT REINFORCEMENT ,WIRE TO RAFT FOUNDATION REINFORCEMENT 500mm diameter ;15000mm long	NO	100.00		
A	SUBSTRUCTURE EXCAVATION AND EARTHWORKS STARTING LEVELS UNLESS OTHERWISE STATED ALL EXCAVATIONS AND PLANKING AND STRUTTING START AT Natural ground level EXCAVATION EXCAVATE PITS TO RECEIVE COLUMN BASES Not exceeding 1.50m deep	M3	334.00		
B	1.50-3.00m deep	M3	122.00		
C	EXCAVATE PITS TO RECEIVE PAD FOUNDATION Not exceeding 1.50m deep	M3	15,511.00		
D	EXCAVATE PITS TO RECEIVE RAFT FOUNDATION Not exceeding 1.50m deep	M3	3,674.00		
E	1.50-3.00m deep	M3	1,837.00		
F	EXTRA OVER ALL TYPES OF EXCAVATION FOR Breaking up rock (Provisional)	M3	5,370.00		
G	EARTHWORK SUPPORT ALLOW FOR PROVISION AND SUBSEQUENT REMOVAL OF PLANKING AND STRUTTING TO UPHOLD AND MAINTAIN ALL VERTICAL FACES OF EXCAVATIONS Generally	Item	1.00		
H	FILLING IMPORTED CRUSHED AGGREGATES (CRR) TO STANDARD SPECIFICATIONS TO MAKE UP LEVELS Average 150mm thick	M2	18,248.00		
A	SUBSTRUCTURE (Cont'd) EXCAVATION AND EARTHWORKS (Cont'd) FILLING IMPORTED CRUSHED STONES (CRS) TO STANDARD SPECIFICATIONS TO MAKE UP LEVELS Average 150mm thick	M2	18,248.00		

B	FILLING; IMPORTED SUB-BASE MATERIAL GRADE G15; WELL COMPACTED TO MAKE UP LEVELS Average 100mm thick	M2	18,248.00		
C	FILLING; IMPORTED SUB-BASE MATERIAL GRADE G45; COMPACTED TO MAKE UP LEVEL TO MAKE UP LEVELS Average 150mm thick	M2	18,248.00		
D	DISPOSAL EXCAVATED MATERIAL Removing from site	M3	21,478.00		
E	DISPOSAL OF WATER KEEPING EXCAVATIONS FREE OF General water	Item	1.00		
F	SURFACE TREATMENTS SOIL STERILIZATION; ALDRIN 0.50% SOLUTION OR OTHER EQUAL AND APPROVED ANTI-TERMITE TREATMENT APPLIED AT A RATE OF 7 LITRES PER SQUARE METRE To surfaces of excavation or backfilling	M2	18,248.00		
G	FILLING; HARDCORE; BLINDED WITH SAND TO RECEIVE DAMP PROOF MEMBRANE (MEASURED SEPARATELY) TO MAKE UP LEVELS 300mm thick	M2	18,248.00		
A	SUBSTRUCTURE (Cont'd) CONCRETE WORK PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 15; 20MM MAXIMUM AGGREGATE SIZE BLINDING BEDS; SLOPING NOT EXCEEDING 15 DEGREES FROM HORIZONTAL; LAID ON EARTH OR HARDCORE 75mm thick	M2	2,264.00		
B	PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 30; 20MM AGGREGATE MAXIMUM SIZE ISOLATED FOUNDATION BASES TO COLUMNS OR PIERS Generally	M3	124.00		
C	GROUND BEAMS; POURED AGAINST FACES OF EXCAVATION Generally	M3	106.00		
D	GROUND FLOOR SLAB; LAID ON EARTH OR HARDCORE 300mm thick	M3	16,625.00		
E	RAFT FOUNDATION; LAID ON EARTH OR HARDCORE Over 300mm thick	M3	1,913.00		
F	SLAB; LAID ON EARTH OR HARDCORE 300mm thick	M2	2,226.00		
G	PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 30; 20MM MAXIMUM AGGREGATE SIZE WALLS 600mm thick	M3	166.00		
H	COLUMNS Generally	M3	131.00		
A	SUBSTRUCTURE (Cont'd) CONCRETE WORK (Cont'd) REINFORCEMENT; BARS; BS4449; HOT ROLLED PLAIN ROUND MILD STEEL STRAIGHT OR BENT 8mm diameter	Kg	5,736.00		

B	10mm diameter	Kg	10,328.00		
C	12mm diameter	Kg	154,293.00		
D	16mm diameter	Kg	40,627.00		
E	20mm diameter	Kg	67,380.00		
F	25mm diameter	Kg	114,148.00		
G	32mm diameter dowel bars	Kg	151,173.00		
H	FORMWORK; SAWN EDGES OF SLAB PANELS; VERTICAL FACE 225-300mm high	M	13,300.00		
J	EDGES OF SLABS; VERTICAL FACE 225-300mm high	M	323.00		
K	FORMWORK; SAWN FORMWORK COLUMN BASES Generally	M2	197.00		
L	FACES OF RAFT FOUNDATIONS AND THE LIKE; VERTICAL Generally	M2	544.00		
M	GROUND BEAM Generally	M2	474.00		
N	FACES OF WALLS; VERTICAL Generally	M2	558.00		
A	SUBSTRUCTURE (Cont'd) CONCRETE WORK (Cont'd) FORMWORK; SAWN FORMWORK (Cont'd) COLUMNS; VERTICAL Generally	M2	506.00		
B	SUNDRIES EXPANSION JOINTS;25MM THICK BITUMEN IMPREGNATED FIBRE BOARD PLACED BETWEEN ADJOINING CONCRETE SURFACES INCLUDING ALL NECESSARY FORMWORK 25mm wide; vertical; on floors or the like (Provisional)	M2	189.00		
C	300mm deep; vertical; on floors or the like (Provisional)	M	6,822.00		
10	WALLING				
12	DAMP PROOFING				
A	SILICONE SEALANT TO C920, STANDARD SPECIFICATION FOR ELASTOMERIC JOINT SEALANTS (REF1),GRADE NS, USE M; EXHIBITING THE HIGHEST EXPANSION AND COMPRESSION CAPABILITIES,AND RESISTANT TO WEATHERING (ULTRAVIOLET); INCLUDING PROPRIETARY PRIMER APPLIED BETWEEN CONCRETE EXPANSION JOINTS 25mm wide x 50mm deep; on floors or the like (Provisional)	M	6,917.00		
B	1000 GAUGE POLYTHENE SHEET DAMP-PROOF MEMBRANE; 200MM LAPPED JOINTS Over 300mm wide; horizontal; on floors or the like	M2	18,248.00		
14	Expansion Joints:				
A	SUBSTRUCTURE (Cont'd) METAL	M	6,917.00		

	WORK SUNDRIES COMPOSITE ITEM; EXPANSION JOINT COVER COMPRISING OF 2NR.,30 X 3MM THICK PERFORATED STAINLESS STEEL PLATES TO BS1476, ETCHED, ANODISED NATURAL; HEAVY DUTY FLEXIBLE RUBBER MATERIAL FITTED BETWEEN STAINLESS PLATES TO ACCOMMODATE EXPANSION; INCLUDING BEDDING ALUMINUM PLATES TO CONCRETE WITH CEMENT MORTAR (1:3) Overall 60mm wide				
ELEMENT No.2	FRAMES				
	CONCRETE WORKS:				
A	FRAMES AND UPPER FLOORS CONCRETE WORK PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 30; 20MM MAXIMUM AGGREGATE SIZE WALLS 600mm thick	M3	1,777.00		
I	Reinforced insitu concrete grade '30' including vibrating around reinforcements.				
A	PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE30; 20MM AGGREGATE MAXIMUM SIZE SUSPENDED SLABS 175mm thick	M2	475.00		
2	REINFORCEMENTS;				
	High tensile steel bar reinforcements with a strength of 500N/mm2 to BS 4449:1969: including bends, hooks, tying wire, spacers and distance blocks.				
A	REINFORCEMENT; BARS; BS4461; COLD WORKED DEFORMED HIGH YIELD STEEL STRAIGHT OR BENT 12mm diameter bars	Kg	7,100.00		
B	20mm diameter bars	Kg	70,396.00		
C	20mm diameter bars	Kg	128,099.00		
D	FORMWORK; SAWN SOFFITS OF SLABS; HORIZONTAL Not exceeding 250mm thick	M2	257.00		
E	EDGES OF SUSPENDED SLABS; VERTICAL FACE 150-225mm high	M	165.00		
F	FORMWORK; SAWN FORMWORK FACES OF WALLS; VERTICAL Generally	M2	2,962.00		
A	STEEL STRUCTURE STRUCTURAL STEELWORK STRUCTURAL STEEL WORK FRAMED STEEL WORK OF WELDED, FABRICATION BOLTED SITE CONNECTION AND ERECTION AS PER BS 5950 , ALL TO BE INDUSTRIAL PAINTED WITH ONE COAT OF ZINC PHOSPHATE PRIMER TO DRY DRY FILM THICKNESS OF 40MM-50MM MICRONS BEFORE RELEASED FOR DISPATCH TO SITE; FINAL COATS AFTER ERECTION ON SITE. 203 x 203: UC 46-Section Column	M	1,440.00		

B	FRAMED STEEL WORK OF WELDED, FABRICATION BOLTED SITE CONNECTION AND ERECTION AS PER BS 5950 ON STEEL STRUCTURE (MEASURED SEPARATELY), ALL TO BE INDUSTRIAL PAINTED WITH ONE COAT OF ZINC PHOSPHATE PRIMER TO DRY DRY FILM THICKNESS OF 40MM-50MM MICRONS BEFORE RELEASED FOR DISPATCH TO SITE; FINAL COATS AFTER ERECTION ON SITE 203 x 133mm UB25 Horizontal frame member	M	2,214.00		
C	FRAMED STEEL WORK OF WELDED, FABRICATION BOLTED SITE CONNECTION AND ERECTION AS PER BS 5950 ON STEEL STRUCTURE , ALL TO BE INDUSTRIAL PAINTED WITH ONE COAT OF ZINC PHOSPHATE PRIMER TO DRY DRY FILM THICKNESS OF 40MM-50MM MICRONS BEFORE RELEASED FOR DISPATCH TO SITE; FINAL COATS AFTER ERECTION ON SITE. 356 x 406: UC 634 I-Section Column	M	1,600.00		
D	FRAMED STEEL WORK OF WELDED, FABRICATION BOLTED SITE CONNECTION AND ERECTION AS PER BS 5950 STRUCTURAL BEAMS WITH AND INCLUDING ALL CONNECTIONS, ALL TO BE INDUSTRIAL PAINTED WITH ONE COAT OF ZINC PHOSPHATE PRIMER TO DRY DRY FILM THICKNESS OF 40MM-50MM MICRONS BEFORE RELEASED FOR DISPATCH TO SITE; FINAL COATS AFTER ERECTION ON SITE. 305 x 305: UB 283 H-Beam	M	180.00		
A	STEEL STRUCTURE (Cont'd) STRUCTURAL STEELWORK (Cont'd) STRUCTURAL STEELWORK; WELDABLE STEEL;MILD STEEL CHS BRACING MEMBERS 88mm diameter x 3mm thick	M	3,940.00		
A	STEEL STRUCTURE (Cont'd) METAL WORK PLATES, BARS, SECTIONS AND TUBES; MILD STEEL PLATES 810 x 1070 x 40mm thick; fixing by bolting	NO	40.00		
B	350 x 350 x 8mm thick; fixing by bolting	NO	72.00		
C	400 x 4000 x 10mm thick; fixing by bolting	NO	16.00		
D	600 x 1200 x 10mm thick; fixing by bolting	NO	40.00		
E	357 x 820 x 30mm thick; Bolted to 356 x 406 UC634 Column	NO	40.00		
F	SUNDRIES HOLES For 24mm diameter bolts; through10mm thick mild steel	NO	2,560.00		
G	For 28mm diameter bolts; through10mm thick mild steel	NO	640.00		

H	J BOLTS; MILD STEEL 20mm diameter x 632mm long; one nut, one washer	NO	800.00		
J	16mm diameter x 300mm long; one nut, one washer	NO	432.00		
K	BOLTS; MILD STEEL 24mm diameter x 300mm long; one nut, one washer	NO	128.00		
L	24mm diameter x 150mm long; one nut, one washer	NO	2,560.00		
ELEMENT NO.4	WALLING.				
1	BLOCKWORK:				
I	Solid concrete blocks to BS 6073 Type 'A' dense aggregate, average compressive strength 7N/sq mm; in cement mortar:				
A	WALLING WALLING SANDWICH PANELS THE QUANTITIES RESPECTING WALL CLADDING ARE ALL PROVISIONAL BASED ON BILL DIAGRAMS AND/ OR BILL DRAWINGS. THE BIDDER SHALL PREPARE ALL NECESSARY SHOP DRAWINGS AND PRODUCE A DETAILED QUOTATION IN LINE WITH THE SHOP DRAWINGS AND SHALL SUBMIT THE ESTIMATE AND THE SHOP DRAWINGS AS PART OF THE TENDER DOCUMENTS. SUCH INFORMATION AND/OR ESTIMATE SHALL TAKE ACCOUNT THE COST OF BOLTS, WELDING, PLATES AND ANY OTHER NECESSARY ACCESSORIES. SANDWICH WALL PANELS SUPPLY AND FIX WALL CLADDING WITH AND INCLUDING PREFAB AND COMPOSITE MATERIALS V-950 INSULATED STEEL SANDWICH PANELS 0.5MM/75MM ROCKWOOL / 0.5MM, GRAY OR WHITE COLOUR SUBJECT TO ARCHITECTS APPROVAL PRIOR TO FIX ; METHOD OF FIXING AS PER MANUFACTURERS PRINTED INSTRUCTIONS 55mm thick x 1100mm wide	M2	4,826.00		
B	SUPPLY AND INSTALL INSULATED PANELS CONSISTING OF TWO LAYERS OF GALVINIZED MILD STEEL FACERS EACH 0.5MM THICK AND PUR/PIR INSULATION CORE BETWEEN FACERS AS MANUFACTURED BY EMIRATES INDUSTRIAL PANELS OR OTHER EQUAL AND APPROVED BY THE ARCHITECT; INSULATION CORE OF DENSITY 40+ 3KG/M3; THERMAL CONDUCTIVITY PUR=0.418W/MK1 AND PIR=0.382W/MK1 AND 90% CLOSED CELL CONTENT FIXED WITH PROPRIETARY FIXING MATERIALS TO STRUCTURAL STEEL RAILINGS (MEASURED SEPARATELY) Extra over	M2	2,068.00		

	for 2000mm x 2100mm x 8mm thick Low - E glazing glass				
2	CURTAIN				
	Design, Engineering, Fabrication, installation, Testing and Commissioning				
ELEMENT No.5	ROOFING				
3	Unframed Structural Hollow section steel pipe				
5.	ROOF DRAINAGE				
I	Unplasticised PVC rainwater pipes to BS 4514				
II	Unplasticised PVC rainwater gutter as supplied by "Nabaki Africa" or any other equal and approved complete with fittings and approved complete with fittings and fixing brackets as per supplier's instruction				
A	ROOFING AND RAIN WATER DRAINAGE SYSTEM WALLING ROOF TRANSLUCENT SANDWICH PANELS THE QUANTITIES RESPECTING ROOF PANELS ARE ALL PROVISIONAL BASED ON BILL DIAGRAMS AND/ OR BILL DRAWINGS. THE BIDDER SHALL PREPARE ALL NECESSARY SHOP DRAWINGS AND PRODUCE A DETAILED QUOTATION IN LINE WITH THE SHOP DRAWINGS AND SHALL SUBMIT THE ESTIMATE AND THE SHOP DRAWINGS AS PART OF THE TENDER DOCUMENTS. SUCH INFORMATION AND/OR ESTIMATE SHALL TAKE ACCOUNT THE COST OF BOLTS, WELDING, PLATES AND ANY OTHER NECESSARY ACCESSORIES. SANDWICH ROOF PANELS SUPPLY AND FIX ROOF PANELS WITH AND INCLUDING PREFAB AND COMPOSITE MATERIALS V-950 INSULATED STEEL SANDWICH PANELS 0.5MM/75MM ROCKWOOL / 0.5MM, GRAY OR WHITE COLOUR SUBJECT TO ARCHITECTS APPROVAL PRIOR TO FIX ; METHOD OF FIXING AS PER MANUFACTURERS PRINTED INSTRUCTIONS 55mm thick x 1100mm wide	M2	17,075.00		
A	ROOFING AND RAIN WATER DRAINAGE SYSTEM (Cont'd) STRUCTURAL STEELWORK STRUCTURAL STEELWORK; WELDABLE STEEL;MILD STEEL PIPES; CLASS B; COMPRESSIVE STRENGTH 275N/MM2 ROOF TRUSSES; TYPE T1-10NOS. WITH WELDED CONNECTIONS; SPAN NOT EXCEEDING 200M WIDE; INCLUDING HOISTING APPROXIMATELY 20.00M ABOVE EXISTING GROUND LEVEL; WITH AND INCLUDING PRIMING WITH RED OXIDE PRIOR FIXING 600mm x 600mm x 20mm SHS pipe top chord	M	1,915.00		

B	600mm x 600mm x 20mm SHS pipe bottom chord	M	1,915.00		
C	180mm x 180mm x 16mm SHS pipe struts	M	25,150.00		
D	ROOF TRUSSES; TYPE T2-40NOS. WITH WELDED CONNECTIONS; SPAN NOT EXCEEDING 100M WIDE; INCLUDING HOISTING APPROXIMATELY 20.00M ABOVE EXISTING GROUND LEVEL; WITH AND INCLUDING PRIMING WITH RED OXIDE PRIOR FIXING 160mm x 160mm x 16mm SHS pipe top chord	M	3,680.00		
E	160mm x 160mm x 16mm SHS pipe bottom chord	M	3,680.00		
F	100mm x 100mm x 3.6mm SHS pipe struts	M	16,525.00		
G	STRUCTURAL STEELWORK; WELDABLE STEEL;MILD STEEL Z-PURLINS 200 x 150 x 3mm thick Z-purlins	M	10,430.00		
H	SHS BRACING MEMBERS 50 x 50 x 10mm thick	M	534.00		
A	ROOFING AND RAIN WATER DRAINAGE SYSTEM (Cont'd) METAL WORK PLATES, BARS, SECTIONS AND TUBES; MILD STEEL PLATES 200 x 150 x 3mm thick; welded to top chord	NO	1,070.00		
B	800 x 100 x 3mm thick; welded to truss	NO	20.00		
C	2000 x 400 x 3mm thick; welded to truss	NO	40.00		
D	200 x 100 x 3mm thick; welded to bracing members	NO	24.00		
E	600 x 12000 x 20mm thick; welded to truss	NO	10.00		
F	170 x 170 x 6mm thick; welded to truss	NO	2.00		
G	780 x 780 x 6mm thick; welded to truss	NO	180.00		
H	GUSSET PLATES 1200 x 900 x 10mm thick; fixed by welding	NO	12,684.00		
J	SUNDRIES HOLES For 16mm diameter bolts; through 10mm thick mild steel	NO	1,282.00		
K	For 12mm diameter bolts; through 6mm thick mild steel	NO	2,140.00		
L	For 25mm diameter bolts; through 6mm thick mild steel	NO	160.00		
M	CHEMICAL BOLTS; MILD STEEL 25mm diameter x 120mm long; one nut, one washer	NO	160.00		
N	SAG ROD; MILD STEEL 12mm diameter x 100mm long; one nut, one washer	NO	1,915.00		
P	BOLTS; MILD STEEL 16mm diameter x 100mm long; one nut, one washer	NO	1,270.00		
Q	12mm diameter x 100mm long; one nut, one washer	NO	2,140.00		
R	16mm diameter x 120mm long; one nut, one washer	NO	12.00		

A	ROOFING AND RAIN WATER DRAINAGE SYSTEM (Cont'd) PLUMBING AND ENGINEERING INSTALLATIONS 3.0MM THICK GALVANIZED IRON SHEET RAIN WATER GUTTER Water gutter 2000mm girth, and all joints soldered and double reverted, four times bent in the length and fixed on and including galvanized flat section bracket 2100mm girth , bent three times and bolted both ends to roof truss	M	163.00		
B	RAINWATER INSTALLATION; PIPEWORK; U.P.V.C, FITTINGS AND ASSOCIATED SUPPORT BRACKETS;FIXED AS PER MANUFACTURER.'S INSTRUCTION RAIN WATER DOWN PIPES; SOCKETTED JOINTS IN THE RUNNING LENGTH. 100mm diameter down pipe;plugged to wall	M	320.00		
C	RAINWATER INSTALLATION; PIPEWORK; U.P.V.C. PIPES; CLASS B RAINWATER PIPES; SOCKETTED JOINTS IN THE RUNNING LENGTH Extra-over 100mm diameter pipe for shoe	NO	16.00		
D	Extra-over 100mm diameter pipe for bend	NO	16.00		
E	ROOFING AND RAIN WATER DRAINAGE SYSTEM (Cont'd) FLOOR, WALL AND CEILING FINISHING WATER PROOFING SUPPLY AND FIX POLYMERIC ROOF WATER PROOFING TREATMENT; FIRST LAYER SARNAFIL A300G/M2 LEVELING LAYER; SECOND LAYER SARNAFIL S327-12 NA SARNAFIL G41012 AS MAIN FIELD SHEET AND FOR DETAIL WORK RESPECTIVELY; ALL LAID BY A SPECIALIST AS SPECIFIED IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS Over 300mm wide; to cross falls	M2	475.00		
F	BEDS SCREEDED; TO FLOORS; LEVEL OR TO FALLS; TO CONCRETE BASE 50mm thick	M2	475.00		
A	FLOOR DRAINAGE SYSTEM CONCRETE WORK PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 30; 20MM MAXIMUM AGGREGATE SIZE RECTANGULAR DRAINAGE CHANNEL, COMPRISING 100MM BED LAID TO FALLS; 150MM THICK WALLS AND REINFORCED WITH BRC MESH REFERENCE A393 WEIGH. 6.16KG/M2; FORM 20MM X 20MM REBATE TO WALLS TO RECEIVE SLOTTED PRECAST CONCRETE COVERS (M/S) AND INCLUDING ALL NECESSARY EXCAVATION TO SLOPE;	M	360.00		

	BACKFILLING; DISPOSAL OF SURPLUS EXCAVATED MATERIALS; FORMWORK AND PLANKING AND STRUTTING Internal size 600mm wide x 800mm deep (average)				
B	CONCRETE COVER SLABS; REINFORCED WITH AND INCLUDING BRC MESH TYPE A252; WEIGHING 3.95KG PER SQUARE METRE 640 x 540 x 150mm; finish fair on one face	NO	668.00		
ELEMENT No.6	DOORS:				
4	WOOD WORK				
III	Prime quality hardwood, Paneled Doors, 50mm Thick Pannel glazed door comprising of 100mm wide stiles and top rail; 150mm wide bottom rail ; 100mm intermediate rail; with 8mm thick solid panels, housed to stiles and rail.				
A	DOORS METAL WORK ESAVIAN TYPE 126 HANGAR DOOR ALL QUANTITIES OF ARE PROVISIONAL BASED ON BILL DIAGRAMS AND/ OR BILL DRAWINGS. THE BIDDER SHALL PREPARE ALL NECESSARY SHOP DRAWINGS AND PRODUCE A DETAILED QUOTATION IN LINE WITH THE SHOP DRAWINGS AND SHALL SUBMIT THE ESTIMATE AND THE SHOP DRAWINGS AS PART OF THE TENDER DOCUMENTS. SUCH INFORMATION AND/OR ESTIMATE SHALL TAKE ACCOUNT THE COST OF BOLTS, WELDING, PLATES AND ANY OTHER NECESSARY ACCESSORIES. SUPPLY AND FIX 1 SET OF ESAVIAN TYPE 126 SLIDING BY FOLDING HANGAR DOORS; COMPRISING OF THREE EQUAL LEAF SECTIONS; WITH AND INCLUDING ALL NECESSARY RAILING AND IRON MONGERIES; METHOD OF FIXING AS PER SPECIALIST PRINTED INSTRUCTIONS. Overall size 30000 x 20000mm high	No	6.00		
IV	Frames and finishing:				
A	FINISHINGS FLOOR, WALL AND CEILING FINISHINGS IN-SITU FINISHINGS; RENDER; CEMENT AND SAND (1:4); TROWELLED FINISH; INTERNAL WORK TO WALLS; BLOCKWORK BASE OR CONCRETE SURFACES 15mm thick	M2	2,962.00		
B	IN-SITU FINISHINGS; EPOXY RESIN FLOOR COATS; "TERKIN FLOOR SLS10" OR OTHER EQUAL AND APPROVED EPOXY RESIN COATING TO FLOORS; APPLIED TO FLOORS ACCORDING TO PRINTED MANUFACTURERS INSTRUCTIONS TO CONCRETE BASE 4mm thick Epoxy Skirting	M	369.00		
C	IN-SITU FINISHINGS;HEAVY DUTY	M2	17,010.00		

	EPOXY RESIN FLOOR COATS; "TERKIN FLOOR SLS10" OR OTHER EQUAL AND APPROVED EPOXY RESIN COATING TO FLOORS; APPLIED TO FLOORS ACCORDING TO PRINTED MANUFACTURERS INSTRUCTIONS WORK TO FLOORS; LEVEL; TO CEMENT AND SAND BASE Generally				
V	Hardwood frames				
5	OTHER DOORS				
ELEMENT No. 15	PAINTING AND DECORATING				
a)	INTERNAL WORK:				
A	PAINTING AND DECORATIONS PAINTING AND DECORATING PAINTING; EXTERNAL WORK; CAPAROL OR OTHER EQUAL AND APPROVED EXTERNAL WASHABLE PAINT PAINTING ; ONE COAT CAPAACRYL (EXTERNAL QUALITY) PRIMER; TWO COATS CAPAFINE UNDERCOAT, STEEL TROWELLED AND SANDED; TWO COATS AMPHISIL FINISHING COAT, APPLIED BY PAINT ROLLER ACCORDING TO PRINTED MANUFACTURERS INSTRUCTIONS; TO RENDERED SURFACES OF BLOCKWORK OR CONCRETE Generally	M2	2,962.00		
i)	Painting and Decorations				
PROVISIONAL SUMS					
BILL NO. 2	PRIME COST AND PROVISIONAL SUMS				
SECTION C	PROVISIONAL SUMS FOR THE WORKS OR COSTS THAT CAN NOT ENTIRELY BE FORESEEN, DEFINED OR DETAILED DURING THE PREPARATION OF BILLS OF QUANTITIES				
SECTION D	INSURANCES AND CONTINGENCY SUM				
I	Allow provisional sum for				
A	Provisional of ATCL emblem	lumpsum	1.00		
B	Pursuant to Clause 17 of Conditions of Contract; Allow cost for providing insurance against loss of or damage to Works, Plants, Materials and Contractor's equipment; loss of or death to contractor's personnel and Insurance against loss of or injury to persons and damage to property in connection with the Contract	lumpsum	1.00		
C	Builders Work in connection with services and Engineering Installations	lumpsum	1.00		
D	Kitchen Counters and workshops	Lumpsum	1.00		
E	Laboratory charges for testing materials	Lumpsum	1.00		
F	Progress photographs	Lumpsum	1.00		
G	Directional Signage Generally	Lumpsum	1.00		
H	Fire Break	Lumpsum	1.00		

I	Additional earthworks for site leveling	Lumpsum	1.00		
J	Service Building	Lumpsum	1.00		
K	Dark Store Building	Lumpsum	1.00		
L	Roofing Skylight with and including steel roof structure	Lumpsum	1.00		
M	Storm water Drainage	Lumpsum	1.00		
N	Cat ladder (2Nr)	Lumpsum	1.00		
O	Additional steel trusses	Lumpsum	1.00		
P	Ramps and steps	Lumpsum	1.00		
Q	As built drawings	Lumpsum	1.00		
R	Clerk of works expenses and salaries	Lumpsum	1.00		

ASSOCIATED OFFICE BUILDING

BILL No 3	MEASURED WORKS				
ELEMENT No.1	SUBSTRUCTURE (ALL PROVISIONAL)				
1	Excavation and Earthworks;				
A	SUBSTRUCTURE EXCAVATION AND EARTHWORKS STARTING LEVELS UNLESS OTHERWISE STATED ALL EXCAVATIONS AND PLANKING AND STRUTTING START AT Natural ground level EXCAVATION EXCAVATE PITS TO RECEIVE BASES OF STANCHIONS OR THE LIKE Not exceeding 1.50m deep	M3	8,725.00		
B	1.50-3.00m deep	M3	3,233.00		
C	EXTRA OVER ALL TYPES OF EXCAVATION FOR Breaking up rock (Provisional)	M3	9,566.00		
D	EARTHWORK SUPPORT ALLOW FOR PROVISION AND SUBSEQUENT REMOVAL OF PLANKING AND STRUTTING TO UPHOLD AND MAINTAIN ALL VERTICAL FACES OF EXCAVATIONS Generally	Item	1.00		
E	FILLING; SELECTED EXCAVATED MATERIAL TO MAKE UP LEVELS Average 300mm thick, compacted in layers not exceeding 300mm thick	M2	8,625.00		
2	Disposal of water:				
A	DISPOSAL EXCAVATED MATERIAL Removing from site	M3	11,074.00		
B	DISPOSAL OF WATER KEEPING EXCAVATIONS FREE OF General water	Item	1.00		
5	Soil sterilization:				
A	SUBSTRUCTURE (Cont'd) EXCAVATION AND EARTHWORKS (Cont'd) SURFACE TREATMENTS SOIL STERILIZATION; ALDRIN 0.50% SOLUTION OR OTHER EQUAL AND APPROVED ANTI-TERMITE TREATMENT APPLIED AT A RATE OF 7 LITRES PER SQUARE METRE To	M2	8,895.00		

	surfaces of hardcore or backfilling				
B	FILLING; HARDCORE; BLINDED WITH SAND TO RECEIVE DAMP PROOF MEMBRANE (MEASURED SEPARATELY) TO MAKE UP LEVELS 300mm thick	M2	8,895.00		
6	Damp Proof Membrane				
7	CONCRETE WORK:				
	Plain insitu concrete grade '15'				
A	SUBSTRUCTURE (Cont'd) CONCRETE WORK PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 15; 20MM MAXIMUM AGGREGATE SIZE BLINDING BEDS; SLOPING NOT EXCEEDING 15 DEGREES FROM HORIZONTAL; LAID ON EARTH OR HARDCORE 50mm thick	M2	2,292.00		
	Plain insitu concrete grade '20'				
B	PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 20, MAXIMUM AGGREGATE SIZE 20MM BEDS; LAID ON EARTH OR HARDCORE 150mm thick	M2	9,482.00		
	Reinforced insitu concrete grade '30'; vibrated; including vibrating around reinforcements:				
C	PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 30; 20MM AGGREGATE MAXIMUM SIZE GROUND BEAMS; HORIZONTAL OR SLOPING NOT EXCEEDING 15 DEGREES FROM HORIZONTAL Generally	M3	363.00		
D	PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 20,20MM MAXIMUM AGGREGATE SIZE COLUMNS Generally	M3	68.00		
8	REINFORCEMENTS:				
I	High tensile steel bar reinforcements with a strength of 500N/mm2 to BS 4449:1969: including bends, hooks, tying wire, ordinary spacers and distance blocks:				
E	REINFORCEMENT; BARS; BS4461; COLD WORKED DEFORMED HIGH YIELD STEEL STRAIGHT OR BENT 8mm diameter bars	Kg	9,059.00		
F	16mm Diameter	Kg	62,892.00		
G	20mm Diameter	Kg	23,175.00		
H	FABRIC REINFORCEMENT; A392; WEIGHING 6.16 KG/M2 MESH GENERALLY In ground slabs	M2	9,482.00		
A	SUBSTRUCTURE (Cont'd) CONCRETE WORK (Cont'd) FORMWORK; SAWN FORMWORK FACES OF FOUNDATIONS, GROUND BEAMS, MACHINE BASES AND THE LIKE; VERTICAL Generally	M2	3,151.00		

B	COLUMNS; VERTICAL Generally	M2	341.00		
C	EDGES OF BEDS; VERTICAL FACE 225-300mm high	M	972.00		
D	SUNDRIES GALVANIZED STEEL BUTTERFLY WIRE TYPE WALL TIES; BS1243 FIGURE 1; CASTING IN TO CONCRETE 8mm diameter x 450mm long (Provisional)	NO	9,400.00		
E	EXPANSION JOINTS;25MM THICK BITUMEN IMPREGNATED FIBRE BOARD PLACED BETWEEN ADJOINING CONCRETE SURFACES INCLUDING ALL NECESSARY FORMWORK 500mm wide; vertical; on floors or the like (Provisional)	M	237.00		
F	SILICONE SEALANT TO C920, STANDARD SPECIFICATION FOR ELASTOMERIC JOINT SEALANTS (REF1),GRADE NS, USE M; EXHIBITING THE HIGHEST EXPANSION AND COMPRESSION CAPABILITIES,AND RESISTANT TO WEATHERING (ULTRAVIOLET); INCLUDING PROPRIETARY PRIMER APPLIED BETWEEN CONCRETE EXPANSION JOINTS 25mm wide x 50mm deep; on floors or the like (Provisional)	M	237.00		
G	1000 GAUGE POLYTHENE SHEET DAMP-PROOF MEMBRANE; 200MM LAPPED JOINTS Over 300mm wide; horizontal	M2	8,884.00		
11	FINISHINGS				
	Sealing of expansion joint by using CORESEAL PS 215 (GG) heavy duty sealant				
10	WALLING				
A	SUBSTRUCTURE (Cont'd) WALLING WALLING; CONCRETE BLOCKS, BS 6073 PART 1 AND 2, SOLID, DENSE AGGREGATE, AVERAGE COMPRESSIVE STRENGTH 4N/SQ MM; IN CEMENT MORTAR (1:4) WALLS OR PARTITIONS 230mm thick	M2	1,175.00		
B	SUNDRIES DAMP-PROOF COURSES; TROPICAL HIGH PERFORMANCE FELT; LAPPED AT JOINTS AND ANGLES; BEDDED IN CEMENT MORTAR (1:4) ;MEASURED NET-NO ALLOWANCE MADE FOR LAPS 230mm wide	M	3,981.00		
A	SUBSTRUCTURE (Cont'd) METAL WORK SUNDRIES COMPOSITE UNITS; EXPANSION JOINT COVER COMPRISING OF 2NR.PERFORATED STAINLESS STEEL PLATES EACH 30MM WIDE X 3MMTHICK (MINIMUM); TO BS1476; ETCHED; ANODISED NATURAL; HEAVY DUTY	M	237.00		

	FLEXIBLE RUBBER MATERIAL HOUSED BETWEEN THE PLATES TO ACCOMMODATE EXPANSION; INCLUDING BEDDING ALUMINUM PLATES TO CONCRETE WITH CEMENT MORTAR (1:3) Overall 60mm wide				
	Solid concrete blocks to BS 6073 Type 'A' dense aggregate, average compressive strength 7N/sq mm; in cement mortar				
12	DAMP PROOFING				
ELEMENT No.2	FRAMES				
	CONCRETE WORKS:				
I	Reinforced insitu concrete grade '30' including vibrating around reinforcements.				
A	FRAMES AND UPPER FLOORS CONCRETE WORK PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 30; 20MM MAXIMUM AGGREGATE SIZE WALLS 230mm thick	M2	71.00		
B	BEAMS; HORIZONTAL OR SLOPING NOT EXCEEDING 15 DEGREES FROM HORIZONTAL Generally	M3	2,024.00		
C	COLUMNS Generally	M3	335.00		
D	PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 30; 20MM MAXIMUM AGGREGATE SIZE; MIXED WITH KRYTONINTERNAL MEMBRANE DRY POWDER ADMIXTURE AT A RATE OF 2% BY WEIGHT OF CEMENTITIOUS CONTENT INCLUDING FLY ASH, TO A MAXIMUM OF 8KG/M3 SUSPENDED SLABS 175mm thick	M2	6,890.00		
2	REINFORCEMENTS;				
	High tensile steel bar reinforcements with a strength of 500N/mm2 to BS 4449:1969: including bends, hooks, tying wire, spacers and distance blocks.				
E	REINFORCEMENT; BARS; BS4461; COLD WORKED DEFORMED HIGH YIELD STEEL STRAIGHT OR BENT 8mm diameter bars	Kg	88,320.00		
F	10mm Diameter	Kg	31,355.00		
G	12 mm Diameter	Kg	244,002.00		
H	16mm Diameter	Kg	90,463.00		
J	20mm Diameter	Kg	142,874.00		
K	25mm Diameter	Kg	144,516.00		
L	FORMWORK; SAWN SOFFITS OF SLABS; HORIZONTAL Not exceeding 250mm thick	M2	6,890.00		
A	FRAMES AND UPPER FLOORS (Cont'd) CONCRETE WORK (Cont'd) FORMWORK; SAWN (Cont'd) FACES OF WALLS Generally	M2	140.00		
B	FORMWORK; SAWN FORMWORK	M2	2,254.00		

	COLUMNS; VERTICAL Generally				
C	ISOLATED BEAMS; HORIZONTAL Sides and soffit	M2	12,395.00		
D	FORMWORK; SAWN FORMWORK TO FORM OPENING TO 175MM THICK SLAB Overall size 2740mm x 2368mm opening	NO	1.00		
E	FORM OPENING TO 175MM THICK SUSPENDED SLAB Overall size 2740mm x 1848mm opening	NO	1.00		
F	Overall size 2740mm x 1899mm opening	NO	1.00		
G	Overall size 2740mm x 7120mm opening	NO	1.00		
ELEMENT No.3	STAIRS AND RAMPS				
4	Balustrade				
A	STAIRCASE TYPE 1 (4NR) CONCRETE WORK PLAIN AND REINFORCED IN- SITU CONCRETE; GRADE 30; 20MM MAXIMUM AGGREGATE SIZE GROUND BEAMS Generally	M3	1.00		
B	SUSPENDED LANDING; HORIZONTAL 175mm thick	M2	63.00		
C	BEAMS; HORIZONTAL OR SLOPING NOT EXCEEDING 15 DEGREES FROM HORIZONTAL Generally	M3	3.00		
D	STEPS OR STAIRCASES Generally	M3	13.00		
E	REINFORCEMENT; BARS; BS4449; HOT ROLLED PLAIN ROUND MILD STEEL STRAIGHT OR BENT 10mm diameter	Kg	1,265.00		
F	16mm diameter	Kg	224.00		
G	FORMWORK; SAWN FORMWORK SOFFITS OF LANDING; HORIZONTAL Not exceeding 250mm thick	M2	38.00		
H	GROUND BEAMS; VERTICAL Generally	M2	7.00		
J	ISOLATED BEAMS; HORIZONTAL Sides and soffit	M2	34.00		
K	EDGES OF LANDING; VERTICAL FACE 150-225mm high	M	46.00		
L	RISERS OF STAIRCASES; VERTICAL FACE 75-150mm high	M	166.00		
A	STAIRCASE TYPE 1 (4NR) (Cont'd) CONCRETE WORK (Cont'd) FORMWORK; SAWN FORMWORK (Cont'd) SLOPING SOFFITS OF STAIRCASE FLIGHTS Generally	M2	51.00		
B	EDGES OF STAIRCASE FLIGHTS 350mm maximum width	M	37.00		
A	STAIRCASE TYPE 1 (4NR) (Cont'd) METAL WORK PLATES, BARS, SECTIONS AND TUBES; STAINLESS STEEL; BS 970 PART 4; MILL FINISH FLOOR PLATES; PLAIN; WELDED TO	NO	48.00		

	BALUSTERS; FOUR TIMES DRILLED FOR 12MM BOLTS (MEASURED SEPARATELY) 100 x 100 x 3mm ; fixing by bolting				
B	HANDRAIL COMPLETE WITH AND INCLUDING 25MM DIAMETER X 300MM LONG BRACKET PLUGGED TO WALLS AT 500MM CENTRES Extra over for bends	NO	36.00		
C	HANDRAILS C 60mm diameter x 3mm thick hollow section; fixing by welding	M	67.00		
D	HANDRAILS COMPLETE WITH AND INCLUDING 25MM DIAMETER X 300MM LONG BRACKET PLUGGED TO WALL AT 500MM CENTRES 60mm diameter x 4mm thick hollow section; welded to brackets	M	74.00		
E	INTERMEDIATE RAILS 25mm diameter; fixing to balusters by welding	M	148.00		
F	ISOLATED BALUSTERS WITH ONE END WELDED TO STAINLESS STEEL PLATE (MEASURED SEPARATELY) 50mm diameter x 1200mm long bar; fixing by bolting; include all necessary stainless steel covers	NO	48.00		
G	SUNDRIES HOLES For 12mm diameter bolts; through 3mm thick mild steel	NO	98.00		
H	RAG-BOLTS; MILD STEEL 12mm diameter x 150mm long; one nut, one washer	NO	96.00		
A	STAIRCASE TYPE 1 (4NR) (Cont'd) FLOOR, WALL AND CEILING FINISHINGS IN-SITU FINISHINGS; RENDER; CEMENT AND SAND (1:4); TROWELLED FINISH; INTERNAL WORK TO CEILINGS; TO CONCRETE BASE 15mm thick	M2	38.00		
B	WORK TO OPEN STRINGS; TO CEMENT AND SAND BASE 15mm thick; 300mm average wide	M	37.00		
C	WORK TO SOFFITS OF STAIRCASE FLIGHTS; TO CEMENT AND SAND BASE 15mm thick	M2	51.00		
D	WORK TO RISERS; TO CONCRETE BASE 20mm thick; 150mm wide	M	166.00		
E	IN-SITU FINISHINGS; SCREED; CEMENT AND SAND (1:4) FLOATED FINISH WORK TO LANDINGS; TO CEMENT AND SAND BASE 40mm thick	M2	47.00		
F	WORK TO TREADS; TO CEMENT AND SAND BASE 40mm thick; 300mm wide	M	124.00		
G	TILE, SLAB OR BLOCK FINISHINGS; EX ITALY OR SPAIN;UNPOLISHED GRADE "A" PORCELAIN RISERS; 300 X 150 X 10MM THICK; SUBJECT TO	M	166.00		

	ARCHITECT APPROVAL PRIOR TO PURCHASE; FIXING WITH APPROVED ADHESIVE; GROUTING WITH APPROVED GROUT TO RISERS; BUTT JOINTS; TO CEMENT AND SAND BASE 150mm wide				
A	STAIRCASE TYPE 1 (4NR) (Cont'd) FLOOR, WALL AND CEILING FINISHINGS (Cont'd) TILE, SLAB OR BLOCK FINISHINGS; EX ITALY OR SPAIN;UNPOLISHED GRADE "A" PORCELAIN TILES 300 X 300 X 10MM THICK,WITH THREE ROWS OF NON SLIP RIBS; SUBJECT TO ARCHITECT APPROVAL PRIOR TO PURCHASE; FIXING WITH APPROVED ADHESIVE; GROUTING WITH APPROVED GROUT TO TREADS; BUTT JOINTS; TO CEMENT AND SAND BASE 300mm wide	M	124.00		
B	TILE, SLAB OR BLOCK FINISHINGS; EX ITALY OR SPAIN;UNPOLISHED GRADE "A" PORCELAIN TILES 500 X 500 X 10MM THICK; SUBJECT TO ARCHITECT APPROVAL PRIOR TO PURCHASE; FIXING WITH APPROVED ADHESIVE; GROUTING WITH APPROVED GROUT TO FLOORS; BUTT JOINTS STRAIGHT BOTH WAYS; LEVEL; TO CEMENT AND SAND BASE Generally	M2	47.00		
C	TILE, SLAB OR BLOCK FINISHINGS; EX ITALY, SPAIN OR FROM ANY OTHER SOURCE APPROVED BY THE ARCHITECT; UNPOLISHED GRADE "A" PORCELAIN SKIRTINGS 300 X 300 X 10MM THICK; FIXING WITH APPROVED ADHESIVE; GROUTING WITH APPROVED GROUT TO WALLS; 3MM JOINTS STRAIGHT BOTH WAYS; TO CEMENT AND SAND BASE 100mm high skirting	M	87.00		
A	STAIRCASE TYPE 1 (4NR) (Cont'd) PAINTING AND DECORATING PAINTING; INTERNAL WORK; GALAXY PAINTS; ONE COAT GALAXY LATEX PRIMER; TWO COATS GALAXY STUCCO UNDERCOAT; STEEL TROWELLED AND SANDED; TWO COATS SEMI GLOSS GALAXY SUPERLUX VINYL EMULSION (GWB2) FINISHING COAT, APPLIED BY PAINT ROLLER; TO RENDERED CONCRETE OR BLOCKWORK SURFACES CEILINGS Generally	M2	38.00		
B	EDGES OF OPEN STRINGS; TO CEMENT AND SAND BASE Over 300mm girth	M	37.00		
C	SOFFITS OF STAIRCASE FLIGHTS	M2	51.00		

	Generally				
A	STAIRCASE TYPE 2 (1NR) CONCRETE WORK PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 30; 20MM MAXIMUM AGGREGATE SIZE GROUND BEAMS Generally	M3	1.00		
B	SUSPENDED LANDING; HORIZONTAL 200mm thick	M2	18.00		
C	BEAMS; HORIZONTAL OR SLOPING NOT EXCEEDING 15 DEGREES FROM HORIZONTAL Generally	M3	2.00		
D	STEPS OR STAIRCASES Generally	M3	8.00		
E	REINFORCEMENT; BARS; BS4449; HOT ROLLED PLAIN ROUND MILD STEEL STRAIGHT OR BENT 10mm diameter	Kg	326.00		
F	16mm diameter	Kg	224.00		
G	FORMWORK; SAWN FORMWORK SOFFITS OF LANDING; HORIZONTAL Not exceeding 250mm thick	M2	18.00		
H	GROUND BEAMS; VERTICAL Generally	M2	1.00		
J	ISOLATED BEAMS; HORIZONTAL Sides and soffit	M2	19.00		
K	EDGES OF LANDING; VERTICAL FACE 150-225mm high	M	17.00		
L	RISERS OF STAIRCASES; VERTICAL FACE 75-150mm high	M	94.00		
A	STAIRCASE TYPE 2 (1NR) (Cont'd) CONCRETE WORK (Cont'd) FORMWORK; SAWN FORMWORK (Cont'd) SLOPING SOFFITS OF STAIRCASE FLIGHTS Generally	M2	28.00		
B	EDGES OF STAIRCASE FLIGHTS 350mm maximum width	M	29.00		
A	STAIRCASE TYPE 2 (1NR) (Cont'd) METAL WORK PLATES, BARS, SECTIONS AND TUBES; STAINLESS STEEL; BS 970 PART 4; MILL FINISH HANDRAIL COMPLETE WITH AND INCLUDING 25MM DIAMETER X 300MM LONG BRACKET PLUGGED TO WALLS AT 500MM CENTRES Extra over for bends	NO	8.00		
B	HANDRAILS COMPLETE WITH AND INCLUDING 25MM DIAMETER X 300MM LONG BRACKET PLUGGED TO WALL AT 500MM CENTRES 60mm diameter x 4mm thick hollow section; welded to brackets	M	44.00		
A	STAIRCASE TYPE 2 (1NR) (Cont'd) FLOOR, WALL AND CEILING FINISHINGS IN-SITU FINISHINGS; RENDER; CEMENT AND SAND (1:4); TROWELLED FINISH; INTERNAL	M2	18.00		

	WORK TO CEILINGS; TO CONCRETE BASE 15mm thick				
B	WORK TO OPEN STRINGS; TO CEMENT AND SAND BASE 15mm thick; 300mm average wide	M	29.00		
C	WORK TO SOFFITS OF STAIRCASE FLIGHTS; TO CEMENT AND SAND BASE 15mm thick	M2	28.00		
D	WORK TO RISERS; TO CONCRETE BASE 20mm thick; 150mm wide	M	94.00		
E	IN-SITU FINISHINGS; SCREED; CEMENT AND SAND (1:4) FLOATED FINISH WORK TO LANDINGS; TO CEMENT AND SAND BASE 40mm thick	M2	15.00		
F	WORK TO TREADS; TO CEMENT AND SAND BASE 40mm thick; 300mm wide	M	63.00		
G	TILE, SLAB OR BLOCK FINISHINGS; EX ITALY OR SPAIN;UNPOLISHED GRADE "A" PORCELAIN RISERS; 300 X 150 X 10MM THICK; SUBJECT TO ARCHITECT APPROVAL PRIOR TO PURCHASE; FIXING WITH APPROVED ADHESIVE; GROUTING WITH APPROVED GROUT TO RISERS; BUTT JOINTS; TO CEMENT AND SAND BASE 150mm wide	M	94.00		
A	STAIRCASE TYPE 2 (1NR) (Cont'd) FLOOR, WALL AND CEILING FINISHINGS (Cont'd) TILE, SLAB OR BLOCK FINISHINGS; EX ITALY OR SPAIN;UNPOLISHED GRADE "A" PORCELAIN TILES 300 X 300 X 10MM THICK, WITH THREE ROWS OF NON SLIP RIBS; SUBJECT TO ARCHITECT APPROVAL PRIOR TO PURCHASE; FIXING WITH APPROVED ADHESIVE; GROUTING WITH APPROVED GROUT TO TREADS; BUTT JOINTS; TO CEMENT AND SAND BASE 300mm wide	M	63.00		
B	TILE, SLAB OR BLOCK FINISHINGS; EX ITALY OR SPAIN;UNPOLISHED GRADE "A" PORCELAIN TILES 500 X 500 X 10MM THICK; SUBJECT TO ARCHITECT APPROVAL PRIOR TO PURCHASE; FIXING WITH APPROVED ADHESIVE; GROUTING WITH APPROVED GROUT TO FLOORS; BUTT JOINTS STRAIGHT BOTH WAYS; LEVEL; TO CEMENT AND SAND BASE Generally	M2	18.00		
C	TILE, SLAB OR BLOCK FINISHINGS; EX ITALY, SPAIN OR FROM ANY OTHER SOURCE APPROVED BY THE ARCHITECT; UNPOLISHED GRADE "A" PORCELAIN SKIRTINGS 300 X 300 X 10MM THICK; FIXING WITH APPROVED ADHESIVE; GROUTING	M	35.00		

	WITH APPROVED GROUT TO WALLS; 3MM JOINTS STRAIGHT BOTH WAYS; TO CEMENT AND SAND BASE 100mm high skirting				
A	STAIRCASE TYPE 2 (1NR) (Cont'd) PAINTING AND DECORATING PAINTING; INTERNAL WORK; GALAXY PAINTS; ONE COAT GALAXY LATEX PRIMER; TWO COATS GALAXY STUCCO UNDERCOAT; STEEL TROWELLED AND SANDED; TWO COATS SEMI GLOSS GALAXY SUPERLUX VINYL EMULSION (GWB2) FINISHING COAT, APPLIED BY PAINT ROLLER; TO RENDERED CONCRETE OR BLOCKWORK SURFACES CEILINGS Generally	M2	18.00		
B	EDGES OF OPEN STRINGS; TO CEMENT AND SAND BASE Over 300mm girth	M	29.00		
C	SOFFITS OF STAIRCASE FLIGHTS Generally	M2	28.00		
A	HANDRAILS TO BALCONIES CONCRETE WORK SUNDRIES DRILLING IN CONCRETE, 20MM DEEP For 12mm diameter expanding bolts	NO	166.00		
A	HANDRAILS TO BALCONIES (Cont'd) METAL WORK PLATES, BARS, SECTIONS AND TUBES; STAINLESS STEEL; BS 970 PART 4; MILL FINISH FLOOR PLATES; PLAIN; WELDED TO BALUSTERS; TWO TIMES DRILLED FOR 12MM BOLTS (MEASURED SEPARATELY) 100 x 100 x 3mm ; fixing by bolting	NO	133.00		
B	HANDRAILS 60mm diameter x 6mm thick hollow section; fixing by welding	M	132.00		
C	Extra over for bends	NO	10.00		
D	INTERMEDIATE RAILS 25mm diameter; fixing to balusters by welding	M	396.00		
E	ISOLATED BALUSTERS 50mm diameter x 6mm thick, 900mm long bar; fixing by welding to stainless steel plate (measured separately); include all necessary stainless steel covers	NO	133.00		
F	SUNDRIES RAG-BOLTS; MILD STEEL 12mm diameter x 150mm long; one nut, one washer	NO	266.00		
ELEMENT NO.4	WALLING.				
3	PARTITIONING				
	COMPOSITE UNITS				
A	WALLING AND INTERNAL PARTITION CONCRETE WORK	M	371.00		

	PRECAST CONCRETE; MIX 1:1.5:2; BEDDING, JOINTING AND POINTING IN CEMENT MORTAR(1:3) SILLS 375 x 100mm; finish fair on top one side and part soffit; rebated once; weathered once				
B	PRECAST CONCRETE; MIX 1:2:4; BEDDING, JOINTING AND POINTING IN CEMENT MORTAR(1:3) COPINGS 250 x 100mm; weathered once; finish fair on top, two sides and part soffit; reinforced with steel fabric reinforcement reference A142 weighing 2.22kg/m2	M	513.00		
C	SUNDRIES GALVANIZED STEEL BUTTERFLY WIRE TYPE WALL TIES; BS1243 FIGURE 1; CASTING IN TO CONCRETE 8mm diameter x 300mm long (Provisional)	NO	5,337.00		
A	WALLING AND INTERNAL PARTITION (Cont'd) WALLING WALLING; CONCRETE BLOCKS, BS 2028 PART 1 AND 2, SOLID, DENSE AGGREGATE, AVERAGE COMPRESSIVE STRENGTH 5.75N/SQ MM; IN CEMENT MORTAR (1:4) WALLS OR PARTITIONS;EXTERNALLY 150mm thick; parapet wall	M2	615.00		
B	WALLS OR PARTITIONS;INTERNALLY 150mm thick	M2	8,832.00		
C	230mm thick	M2	1,572.00		
D	WALLS OR PARTITIONS;EXTERNALLY 230mm thick	M2	2,324.00		
A	WALLING AND INTERNAL PARTITION (Cont'd) FLOOR, WALL AND CEILING FINISHINGS DRYWALL PARTITION; GYPWALL PLASTERBOARDS COMPRISING OF DOUBLE SKIN OF 15MM GYPROC PLASTERBOARDS; 70MM CAVITY; 25MM THICK ISOVER INSULATION INFILL TO CAVITY; 70MM C CHANNELS VERTICAL SUPPORTS AT 600MM CENTRES; FIXED TO FLOOR AND CEILING C CHANNELS; ALL SUPPORTS FIXED ACCORDING TO MANUFACTURER'S RECOMMENDATION; INCLUDE SEALING PLASTERBOARD JOINTS WITH GYPROC SEALANT 100mm double skin plasterboard walls; fixed to C channels with drywall screws	M2	190.00		
B	WALLING AND INTERNAL PARTITION (Cont'd) GLAZING FRAMELESS GLASS PARTITION LAMINATED GLASS PARTITION; SINGLE GLAZED; COMPLETE WITH 25 X 25MM STAINLESS STEEL CHANNEL HOUSED IN GROOVES TO CONCRETE	M2	317.00		

	FLOOR AND PLUGGED AT 600 CENTRES MAXIMUM; 40 X 25MM SUSPENSION STUDS FIXED TO CEILING CHANNEL BY SCREWING AT 600MM CENTRES MAXIMUM; INCLUDE SEALING GLAZING JOINTS WITH SILICONE, GASKETS AND GLAZING BEADS 8mm thick glazed partition				
ELEMENT No.5	ROOFING				
1	ROOF COVERINGS				
VI	Cement and sand (1:3) with approved water proofing additive trowelled to a smooth finish				
A	ROOFING WAND RAIN WATER DRAINAGE SYSTEM CONCRETE WORK PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 30; 20MM MAXIMUM AGGREGATE SIZE; MIXED WITH KRYTONINTERNAL MEMBRANE DRY POWDER ADMIXTURE AT A RATE OF 2% BY WEIGHT OF CEMENTITIOUS CONTENT INCLUDING FLY ASH, TO A MAXIMUM OF 8KG/M3 SUSPENDED SLABS 175mm thick	M2	8,891.00		
B	FORMWORK; SAWN SOFFITS OF SLABS; HORIZONTAL Not exceeding 250mm thick; 5.00-6.50 high	M2	5,783.00		
C	Not exceeding 250mm thick	M2	3,108.00		
D	EDGES OF SUSPENDED SLABS; VERTICAL FACE 150-225mm high	M	975.00		
A	ROOFING WAND RAIN WATER DRAINAGE SYSTEM (Cont'd) PLUMBING AND ENGINEERING INSTALLATIONS ANCILLARIES AND PIPE CONNECTION "FULBORA" VERTICAL SPIGOT TYPE RAINWATER ROOF OUTLET CAST INTO CONCRETE AND INCLUDING DOMED GRATING AND CONNECTION TO RAINWATER DOWN PIPE 100mm diameter	NO	102.00		
B	RAINWATER INSTALLATION; PIPEWORK; U.P.V.C. PIPES; CLASS B RAINWATER PIPES; SOCKETTED JOINTS IN THE RUNNING LENGTH 100mm pipes; galvanized steel holderbats; fixing to backgrounds requiring plugging; in ducts	M	726.00		
C	Extraover 100mm diameter pipe for shoe	NO	102.00		
D	Extraover 100mm diameter pipe for swan-neck	NO	102.00		
E	Extraover 100mm diameter pipe for bend	NO	102.00		
A	ROOFING WAND RAIN WATER DRAINAGE SYSTEM (Cont'd) FLOOR, WALL AND CEILING FINISHINGS WATER PROOFING SUPPLY AND FIX POLYMERIC ROOF WATER PROOFING TREATMENT; FIRST LAYER	M2	9,061.00		

	SARNAFIL A300G/M2 LEVELLING LAYER; SECOND LAYER SARNAFIL S327-12 NA SARNAFIL G41012 AS MAIN FIELD SHEET AND FOR DETAIL WORK RESPECTIVELY; ALL LAID BY A SPECIALIST AS SPECIFIED IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS Over 300mm wide; to cross falls				
B	BEDS AND BACKINGS; SCREED; CEMENT AND SAND (1:3) BEDS SCREEDED; TO FLOORS; LEVEL OR TO FALLS; TO CONCRETE BASE 50mm thick	M2	9,061.00		
ELEMENT No.6	DOORS:				
3	HEAVY DUTY ALUMINIUM FRAMELESS GLASS DOOR				
A	DOORS JOINERY DOORS, MAINLY IN SOFTWOOD; SUBJECT TO ARCHITECT APPROVAL PRIOR TO PURCHASE FLUSH DOORS; SOLID CORE; SELECTED OAK INTERNAL QUALITY; 3MM VENEERED PLYWOOD FACED BOTH SIDES; SELECTED MNINGA LIPPING ALL EDGES 850 x 2100 x 50mm thick (D03)	No	10.00		
B	900 x 2100 x 50mm thick(D04)	NO	48.00		
C	700 x 2100 x 50mm thick (D05)	NO	5.00		
D	700 x 2100 x 50mm thick(D06)	NO	58.00		
E	350 x 2100 x 50mm thick(D06)	NO	2.00		
4	WOOD WORK				
1	Prime quality hardwood Mkongo ,Paneled Doors, 50mm Thick paneled door; comprising of 100mm wide stiles and top rail; 150mm wide bottom rail ; 100mm intermediate rail; with 30mm thick solid panels, housed to stiles and rail.				
F	DOORS; IN PRIME QUALITY WROUGHT MNINGA PANELLED DOORS; IN ONE PANEL; SUBJECT TO ARCHITECT APPROVAL 40mm thick;400mm x 2050mm high (D10) panelled door; comprising of 2No; 275mm wide top and bottom rail; 2No 155mm wide stiles; 300mm wide infill rails housed to stiles and rails	No	56.00		
G	FRAMES, SILLS AND KERBS; PRIME QUALITY WROUGHT MNINGA TRANSOMS WITH ONE LABOUR 45 x 145mm	M	61.00		
H	FILLETS, GLAZING BEADS AND GROUNDS; SAWN MNINGA GROUNDS 20 x 100mm; plugged	M	782.00		
J	FRAMES, SILLS AND KERBS; PRIME QUALITY WROUGHT MNINGA DOOR FRAMES WITH TWO LABOURS 45 x 145mm	M	782.00		
A	DOORS (Cont'd) JOINERY (Cont'd)	M	267.00		

	FILLETS, GLAZING BEADS AND GROUNDS; WROUGHT MNINGA; SELECTED GLAZING BEADS 15 x 15mm				
B	ARCHITRAVES WITH ONE LABOUR 20 x 70mm	M	1,563.00		
C	IRONMONGERY SUPPLY AND FIX THE FOLLOWING IRONMONGERY WITH MATCHING SCREWS AS MANUFACTURED BY MESSRS HAFFELEOR OTHER EQUAL AND APPROVED MANUFACTURERS Overhead door closer.	NO	120.00		
D	150 x 78 x 3mm stainless steel plate; engraved "WC"; reference UBM 130-210.201; black lettering; fixing to hardwood with matching screws (Provisional)	NO	58.00		
E	850 x 150 x 3mm aluminium kick plate; fixing to timber door with matching screws	NO	20.00		
F	Rubber door stop,screwed,plugged to floor.	NO	252.00		
G	Stainless Steel ball hinges ref.HN-4BB-403030-SS	NO	537.00		
H	900 x 150 x 3mm aluminium kick plate; fixing to timber door with matching screws	NO	96.00		
J	Indicator bolt complete with handles	NO	116.00		
K	700 x 150 x 3mm aluminum kick plate; fixing to timber door with matching screws	NO	126.00		
L	Flush bolt	NO	20.00		
M	350 x 150 x 3mm aluminium kick plate; fixing to timber door with matching screws	NO	4.00		
N	Brushed stainless steel handle and lock	NO	60.00		
P	Mortice budget lock	NO	28.00		
A	DOORS (Cont'd) METAL WORK PLATES, BARS, SECTIONS AND TUBES; ALUMINUM PROFILES ALUMINUM LOUVRE DOOR Overall size 600 x 1000mm high with and including iron mongeries	NO	306.00		
B	LOUVRE DOOR; FOLDING DOOR TYPE D01; 1NR. LEAF; POWDER COATED; COLOUR SUBJECT TO ARCHITECT'S SELECTION Overall size 5000 x 5200mm high; leaf fabricated from extruded profiles; comprising of 42 x 51mm outer frame, transom and mullion ; 34 x 63mm aluminium louvre blades fixed to 30 x 25mm C channels and mounted to outer frame and mullion using standard self tapping screws; include 50 x 50mm frame to folding door fixed to concrete or blockwork background by screwing; include all necessary hinges,locks, stainless steel push handles and door closers	NO	20.00		
A	DOORS (Cont'd) GLAZING GLASS IN	M2	11.00		

	OPENINGS; CLEAR SHEET GLASS TO HARD WOOD REBATES WITH SCREWED TIMBER BEADS 6mm thick; 0.10 - 0.50sq.m				
B	SUPPLY AND FIX FRAMELESS GLASS DOOR SHUTTERS TOUGHED GLASS DOOR COMPLETE WITH FANLIGHT AND PATCH FITTINGS, WITH TWO EQUAL LEAFS; FACTORY DRILLED FOR PULL HANDLES AND IRONMONGERY; COMPLETE WITH STAINLESS STEEL PULL HANDLES, DOUBLE SWING FLOOR SPRING, KICKING PLATE, LOCKS AND ANY OTHER NECESSARY IRONMONGERY. IRONMONGERY SUBJECT TO ARCHITECT'S APPROVAL PRIOR TO PURCHASE Overall size 1000 x 2400 x 12mm thick	NO	103.00		
C	SUPPLY AND FIX FRAMELESS GLASS DOOR; SINGLE GLAZED TOUGHED GLASS DOUBLE DOOR COMPLETE WITH FANLIGHT AND PATCH FITTINGS, WITH TWO EQUAL LEAFS; FACTORY DRILLED FOR PULL HANDLES AND IRONMONGERY; COMPLETE WITH STAINLESS STEEL PULL HANDLES, DOUBLE SWING FLOOR SPRING, KICKING PLATE, LOCKS AND ANY OTHER NECESSARY IRONMONGERY. IRONMONGERY SUBJECT TO ARCHITECT'S APPROVAL PRIOR TO PURCHASE Overall size 1800 x 2400x 12mm thick	NO	5.00		
A	WINDOWS METAL WORK COMPOSITE UNITS; ALUMINUM DOORS, WINDOWS AND SHOPFRONTS SUPPLY AND FIX THE FOLLOWING ALUMINUM UNITS; INNOVATION 2003; SERIES CW; BS 4842; OR OTHER ALUMINUM PROFILE UNITS OF EQUAL QUALITY; POWDER COATED; COLOUR TO BE APPROVED BY THE ARCHITECT; PROFILES MINIMUM THICKNESS 2MM, ALL AS PER ARCHITECT DESIGN; COMPLETE WITH ASSOCIATED IRONMONGERY, INCLUDING ASSEMBLING, SCREWING TO SUB-FRAME SURROUNDS, POINTING EXTERNALLY WITH MASTIC, STRIPPING OFF PROTECTIVE TAPE FROM ALUMINUM FRAMES A Window type W06 complete with associated frame channeled to wall , overall size 2100mm x 2250mm high; comprising of 1Nr. fixed panel;glazing measured separately	NO	10.00		
B	Window type W07 complete with associated frame, overall size 900mm x 900mm high; comprising of 1Nr. fixed panel	NO	16.00		

C	Window type W08 complete with associated frame, overall size 1800mm x 1400mm high	NO	36.00		
D	Window type W09 ;complete with associated frame, overall size 3000mm x 2250mm high	NO	4.00		
E	Window type W10 ;complete with associated frame, overall size 9800mm x 2850mm high	NO	2.00		
F	Window type W13 ;complete with associated frame, overall size 7800mm x 2850mm high	NO	1.00		
G	Window type W14 ;complete with associated frame, overall size 3600mm x 1700mm high	NO	2.00		
A	WINDOWS (Cont'd) GLAZING GLASS IN OPENINGS; STRUCTURAL GLAZING CURTAIN WALL SYSTEM COMPOSITE UNIT ; 28.4MM DOUBLE GLAZING, COMPRISING OF 6MM THICK TOUGHENED GLASS, 16MM AIR SPACE, 6.4MM LAMINATED GLASS; ALUMINUM PROFILE 120 X70X 2.5MM MULLION ; 120 X 70 X 2.00MM TRANSOM FIXED TO CONCRETE OR BLOCKWORK BACKGROUND USING HEAVY DUTY ALUMINIUM BRACKETS ANCHORED TO FRAME WITH STAINLESS STEEL FASTENERS; INCLUDE ALIGNING THE MAIN ALUMINIUM FRAME TO PLUMB; FIXING GLAZING TO ALUMINIUM MAIN FRAME WITH SPECIAL CLIPS, SEALING GLASS JOINTS WITH PROPRIETARY SEALANT AND POINTING EXTERNALLY WITH MASTIC Curtain walling type CW01; overall size 3000 x 5400mm high	NO	76.00		
B	Extra over for 1008 x 1200mm Window shutter; top hang and openable	NO	152.00		
C	Curtain walling type CW02; overall size 2100 x 5400mm high	NO	2.00		
D	Extra over for 1050 x 1200mm window shutter, top hang and openable	NO	4.00		
E	Curtain walling type CW03; overall size 9418 x 5400mm high	NO	2.00		
F	Extraover for 900 x 1200mm Window shutter; top hang and openable	NO	2.00		
G	Curtain walling type CW04; overall size 3000 x 9000mm high	NO	2.00		
H	Extra-over for 1008 x 1200mm Window shutter; top hang and openable	NO	8.00		
J	Curtain walling type CW11; overall size 44400 x 2100mm high	NO	2.00		

K	Extra-over for 1008 x 900mm Window shutter; top hang and openable	NO	40.00		
L	Extra-over for 1033 x 900mm Window shutter; top hang and openable	NO	4.00		
A	WINDOWS (Cont'd) GLAZING (Cont'd) GLASS IN OPENINGS; STRUCTURAL GLAZING CURTAIN WALL SYSTEM (Cont'd) Curtain walling type CW12; overall size 15000 x 2850mm high	NO	1.00		
B	Extra over for 1064 x 1050mm Window shutter; top hang and openable	NO	4.00		
C	Curtain walling type CW5; overall size 4800 x 9000mm high	NO	2.00		
D	Extra-over for 1225 x 1200mm Window shutter; top hang and openable	NO	8.00		
E	GLASS IN OPENINGS; TOUGHENED 1.00CLEAR SHEET GLASS TO METAL REBATES WITH SCREWED METAL BEADS 8mm thick; 1.00-1.50sq.m	M2	102.00		
F	GLASS IN OPENINGS; TOUGHENED CLEAR SHEET GLASS TO METAL REBATES WITH SCREWED METAL BEADS 8mm thick; 0.50-1.00sq.m	M2	13.00		
G	8mm thick; 1.5.00-2.00sq.m	M2	22.00		
H	8mm thick; 2.00.00-2.50sq.m	M2	57.00		
J	8mm thick; 2.50.00-3.00sq.m	M2	3.00		
K	8mm thick; 3.00.00-3.50sq.m	M2	25.00		
L	8mm thick; 4.50.00-5.00sq.m	M2	47.00		
ELEMENT No. 14	FINISHING				
a)	INTERNAL FINISHINGS				
i)	Floor finish: (Tiles, slab or block finishings)				
a)	Porcelain Tiles				
A	FINISHINGS METAL WORK PLATES, BARS, SECTIONS AND TUBES; ALUMINIUM ANGLE STRIPS; FOR TILES NOT EXCEEDING 10MM THICK; FIXING IN POSITION WITH CEMENT MORTAR (1:4) A Standard Angle strips (Provisional)	M	12.00		
A	FINISHINGS (Cont'd) FLOOR, WALL AND CEILING FINISHINGS IN-SITU FINISHINGS; RENDER; CEMENT AND SAND (1:4); TROWELLED FINISH; EXTERNAL WORK TO WALLS; BLOCKWORK BASE OR CONCRETE SURFACES 15mm thick	M2	3,554.00		
B	IN-SITU FINISHINGS; RENDER; CEMENT AND SAND (1:4); TROWELLED FINISH; INTERNAL WORK TO WALLS; BLOCKWORK BASE 15mm thick	M2	21,669.00		

C	WORK TO COPPING; TO CONCRETE BASE 15mm thick	M2	282.00		
D	IN-SITU FINISHING;HEAVY DUTY EPOXY RESIN FLOOR COATS; "TERKIN FLOOR SLS10" OR OTHER EQUAL AND APPROVED EPOXY RESIN COATING TO FLOORS; APPLIED TO FLOORS ACCORDING TO PRINTED MANUFACTURERS INSTRUCTIONS WORK TO FLOORS; LEVEL; TO CEMENT AND SAND BASE Generally	M2	9,499.00		
E	TILE, SLAB OR BLOCK FINISHINGS; EX ITALY OR SPAIN; POLISHED GRADE "A" PORCELAIN SKIRTING TILES; SUBJECT TO ARCHITECT APPROVAL PRIOR TO PURCHASE; FIXING WITH APPROVED ADHESIVE; GROUTING WITH APPROVED GROUT TO WALLS; BUTT JOINTS; TO CEMENT AND SAND BASE 100mm x 10mm Skirting	M	2,957.00		
A	FINISHINGS (Cont'd) FLOOR, WALL AND CEILING FINISHINGS (Cont'd) TILE, SLAB OR BLOCK FINISHINGS; EX ITALY OR SPAIN; POLISHED GRADE "A" PORCELAIN TILES; 600 X 600 X 10MM THICK; SUBJECT TO ARCHITECT APPROVAL PRIOR TO PURCHASE; FIXING WITH APPROVED ADHESIVE; GROUTING WITH APPROVED GROUT TO FLOORS; BUTT JOINTS STRAIGHT BOTH WAYS; LEVEL; TO CEMENT AND SAND BASE Generally	M2	6,984.00		
B	TILE, SLAB OR BLOCK FINISHING; EX ITALY OR SPAIN; UNPOLISHED GRADE "A" PORCELAIN TILES; 300 X 300 X 10MM THICK; SUBJECT TO ARCHITECT APPROVAL PRIOR TO PURCHASE; FIXING WITH APPROVED ADHESIVE; GROUTING WITH APPROVED GROUT TO FLOORS; BUTT JOINTS STRAIGHT BOTH WAYS; LEVEL; TO CEMENT AND SAND BASE Generally	M2	430.00		
C	TILE, SLAB OR BLOCK FINISHING; GRADE "A" POLISHED CERAMIC TILES, 300 X 150 X 8MM THICK; SUBJECT TO ARCHITECT APPROVAL PRIOR TO PURCHASE TO WALLS; BUTT JOINTS STRAIGHT BOTH WAYS; TO CEMENT AND SAND BASE Generally	M2	1,464.00		
D	BEDS AND BACKINGS; SCREED; CEMENT AND SAND (1:3) BEDS SCREEDED; TO FLOORS; LEVEL OR TO FALLS; TO CONCRETE BASE 40mm thick	M2	7,710.00		

A	FINISHINGS (Cont'd) FLOOR, WALL AND CEILING FINISHINGS (Cont'd) DECORATIVE GYPSUM CORNICE; BUTT JOINTED; SUBJECT TO ARCHITECT'S APPROVAL PRIOR TO PURCHASE; FIXED WITH PROPRIATORY ADHESIVE TO CONCRETE OR PLASTERED BLOCKWORK BASE EDGE TRIM 100 x 10mm Thick gypsum cornice	M	3,606.00		
B	SUSPENDED CEILINGS 9MM THICK CEMENT BOARD CEILING INCLUDING ALL NECESSARY METAL BRANDING AND HANGERS; BUTT JOINTS; SEALING JOINTS WITH FIBRE TAPE INCLUDING APPLYING GYPSUM PLASTER TO JOINTS; FIXED WITH PROPRIATORY SCREWS TO ALUMINIUM SUSPENSION SYSTEM ON STEEL RODS WITH NUTS. LININGS TO CEILINGS; HANGER AVERAGE 250MM LONG FIXED TO TIMBER BASE Over 300mm wide	M2	281.00		
C	LININGS TO CEILINGS; HANGER AVERAGE 300MM LONG FIXED TO TIMBER BASE Over 300mm wide	M2	7,154.00		
b)	EXTERNAL FINISHINGS				
i)	Floor finish: (Tiles, slab or block finishings).				
ELEMENT No. 15	PAINTING AND DECORATING				
a)	INTERNAL WORK:				
A	PAINTING AND DECORATIONS PAINTING AND DECORATING PAINTING; INTERNAL WORK; GALAXY PAINTS; ONE COAT GALAXY LATEX PRIMER; TWO COATS GALAXY STUCCO UNDERCOAT; STEEL TROWELLED AND SANDED; TWO COATS SEMI GLOSS GALAXY SUPERLUX VINYL EMULSION (GWB2) FINISHING COAT, APPLIED BY PAINT ROLLER; TO CEMENT BOARD SURFACES DRYWALL PARTITION Generally	M2	381.00		
B	PAINTING; INTERNAL WORK; GALAXY PAINTS; ONE COAT GALAXY LATEX PRIMER; TWO COATS GALAXY STUCCO UNDERCOAT; STEEL TROWELLED AND SANDED; TWO COATS SEMI GLOSS GALAXY SUPERLUX VINYL EMULSION (GWB2) FINISHING COAT, APPLIED BY PAINT ROLLER; TO RENDERED CONCRETE OR BLOCKWORK SURFACES WALLS Generally	M2	21,669.00		
C	PAINTING; INTERNAL WORK; ONE COAT GALAXY SEALER; TWO COATS	M2	493.00		

	OF MATT FINISH; WOOD SURFACES GENERAL SURFACES Over 300mm girth				
D	FRAMES, LININGS AND ASSOCIATED MOULDINGS 100-200mm girth	M	1,563.00		
E	200-300mm girth	M	843.00		
F	Not exceeding 100mm girth	M	267.00		
b)	EXTERNAL WORK:				
i)	External Painting				
A	PAINING AND DECORATIONS (Cont'd) PAINTING AND DECORATING (Cont'd) PAINTING; EXTERNAL WORK; CAPAROL OR OTHER EQUAL AND APPROVED EXTERNAL WASHABLE PAINT PAINTING ; ONE COAT CAPAACRYL (EXTERNAL QUALITY) PRIMER; TWO COATS CAPAFINE UNDERCOAT, STEEL TROWELLED AND SANDED; TWO COATS AMPHISIL FINISHING COAT, APPLIED BY PAINT ROLLER ACCORDING TO PRINTED MANUFACTURERS INSTRUCTIONS; TO RENDERED SURFACES OF BLOCKWORK OR CONCRETE Generally	M2	3,554.00		
B	Generally; to coping	M2	282.00		
PRELIMINARIES					
BILL NO. 1	PRELIMINARIES AND GENERAL MATTERS				
SECTION B	PRELIMINARY AND CONTRACT PARTICULARS				
SECTION A	GENERAL RULES AND INSTRUCTIONS				
	1. Qualification and Rules of the Preparation, Editing, and Measurement for Producing the Bills of Quantities for Public Works				
A5	Units and Standard Measurements				
	No departure shall be made from the recommended Standard Method of Measurement except to meet the requirements of exceptional circumstances not covered therein. In such cases, special methods may be adopted provided the principles and rules laid down under therein are complied with. The rules of measurement to be adopted in these circumstances shall be clearly stated in the Bills of Quantities at the respective items.				
A1	Bills of Quantities shall fully describe and accurately reflect the actual work to be executed as fully presented in the User Requirements, shown on the drawings, and as guided by the specification. Bill of Approximate Quantities are strictly prohibited in the Public Works				
A2	For the sake of uniformity, standard and accuracy of the Bills of Quantities used under the public works, the whole of the work contained in these Bills of Quantities should be prepared, edited and/or measured in accordance with the Standard Method of Measurement of Building Works and Associated Civil Works (SMM-BW-ACW) for Eastern Africa (2nd Edition) of June 2008 published by the Architectural Association of Kenya, Chapter of Quantity Surveyors and in conformity with Bylaws and/or practice notes issued by the Architects and Quantity Surveyors Registration Board (AQRB) of the United Republic of Tanzania				
A3	The descriptions of items in Bills of Quantities shall be clear, comprehensive and of neutral wording (not inclined to brand specification). The Bills should be arranged in the elements of Building Works. For the avoidance of double payments, repetition or duplication of the same items to be reported/ measured in different or more than one element is strictly prohibited.				
A7	Visiting and Inspection of the Site				
A8	Weighting of Preliminary Cost Items				

	It is recommended during payment of the preliminary cost items to consider these weighting distributions: initial cost (30%), running cost (50%), and final cost (20%) of the total quoted preliminary cost			
	The tenderer/ Contractor will be deemed to have visited the site and to have satisfied himself as to the site surroundings, constraints, nature and size of adjoining buildings, public utilities and properties, inspecting the nature, extent and character of the works, local conditions, accessibility of the works, the supply of and conditions affecting labour and materials and any other matter which may affect his tender and consequently influencing the performance of the project. Visits and Inspection to the site shall be by appointment only or during the arranged pre-tender visit and tenderers are to contact the Procuring Entity to make the necessary arrangements.			
SECTION C	PRELIMINARY ITEMS AND GENERAL MATTERS			
2	Project Signboard			
A	The Contractor shall unless otherwise directed, obtain any necessary consent or license from the Local Authority and immediately upon commencement of the works the Contractor shall, in accordance with the details supplied by the Project Manager, make and erect a signboard showing the name of the Employer and such other information as shall be directed and approved by the Project Manager. Also, the Contractor shall arrange payment of Consultants stickers (Project Managers, Architects, Quantity Surveyors and Engineers) and sticker for his own project registration.	Item	1.00	
5	Progress Chart, Progress Reports and Progress Photographs			
C5	Pursuant to the Contract provisions, each month the Contractor shall submit a monthly progress report in ten (10) copies to the Project Manager indicating the month's progress and giving details of any delays caused by inclement weather or other reasons beyond his control. The Progress report must include the project resources, the status of plants or equipment or materials under manufacturing bases and the status of progress on site including information on labour employed, and the progress of all trades, including Nominated Subcontractors. Also, the Contractor shall submit ten (10) copies of progress photographs clearly indicating the date and time of the activity shown on the photograph.	Item	1.00	
3	Site Levels and Setting out the Works			
A	Before commencing work the Contractor must arrange for and agree with the Project Manager on the existing site levels and similarly establish and agree a benchmark. By applying and using the latest and advanced surveying equipment technology, the Contractor shall set out the Works in accordance with the dimensions and levels shown on the Drawings and shall be responsible for the correctness of all dimensions and levels so set out by him and	Item	1.00	

	will be required to amend all errors arising from inaccurate setting out at his own cost and expense. In the event of any error or discrepancy in the dimensions or levels marked on the Drawings being discovered such errors or discrepancies must be reported by the Contractor to the Project Manager for his immediate attention.				
1	Access to the Site				
6	Protection of Works				
7	Watching and Security of the Site				
8	Samples				
9	Temporary Fencing, Hoardings, Screens, Fans, Planked Footways, Guard Rails, Gantries and Similar items				
10	Temporary Connection, Power for the Works and Lighting				
11	Protection from Weather				
12	Trespass and Nuisance				
13	Control of Noise, Pollution and all Other Statutory Obligations				
14	Site Office Accommodation and Temporary Structures				
15	General Scaffolding and Temporary Support				
16	Testing, Quality Control and Assurance				
17	Contractor's Supervision				
C20	The Contractor shall provide full and adequate supervision during the progress of the works and shall employ and keep a competent and authorized Agent or General foreman as well as other contractors staff and labour with appropriate qualification and experience all as approved by the Project Manager (which approval may be withdrawn at any time) constantly on the works. Such authorized Agent or General Foreman shall give his whole time to the supervision of the works and must be able to read and speak English and or Swahili, to receive and act upon (on behalf of the Contractor) all instructions, directions, or orders issued by the Project Manager or his representative.	Item	1.00		
18	Notices and Fees to Local Authorities and Public Undertakings				
C21	The Contractor shall give all notices in accordance with the Conditions of Contract. The Contractor shall pay all fees and charges required in the Conditions of Contract, regulatory or statutory authorities and any Local Authority where the Works are being executed. The amount of all such fees and charges shall be deemed to be included in the Contract Sum.	Item	1.00		
19	Safety, Health and Welfare of the Work People				
C22	The Contractor shall be responsible for and shall ensure the safety and welfare of his work people, and those of his	Item	1.00		

	Subcontractors, Nominated Subcontractors, Nominated Suppliers and persons employed directly by the Employer. Allow for securing OSHA certificate, providing and maintaining on the site the qualified medical/ health attendants, adequate medical facilities and approved first aid equipment kept fully replenished and in an accessible position as well as properly fitted sick bay/ room. Taking into account all EXPRESS and IMPLIED TERMS under this contract with regards to safety, health and welfare of people at the site.				
20	Water for the Works and Temporary Connection				
C23	The Contractor shall allow for all necessary clean fresh water for the works, including that required by Sub-Contractors and for any temporary plumbing metres and storage facilities and pay all charges in connection therewith and clear away on completion and make good works disturbed.	Item	1.00		
21	Removing Rubbish, Wastes, Plants and Cleaning of the Buildings				
C24	During the course of the project execution, the Contractor shall be removing all rubbish, wastes and dirt from the Site at weekly intervals or as directed by the Project Manager	Item	1.00		
C25	The Contractor shall, upon completion of the Works remove and clear away all temporary buildings, plant, rubbish and unused materials, and shall leave the whole of the Site of the Works in a clean and tidy state to the Satisfaction of the Project Manager.	Item	1.00		
C26	Before handing over any building the Contractor shall properly clean all floors and finished surfaces, clean glass inside and outside and leave all sanitary and other appliances in full working order. He shall also cut and weed all grassed areas, clean down external steps, paths and roads and leave the whole in perfect condition ready for occupation.	Item	1.00		
C27	The Contractor shall, upon completion of the Works remove and clear away all temporary buildings, plant, rubbish and unused materials, and shall leave the whole of the Site of the Works in a clean and tidy state to the Satisfaction of the Project Manager.	Item	1.00		
C25	Before handing over any building the Contractor shall properly clean all floors and finished surfaces, clean glass inside and outside and leave all sanitary and other appliances in full working order. He shall also cut and weed all grassed areas, clean down external steps, paths and roads and leave the whole in perfect condition ready for occupation.	Item	1.00		

PLUMBING AND FIRE FIGHTING INSTALLATIONS

BILL No 3	MEASURED WORKS				
ELEMENT No.8	PLUMBING AND ENGINEERING INSTALLATIONS				
1	SANITARY APPLIANCES				
A	Western type low level W.C suite vitrious china to B.S 3402 s/p-trap, 6litres flushing tank with single push button complete with all necessary accessories."Make"	No	47.00		
B	White vitreous china Asian type size 450x530x210mm with high level flushing cirstern 6 litres capacity complete with flush valve cistern, cameo seat and cover with domex screws"RAK".	No	19.00		
D	White vitreous china wash hand basin (HWB), size 750x440x200mm complete with self closing; semi pedestal and chain stay hole; fairline ½in pillar taps with clear acrylic handles; 1¼in bead chain waste and plug; 80cm slotted tail bolt stay; isovalve servicing valves. rubber plug with slotted tail; 32mm plastic bottle trap with 75mm seal. And other accesories "RAK"	No	4.00		
C	Finned and plain plastic W.C outlet connector to B.S 5627:1984	No	47.00		
E	80mm Diameter high quality plastic floor drain trap built in concrete bed FALCON	No	42.00		
F	600 x 900 x 6mm thick looking mirror with beveled edges with alkaline resistance opaque material and ‘domex’ screws to tiled surfaces.	No	47.00		
G	150mm long toilet roll holder (stainlesssteel), plugged and screwed to blockwall approved by Services Engineer; "RAK"	No	55.00		
H	Supply and Install Soap dispenser 0.8L wall mountained equal or any approved by Services Engineer	No	10.00		
J	Supply and Install Soap holder wall mountained equal or any approved by Services Engineer	No	47.00		
K	Shurtuff (Dotche spray) 13mm diameter X 1000mm long flexible hose	No	10.00		
L	Stainless steel sink qual and approved by Services Engineer; Double Bowl Single Drainer complete with 38mm. chromium plated bottle trap; waste plug; chain and pin; 13mm. chromium plated pillar tap; including a pair of cast iron cantilever support brackets plugged to blockwork.	No	42.00		
M	White coloured vitreous China Ventura high rise WC (Ventura CC) with floor fixing kit, cistern and cover, 6litres with free flo siphon bottom supply, microvalve HP/LP ball valve, side supply refill unit, internal overflow, cistern cover fasterner, close	No	3.00		

	coupling fitment Spatula side lever assembly, chrome plated Bakasan seat only, chrome plated pillars Domex screws including 60cm grab rail (3off); 45cm pull rail . (for back door); hinged support rail, and backrest rail				
N	ARISTON Water Heater tank of 10litres with all the necessary fittings and valves	No	11.00		
P	ARISTON Water Heater tank of 30litres with all the necessary fittings and valves	No	28.00		
i	Supply and fix the following sanitary appliances including all connections and fixing to FLOORS or WALLS as necessary, reference Make or equal as approved by services Engineers.				
F	600 x 900 x 6mm thick looking mirror with beveled edges with alkaline resistance opaque material and 'domex' screws to tiled surfaces.	No	1.00		
G	150mm long toilet roll holder (stainlesssteel), plugged and screwed to blockwall approved by Services Engineer; "RAK"	No	1.00		
H	Supply and Install Soap dispenser 0.8L wall mounted equal or any approved by Services Engineer	No	1.00		
J	Supply and Install Soap holder wall mounted equal or any approved by Services Engineer	No	1.00		
K	Shurtuff (Dotche spray) 13mm diameter X 1000mm long flexible hose	No	1.00		
L	Stainless steel sink qual and approved by Services Engineer; Double Bowl Single Drainer complete with 38mm. chromium plated bottle trap; waste plug; chain and pin; 13mm. chromium plated pillar tap; including a pair of cast iron cantilever support brackets plugged to blockwork.	No	1.00		
M	White coloured vitreous China Ventura high rise WC (Ventura CC) with floor fixing kit, cistern and cover, 6litres with free flo siphon bottom supply, microvalve HP/LP ball valve, side supply refill unit, internal overflow, cistern cover fasterner, close coupling fitment Spatula side lever assembly, chrome plated Bakasan seat only, chrome plated pillars Domex screws including 60cm grab rail (3off); 45cm pull rail . (for back door); hinged support rail, and backrest rail	No	1.00		
N	ARISTON Water Heater tank of 10litres with all the necessary fittings and valves	No	1.00		
P	ARISTON Water Heater tank of 30litres with all the necessary fittings and valves	No	1.00		
Q	Wall Hung Urinal,Size : 465 x 335 x 780 mm, with Presmatic cork, fixing clamps/screws/outlet gasket (seal) with Ceramic Waste Outlet Cover.	No	1.00		

R	Supply and install shower set: mixer with 2 tap hot and cold manual mixer with angled shower arm triton shower head chrome plated bodily only equal and approved by Services Engineer"RAK"	No	1.00		
S	Supply and Install towel rail wall mountained equal or any approved by Services Engineer	No	1.00		
T	Disabled WC suites, white glazed vitreous china; nine litre white glazed vitreous china cistern, cover and brackets; ball valves, flush pipe; operating handle, wall hanger and connect to soil pipe.	No	1.00		
U	Bath Tub complete with chrome painted hot/cold mixer tap with cross head. White glazed vitreous china circular; fixing brackets with screws to backgrounds requiring plugging; bedding waste in white lead	No	1.00		
2	COLD WATER INSTALLATIONS DISTRIBUTION PIPES				
	IPS PIPE PN 20"Class C" painted with special paint; including joints in running length.Fixing in accordance with manufacture's instructions				
A	PPR Pipes, Supply and install 50mm diameter water supply pipe.	M	512.00		
B	PPR Pipes, Supply and install 40mm diameter water supply pipe	M	166.00		
C	PPR Pipes, Supply and install 32mm diameter water supply pipe	M	194.00		
E	PPR Pipes, Supply and install 25mm diameter water supply pipe	No	205.00		
D	PPR Pipes, Supply and install 20mm diameter water supply pipe	M	313.00		
F	PPR Pipes, Supply and install 15mm diameter water supply pipe	M	104.00		
G	Supply and install 12mm flexible pipe connectors to wash hand Basins (WHB), water closet (WC's), kitchen sink (KS), Cleaner's sink (CS), etc.	No.	121.00		
H	Supply and installation of reducers, couplings, connectors, elbows, tees, sockets, pressure reducing valves etc.	Item	1.00		
J	WATER SUPPLY, Allow for supply and install 50mm gate/stop valve.	No	7.00		
K	Ditto but with 40mm	No	4.00		
L	Ditto but with 32mm	No	12.00		
M	Ditto but with 25mm	No	12.00		
N	Supply and lay 50mm diameter PPR PIPE pipe to ground water storage tanks including fittings and accessories excavations, back filling and disposal	No	25.00		
P	Water transfer pumps, Supply, install, test and commissioning water transfer pumps (D&S) from ground tank to elevated tank	Set	1.00		

	with capacity 12m ³ /hr -3bars manufactured by GRUNDFOSS including starters, control panel, float switches, dry running protection, tanks level control and alarm for ground water tank, low and high level switch and alarms for hotel roof tanks				
Q	Water storage tanks, Supply and install composite plastic tank (simtank,kiboko,simba tank) with nominal capacity 5m ³ complete with valves, overflow, washout, vent pipe, fittings accessories hoisting to position and laying on and including concrete bearers and coping flats. Roof tank	No	3.00		
R	Construction of concrete ground water storage tank with capacity 403m ³ complete with valves, overflow, washout, vent pipe, fittings accessories	No	1.00		
S	Water Supply for Irrigation, Supply, install, testing and commissioning underground water supply pipes including elbow, reducing socket, tees and other associated accessories, 40mm diameter	M	48.00		
T	Ditto; 32mm diameter.	M	36.00		
U	Ditto; 25mm diameter	M	22.00		
V	Ditto;20mm diameter	M	31.00		
X	Water Supply for Irrigation, Allow for stop valves to each tapping point to be approved by engineer	No	4.00		
Y	Water Supply for Irrigation, Allow for HUNTER PRO sprays unit as shown in the drawings and to be approved by engineer	No	26.00		
Z	Water Supply for Irrigation, Allow for supply hosepipe, 25mm diameter 25m long	No	4.00		
A1	Water Supply for Irrigation, Allow for excavate trench and backfilling not exceeding 0.5m deep for the above pipe installations	Item	1.00		
B2	RAIN WATER, Supply 150mm dia pipe (UPVC CLASS B) for rain water down pipes	M	1,408.00		
C1	RAIN WATER, Supply 100mm dia pipe (UPVC CLASS B) for rain water down pipes	M	446.00		
D1	RAIN WATER, Supply and install fulbore outlet, 12l/s, stainless steel 20x20cm incl. Contact sheet and all accessories for the system to function properly	No	76.00		
E1	RAIN WATER, Allow for elbows, bend, brackets and all other fittings	Item	1.00		
F1	RAIN WATER, Allow for construction of Rain water manhole of internal dimension 900 x 900mm, depth to invert level not exceeding 1m complete with medium duty cast iron frame and cover	Nos	20.00		

3	SUPPLY PIPES				
A	Supply and install 25mm diameter water supply pipe including fittings and accessories concealed in blockwork chases (elbows ,nipples, tees, connectors, bends etc)	M	1.00		
C	Supply and install 15mm flexible pipe connectors to wash hand basin (WHB), Water closet (WCs), and kitchen sink.	M	1.00		
D	Supply and install 13mm diameter water supply pipe including fittings and accessories concealed in blockwork chases (elbows ,nipples, tees, connectors, bends etc)	M	1.00		
E	Draw-off taps, stop valves to BS 5154 or BS 1010	No	1.00		
F	Supply, install, test and commissioning water transfer pumps with capacity 5cu.m per hour- 15mWG as type Grundfos or similar, including starter, timer, control panel, float switch, dry running protection , float valve, and other necessary accessories.	No	1.00		
4	Ancillaries:				
A	Draw off taps; stop valves; copper alloy to BS 5154 or BS 1010: 50mm Diameter stop valve SANWA	No	1.00		
F	Ditto; 13mm Diameter angle valve donald	No	1.00		
D	Ditto; 32mm Diameter stop valve SANWA	No	1.00		
G	Ditto; 13mm Diameter bib taps.	No	1.00		
E	Ditto; 25mm Diameter stop valve SANWA	No	1.00		
B	Ditto; 40mm Diameter stop valve SANWA	No	1.00		
C	Ditto; 50mm Diameter non return valve.	No	1.00		
H	Supply and fix water booster pumps, 'Grundfos CR 32-2 automatic Power= 4kW; Flow: Q =20-36m ³ /h; H: H = 35-25m; or equivalent and approved; connecting to pipes as necessary;	No	1.00		
5	WASTE AND VENT PIPES:				
	UPVC pipes;Class 'B'; including fittings in running length.				
D	Sewerage, Piping (UPVC CLASS B), Supply and install 160mm diameter pipe (UPVC CLASS B) for foulwater pipes inside building including fittings and standard holder bats fixing to wall or slab requiring plugging	M	483.00		
C	Ditto but with diameter 110mm for waste water	M	228.00		
B	Ditto but with diameter 75mm for waste water	M	48.00		
A	Ditto but with diameter 50mm for waste water	M	335.00		
E	Ditto but with diameter 40mm for waste	M	68.00		

	water				
F	Allow for elbows, bends, connector, y- tees, traps etc to suite the above installation	Item	1.00		
H	External Sewerage: Allow for construction of foul water manhole of internal dimension 800 x 800mm, depth to invert level not exceeding 0.5m complete with medium duty cast iron frame and cover	No	21.00		
J	External Sewerage, Allow for Gully trap, size 300mm x 300	No	10.00		
K	External Sewerage,, Excavate trench not exceeding 0.5m deep and average width 500mm for laying sewerage pipes not exceeding 150mm diameter from the sanitary fitting or stack pipes to manholes/gully trap including back filling	M	483.00		
L	100mm Diameter PVC vent cowl	M	1.00		
M	Extra; plug.	No	1.00		
G	Extre Y tees	No	1.00		
7	TESTING				
B	Test the installations to the satisfaction of Service Engineer	Lumpsum	1.00		
A	Prepare three Copies of as Built drawings to the satisfaction of Service Engineer	Lumpsum	1.00		
8	BUILDER'S WORK IN CONNECTIONS WITH PLUMBING AND ENGINEERING INSTALLATIONS (PROVISIONAL)				
A	Excavate trenches not exceeding 1.50 metres deep total depth and average 750mm deep for pipe not exceeding 150mm diameter	M	1.00		
B	Hole through blockwork for small pipes and make good	No	1.00		
C	Ditto; for large pipes and make good	No	1.00		
D	Cutting chases in wall and making good for Small pipes in wall	M	1.00		
9	SUNDRIES-(PLUMBING)				
A	Allow sum for plug, tee, fisher, reducer, elbow, tapes, etc	Lumpsum	1.00		
6	FOUL WATER DRAINAGE				
i	EXCAVATION				
A	Excavate trench to receive pipes; commencing at ground level; not exceeding 1.5m. deep; average 1000mm. deep; including grading bottom; backfilling and compacting and removal of surplus excavated material.	M	1.00		
ii	GULLY TRAPS				
A	Construct a standard gully trap 300*300mm deep;in thick concrete block walls complete with benching and all fittings and gully trap cover	No	1.00		

iii	MANHOLE				
A	Construct standard manhole size 600 x 600mm average depth 1500mm deep; in 150mm. thick solid concrete blocks walls; 150mm. thick plain in-situ concrete grade '15' bed; complete with benching and all necessary pipe fittings; 1No. cast iron manholes covers and frames; finished to wall sides and top of slab with water proof cement and sand render; including excavation back filling and removal of surplus material; all as per and shown in the drawings.	No	1.00		
iv	SEPTIC TANK				
A	Construct septic tank overall internal dimensions; size 6000 x 4000x 2500mm. deep in 230mm. thick solid concrete blocks walls; 230mm. thick plain in-situ concrete grade '15' bed; 100mm. thick reinforced in-situ concrete grade '20' suspended slab reinforced with 10mm diameter x 100 x 100mm BRC square mesh; 80mm. thick baffle wall; complete with necessary pipe fittings; 4No. cast iron manholes covers and frames; vent pipe; finished to wall sides and top of slab with 15mm thick, water proof cement and sand render; including excavation back filling and removal of surplus material; all as per and shown in the drawings.	No	1.00		
v	SOAK AWAY PIT				
A	Construct Soak pit overall size 4500mm diameter x 2500mm from invert level average depth; in 230mm. solid concrete block walls with weep holes at a height shown in the drawings; 230 x 450mm. plain insitu concrete grade '15' foundation at the bottom; 100mm. Thick suspended slab in reinforced insitu concrete grade '20' reinforced with 10mm diameter x 100 x 100mm BRC square mesh; 1No. Cast iron manhole cover and frames; vent pipe; top of slab finished with cement and sand (1:3) screed; including excavations; backfilling and removal of surplus material; all as per and shown in the drawing.	No	1.00		
ELEMENT No. 12	FIRE FIGHTING SYSTEM INSTALLATIONS				
a)	Pipe work, galvanized mild steel pipes to BS 1387, medium grade supported to walls/ ceiling with screwed and socketed joints.Exposed parts painted red. (UL LISTED)				
A	SPRINKLER SYSTEM INSTALLATION, Pipe work, galvanized mild steel pipes to BS 1387, medium grade with screwed and socketed joints. Exposed parts painted red. Pipes; galvanized hangers or holder bats; fixing to backgrounds Diameter 200mm	M	174.00		
B	Ditto; Diameter 150mm	M	598.00		

C	Ditto; Diameter 100mm	M	899.00		
D	Ditto; Diameter 75mm	M	576.00		
E	Ditto; Diameter 65mm	M	547.00		
F	Ditto; Diameter 50mm	M	659.00		
G	Ditto; Diameter 40mm	M	744.00		
H	Ditto; Diameter 32mm	M	897.00		
J	Ditto; Diameter 25mm	No	1,119.00		
K	PORTABLE FIRE EXTINGUISHER, Supply, deliver, install, test and commission the following portable fire extinguishers and conforming to BS EN 3 1866-1:2007 AND LPCB CERTIFIED internally coated with polyolefin based thermosetting polymer resin,as SFFECO or approved equivalent. Dry Chemical Powder Fire Extinguisher 6kg ABC powder portable fire extinguisher complete with pressure gauge, initial charge and mounting brackets as SFFECO or equal and approved.	No	12.00		
L	Ditto; Mobile Dry Chemical Powder Fire Extinguisher Trolley type 50kg ABC powder portable fire extinguisher complete with pressure gauge, initial charge and working pressure of 15bar and operationg temperature of -30'C to +60'C as SFFECO or equal and approved	No	4.00		
M	Ditto; Carbon Dioxide Gas Fire Extinguisher 5kg carbon dioxide gas portable fire extinguisher complete with pressure gauge, initial charge and mounting brackets as SFFECO or equal and approved	No	12.00		
N	Ditto;Fire blanket: Fire blanket 6' X 4' as SFFECO or equal and approved.	No	2.00		
Q	Ditto; Supply and install Mobile Carbondioxide Fire Extinguisher Trolley type 25kg ABC powder portable fire extinguisher complete with pressure gauge, initial charge and working pressure of 15bar and operationg temperature of -30'C to +60'C as SFFECO or equal and approved. For machines and electrical areas.	No	10.00		
P	EXTERNAL PRIVATE HYDRANTS, Supply and install 100mm norminal diameter underground/ pillar fire hydrant with two outlets of 65mm, type "ANGUS" or similar to be approved	No	2.00		
R	EXTERNAL PRIVATE HYDRANTS, Supply and lay fire hydrant pipes 100mm diameter, elbows, bends and any other associated accessories. (minimum cover shall be 1m)	M	420.00		
S	EXTERNAL PRIVATE HYDRANTS, Allow for construction of manhole for underground hydrants size 600x450x600mm deep comprising 200mm	No	2.00		

	plain concrete block wall plastered internally, concrete cover slab reinforced with and including BRC mesh reinforcement including all excavation disposal and frame work. Cover slab should be marked FH				
T	EXTERNAL PRIVATE HYDRANTS, Supply and install 100mm diameter Check Valve	No	2.00		
A	EXTERNAL PRIVATE HYDRANTS, Allow for setting to work, testing and commissioning and labelling of the entire fire fighting system to NFPA standard guidelines and to the satisfaction of the Engineer	Item	1.00		
b)	PIPES PN 16				
A	SPRINKLER PIPE WORK SUPPORT, Allow for sprinkler pipe supports.	Item	1.00		
B	SPRINKLER PIPE WORK SUPPORT, Supply, install, test and commissioning sprinkler water pumping system comprising of automatic electric driven pump of capacity 170m ³ /h – 12bar, automatic diesel engine driven pump of the same capacity, jockey pump, control panels and all other associated accessories and fittings.	Set	1.00		
C	SPRINKLER PIPE WORK SUPPORT, Supply and install fuel tank with capacity 1000 litres complete with fuel gauge, fill cap, stand approx. 1.0m high and other fittings.	No.	1.00		
D	SPRINKLER PIPE WORK SUPPORT, Sprinkler alarm valve & gong	No	1.00		
E	SPRINKLER PIPE WORK SUPPORT, Sprinkler main control valve set.	No	1.00		
F	SPRINKLER PIPE WORK SUPPORT, Pressure gauges	No.	12.00		
G	Zonal Control valve set, 150mm dia ZCV consists of butterfly isolation valve flanged (PN16), 25mm test and drain valve, flow switch etc, as shown in the drawings	No	18.00		
H	Zonal Control valve set, 100mm dia ZCV consists of butterfly isolation valve flanged (PN16), 25mm test and drain valve, flow switch etc., as shown in the approved dwg	No	24.00		
I	Zonal Control valve set, Supply & Install 75mm dia Zonal control valve assembly for chute complete with butterfly valve, flow switch, test and drain valve etc., as shown in the approved dwg	No	4.00		
J	Installation Control Valve Station, 150mm diameter Wet alarm valve assembly comprising swing check sprinkler alarm valve flanged (PN16) fitted with a butterfly isolation valve, 50mm drain valve, 50mm test valve, air release valve, alarm motor	No.	1.00		

	stop valve, alarm motor & gong, retard chamber, manual by- pass valve, strainers and all necessary trim, common key padlocks, pressure gauges and pressure switches to enable the valve to operate, etc, for complete installation				
K	Installation Control Valve Station, 150mm diameter flow meter flanged polyster coated carbon steel body as INFLUX or approved equivalent complete with OS & Y gate valve and necessary accessories	Set	1.00		
L	Electrical Works, Allow for electrical wiring & control connections between pumps, control panel and local isolator in steel conduit.	Item	1.00		
c)	Elbows PN 16				
A	WET RISER INSTALLATION, Pipe work, Carbon Steel Pipe to BS 1387, medium grade with screwed and socketed joints. Exposed parts painted red. Pipes; galvanized hangers or holderbats; fixing to backgrounds requiring plugging. Diameter 100mm	M	360.00		
C	WET RISER INSTALLATION, ELBOWS 100mm diameter bends/elbow	No	12.00		
D	WET RISER INSTALLATION, ELBOWS 65mm diameter bends/elbow	No	12.00		
B	WET RISER INSTALLATION, TEES 100 x 100 x 100mm tee	No	12.00		
E	WET RISER INSTALLATION, TEES 100 x 100 x 65mm tee	No	12.00		
F	AUTOMATIC AIR RELEASE VALVE, Supply and install automatic air release valve to match the system.	No	8.00		
G	65mm diameter, 30 metres long fire hose resistant to Ultra Violet, weather, heat, delamination, abrasion,oils and chemicals. It shall be complete with branch pipe, Jet & Spray nozzle, female instantaneous coupling head, manufacturers recommended hanging rack as SFFECO and other associated fittings for its proper functioning.The hose shall comply with BS 6391 Type 3 and shall be as SFFECO DURAFLEX or approved equivalent.	No	12.00		
H	Supply & install cradle for 65mm fire hose with wall mounting bracket	No	12.00		
I	Two Way Fire Brigade Breeching Inlet 100mm diameter inlet breeching with two way inlets, each inlet consisting of a 65mm diameter male instantaneous coupling with a non-return valve and black cap secured with a short length of chain.The valve shjall comply with BS 5041 Part 3:1975 as SFFECO or approved equivalent.	No	1.00		
J	Sheet Metal Box, Inlet breeching sheet	No	1.00		

	metal box with wired glass door secured with spring locks openable from inside by smashing the glass and releasing the locking devices on the lock. Approximate size to be 595 x 295 x 395mm high.				
K	Supply and install 65mm diameter landing valve with instantaneous female coupling, blank cap, and back flange. by short chains and fixed on 100mm diameter wet riser pipe. It shall comply with BS EN 12163 & BS EN 1563 as SFFECO or approved equivalent..	No	12.00		
L	Supply and install Capacity of foam bladder tank is 8,000Litres complete with high Expansion foam concentrate, afff3% ul grade Packed in drums 8,000Litres, ratio controller (foam proportioner)-c2, 200 diameter, 3" hydraulic concentrate control valve, (foam) ss (water powered ball valve), high expansion foam generator, solinoid valve 24vdc, 1/2" npt, (200 dia). as SFFECO or approved equivalent..	Item	1.00		
M	HOSE REEL INSTALLATION, Pipe work, galvanized mild steel pipes to BS 1387, medium grade with screwed and socketed joints. Exposed parts painted red. Pipes; galvanized hangers or holderbats; fixing to backgrounds requiring plugging. PIPES, 25mm Diameter	M	125.00		
N	Ditto; UNION, 25mm Diameter	No.	16.00		
O	Ditto; ELBOW, 25mm Diameter	M	24.00		
P	Ditto; GATE VALVES, 25mm Diameter	Nos	8.00		
Q	Ditto; GATE VALVES, 50mm Diameter	No	4.00		
R	Ditto; NON RETURN VALVE, 25mm Diameter	No	12.00		
S	Ditto; 25mm diameter 30m long Automatic swinging type hose reel complete with delivery valve, mild steel feed pipe, isolation valve, guide and all other accessories complying with BS EN671- 1 as "SFFECO" or equal and approved.	No	12.00		
T	Ditto; Painting, Allow for painting of the wet riser installation with 2 coats of super gloss paint on a primer coat to the approval of the Project Engineer.	Item	1.00		
d)	Teas PN 16				
A	TEES & CROSS TEES, Diameter 200mm	No.	8.00		
B	Ditto; Diameter 150mm	No	22.00		
C	Ditto; Diameter 100mm	No	84.00		
D	Ditto; Diameter 75mm	No	176.00		
E	Ditto; Diameter 65mm	No	199.00		
F	Ditto; Diameter 50mm	No	278.00		
G	Ditto; Diameter 40mm	No	299.00		

H	Ditto; Diameter 32mm	No.	368.00		
I	Ditto; Diameter 25mm	No.	198.00		
J	ELBOWS, Diameter 200mm	No.	9.00		
K	ELBOWS, Diameter 150mm	No.	16.00		
L	ELBOWS, Diameter 100mm	Nos	163.00		
M	ELBOWS, Diameter 75mm	No	189.00		
N	ELBOWS, Diameter 65mm	No	234.00		
O	ELBOWS, Diameter 50mm	No	113.00		
P	ELBOWS, Diameter 40mm	No.	198.00		
Q	ELBOWS, Diameter 32mm	No	197.00		
R	ELBOWS, Diameter 25mm	No.	1,465.00		
e)	Reducers PN 16				
C	Diameter 32/25 mm	No	976.00		
A	Diameter 40/25 mm	No	675.00		
B	Diameter 40/32 mm	No	589.00		
D	Diameter 50/25 mm	No	231.00		
E	Diameter 50/32 mm	No	234.00		
F	Diameter 50/40 mm	No	145.00		
G	Diameter 65/25 mm	No	15.00		
H	Diameter 65/32 mm	No	45.00		
G	Diameter 65/40 mm	No	124.00		
N	Diameter 65/50 mm	No	127.00		
P	Diameter 75/32 mm	No	12.00		
M	Diameter 75/40 mm	No	25.00		
K	Diameter 75/50 mm	No	121.00		
L	Diameter 75/65 mm	No	142.00		
J	Diameter 100/25 mm	No	19.00		
Q	Diameter 100/32 mm	No	31.00		
R	Diameter 100/40 mm	Nos.	42.00		
S	Diameter 100/50 mm	Nos	53.00		
T	Diameter 100/65 mm	Nos	78.00		
U	Diameter 100/75 mm	Nos	56.00		
V	Diameter 150/100 mm	Nos	34.00		
X	Diameter 200/150 mm	Nos	10.00		
Y	Pendant, conventional, flush sprinkler each of fire rating of 580C; colour to match with that of ceiling.	Nos	2,520.00		
Z	Ditto wall type	Nos	268.00		
f)	Pipe Valves				
i)	Gate Valve PN 16				
A	100mm diameter	No	1.00		
B	80mm diameter	No	1.00		

C	65mm diameter	No	1.00		
D	50mm diameter	No	1.00		
ii)	Union/ Socket PN 16				
A	100mm diameter	No	1.00		
B	80mm diameter	No	1.00		
iii)	Flanged butterfly valve				
A	supply and install butterfly valve with temper switch with an nominal diameter of 80mm complete with all its fittings and accessories	No	1.00		
iv)	Pressure reducing valve				
A	supply and install pressure reducing valve with 25mm nominal diameter	No	1.00		
v)	Sprinkler drain valve				
A	supply and install a hose reel angle drain valve with a nominal diameter 20mm	No	1.00		
g)	Flanges				
B	80mm diameter	No	1.00		
A	100mm diameter	No	1.00		
h)	Sprinkler pipe Hangers				
B	GI Fire Universal clamps 32mm	No	1.00		
C	GI Fire Universal clamps 40mm	No	1.00		
D	GI Fire Universal clamps 50mm	No	1.00		
A	GI Fire universal clamps 25mm	No	1.00		
E	GI Fire Universal clamps 65mm	No	1.00		
F	GI Fire Universal clamps 80mm	No	1.00		
j)	Threads rods, anchor plugs and flat bar				
C	Anchor plugs 10mm box	No	1.00		
B	Thread rods 8mm (2metres in length)	No	1.00		
A	Thread rods 10mm (2metres in length)	No	1.00		
D	4mm thickness, 50mm by 50mm angle iron with 6m length	No	1.00		
k)	Metal Pipe bracket clamp				
B	25mm nominal diameter pipe bracket clamp	No	1.00		
A	50mm nominal diameter pipe bracket clamp	No	1.00		
C	Wet Type Hydrant (Underground Hydrants Model NHYD 058 - 2C, ductile Iron body to BS, EN 1563 outlet: 2.5" diameter BS High Tensile Brass BS Round Threaded. Inlet; 3" diameter Flanged OD 200mm PCD 160mm, 8 holes, Diameter 19mm test pressure - 25bar kite Mark and LPCB approved underground hydrant include all accessories and pipes	No	1.00		
D	Duck Foot Bend Model No. NHYD 070 Body grey Cast Iron BS 1503 outlet 3" Diameter Flanged Inlet 4" Diameter	No	1.00		

	Flanged include control valve				
F	Branch pipe Jet and spray Fire Nose nozzle inlet 2 1/2" Model: NF -FB 320 -NAFFCO.	No	1.00		
E	Fire Hose 2 1/2" 30mts, single jacket (two layer, coupled with aluminium Quick coupling syntex, quick coupling , Model : NF - DH2 65R (NAFFCO)	No	1.00		
G	Bleeching inlet Cabinet, surface mounted wired Glass door, Complete mild steel, Red powder coated.	No	1.00		
H	Bleeching inlet 4"x2 way, Red colour (Kite mark) NAFFCO (with matching flanges) Model NDR 095	No	1.00		
J	2 1/2" Straight through landing valve, threaded type- NAFFCO -Model NDR 107	No	1.00		
K	Allow for intumescence fire seal/ protection materials	Lumpsum	1.00		
I)	FM 200 SYSTEM				
A	Supply and install 50 Lbs FM 200 cylinders, filled with 50Lbs FM 200 Gas, complete with discharge valve, nipple, coupling and mounting strap.	Lumpsum	1.00		
B	Discharge nozzle (360 degree)	No	1.00		
C	Electrical actuator	No	1.00		
D	Extinguisher control panel complete with 24 VDC back up battery + SRM – 4 Relay Module	No	1.00		
m)	Provisional sums				
A	Allow sum for preparation of Fire fighting As built drawing	Lumpsum	1.00		
B	Allow sum for inspecting, testing and commission firefighting system	Lumpsum	1.00		
C	Allow sum for all builders work related direct to installation of firefighting system	Lumpsum	1.00		
DAYWORKS					
BILL NO. 5	SCHEDULE OF DAYWORKS				
SECTION A	LABOUR				
	In accordance with the relevant clauses of the Conditions of Contract, the Contractor shall be paid dayworks rates for extra work that cannot properly be measured and valued and the Contractor is to insert in the space provided below the basic rates and cost of labour as described hereunder				
A	Unskilled Labour	Hrs	50.00		
B	Skilled Labour	Hrs	50.00		
C	Carpenter	Hrs	15.00		
D	Plumber	Hrs	15.00		
E	Net basic rate for Labour	ps	1.00	50000	50,000.00
F	To the basic nett rate of labour used for work carried out on dayworks, an addition of per cent which is to include for task work and incentive schemes, tools,	%			

	standing scaffolding, supervision, insurance, transport, profit and overheads				
G	Mason	Hrs	15.00		
H	Joiner	Hrs	20.00		
I	Welder	Hrs	20.00		
J	Glazier	Hrs	20.00		
K	Plasterer	Hrs	15.00		
L	Painter	Hrs	15.00		
SECTION B	MATERIALS				
	In accordance with the relevant clauses of the Conditions of Contract, the Contractor shall be paid dayworks rates for extra work that cannot properly be measured and valued and the Contractor is to insert in the space provided below the basic rates and cost of materials as described hereunder				
A	Cement	T	10.00		
B	Sand (Fine aggregate)	M3	30.00		
C	Steel reinforcement (high tension)	Kg	500.00		
F	Net basic rate for Materials	ps	1.00	100000	100,000.00
H	Aggregate (12mm)	M3	30.00		
I	Aggregate (19mm)	M3	30.00		
J	Aggregate (37mm)	M3	30.00		
K	Steel reinforcement (mild steel)	Kg	500.00		
L	Krystol T1	Kg	100.00		
M	Krystol T2	Kg	100.00		
N	Sawn timber (podocarpus)	M3	10.00		
P	Wrought timber (mahogany)	M3	10.00		
Q	Wrought timber (Mvule)	M3	10.00		
R	Paint gloss	Lts	50.00		
S	Paint matt	Lts	50.00		
T	Paint emulsion	Lts	50.00		
U	Paint, linseed oil	Lts	50.00		
V	Paint, wood preservative	Lts	50.00		
SECTION C	EQUIPMENT AND TOOLS				
	In accordance with the relevant clauses of the Conditions of Contract, the Contractor shall be paid dayworks rates for extra work that cannot properly be measured and valued and the Contractor is to insert in the space provided below the basic rates and cost of plant as described hereunder				
A	Dumper (1.25 tonnes)	Hrs	20.00		
B	Land - rover (4 wheel drive)	Hrs	20.00		
C	Lorry (7 tonnes)	Hrs	20.00		
D	Lorry (18 tonnes)	Hrs	20.00		
E	Roller (1.3 tonnes vibratory)	Hrs	20.00		
G	Small hand propelled vibrating roller	Hrs	20.00		
H	Portable compressor (with hoses)	Hrs	20.00		
J	Portable electric welding set	Hrs	20.00		

K	Concrete mixer (14/10) with batching plant	Hrs	20.00		
L	Concrete pump (15 cubic meters per hour)	Hrs	20.00		
M	Concrete vibrator (piker types)	Hrs	20.00		
N	Block making machine	Hrs	20.00		
P	Generator set (single phase)	Hrs	20.00		
Q	Motar grade (11.1 tonnes)	Hrs	20.00		
R	Balldozer (1.1m3)	Hrs	20.00		
S	Mechanical loading shovel (3m3 capacity)	Hrs	30.00		
T	Wheel loader (1.5m3)	Hrs	30.00		

ELECTRICAL INSTALLATIONS

BILL No 2 PRIME COST AND PROVISIONAL SUMS

PC 2 PROVISIONAL SUMS

The following Provisional sums are for the works or costs which can not entirely be foreseen, defined or detailed during the preparation of Bills of Quantities and should be used in whole or in part at the discretion of the Architects.

A	Training of client's operation staff	Lumpsum	1.00		
B	Allow a Provisional Sum for Contingency to be expended or deducted by the Project Manager. Contingencies to be used with written authority of the architect / Engineer and approval of the client	Lumpsum	1.00		
C	TanESCO permanent power connection including construction of HT line, testing and commissioning	Lumpsum	1.00		
D	ADD: ___% to the above item being contractor's profit and attendance charges to TANESCO services	Lumpsum	1.00		
E	Allow for maintenance of selected equipment during defect liability period (including spares and general maintenance) for Equipment such as Generator, LV Panels, AVS, Light fittings, Fire detection, Switch accessories	Lumpsum	1.00		
F	Mobilization & Demobilization	Lumpsum	1.00		
G	Site Office operations	Lumpsum	1.00		
H	Preparation of Shop drawings	Lumpsum	1.00		

BILL No 3 MEASURED WORKS

ELEMENT No.9 ELECTRICAL INSTALLATIONS

i Supply and install the following:

A	MAIN POWER Supply and Installation of the following main equipment (including testing and commissioning) a 33KV Autorecloser SF6 insulated rated at 630A, with short circuit withstand of 16KA , for installation in networks with system voltages up to 38kV complete with Control Cubicle. As Schneider N-Series or ABB Three Phase automatic circuit recloser	NO	1.00		
B	An outdoor pole mounted 36kV metering cabinet complete with all measuring	NO	1.00		

	instruments				
C	3 core 185mm ² 33kV XLPE HT cable	LM	110.00		
D	Φ150mm class B PVC sleeve for underground installation of the HT cable	LM	100.00		
E	Cable support System - k 600x50mm heavy duty galvanised cable ladder for distribution of cables in the power rooms complete with suspension support at 1m intervals, bends and other associated accessories from Power House to Electrical room at basement	LM	340.00		
F	400x25mm heavy duty galvanised cable tray for distribution of cables in electrical ducts complete with suspension support at 1m intervals, bends and other associated accessories	LM	120.00		
G	16 way 3200A busbar rated free standing Low Voltage switchboard IP54 protection Panel Verified Assembly to IEC 61439:1-2 Form 3b board, top/bottom cable entry comprising of 2 No. 3200A 4 pole ACBs, comprise with meters (voltage & current) and outgoers incorporated with SPD Type I as shown in the schematics and specifications as ABB/Schneider/HAGER or approved equivalent Shown as MAIN LV PANEL HD	NO	1.00		
H	3200A IP54, Verified Assembly to IEC 61439:1-2 Form 3b board, form 3b Automatic Transfer changeover switch Panel-ATS comprising of 2 Nos. 3200A 3 pole electrically and mechanically interlocked motorised ACB with phase loss sensing facility in built to the above Panel	NO	1.00		
J	3phase 735-kVAr Power Factor Correction Equipment banks (PFCE) can be also built to the Main LV Panel mentioned above as ABB, SCHNEIDER OR EQUIVALENT APPROVED.	NO	1.00		
K	UPS Rating : 50 KVA Modular UPS True Online Double Conversion Pure sine wave Microcontroller based. Input voltage : 370-440 V AC Input frequency : 50 Hz Output voltage : 400 Volts Three Phase IN & Three Phase Out Output p.f : 0.9 (Built in PFC) Backup Time: 30 mins at full load. Batteries : Dry Sealed Maintenance Free Voltage Regulated 5 years Overload 110 % for 10 min Capacity : 125% for 1 min Operating Temp : 0 to 40 degC Mounting : Cabinet Mounting User friendly LCD display for real time UPS status Cold start of load during power failure Transient/Surge Suppressor EMI/RFI Filter Built-in manual and static by-pass switch Remote & local emergency power off function RS-232 connectivity with power management software Provision for external battery bank	NO	1.00		

	UPS & Advance Automatic Battery Management system for temperature compensated battery charging and battery testing on user defined time.				
a)	DISTRIBUTION SYSTEM				
b)	POWER POINTS				
c)	LIGHT FITTINGS, FANS AND SWITCHES				
d)	WIRING AND CABLES				
A	SUB MAIN CABLES Supply and install sub-mains cables from the Main LV Switchboard to SBs as follows, complete with glands, lugs and shrouds: a 4core 70mm ² PVC/SWA/PVC/Cu from Main LV Panel to SB-HG1	LM	110.00		
B	4core 185mm ² PVC/SWA/PVC/Cu from Main LV Panel to SB-HG2	LM	95.00		
C	4core 50mm ² PVC/SWA/PVC/Cu from Main LV Panel to SB-HG3	LM	75.00		
D	4core 35mm ² PVC/SWA/PVC/Cu from Main LV Panel to SB-HG4	LM	60.00		
E	4core 35mm ² PVC/SWA/PVC/Cu from Main LV Panel to SB-HG5	LM	75.00		
F	4core 185mm ² PVC/SWA/PVC/Cu from Main LV Panel to SB-HG56	LM	80.00		
G	4core 35mm ² PVC/SWA/PVC/Cu from Main LV Panel to SB-OF	LM	25.00		
H	4core 70mm ² PVC/SWA/PVC/Cu from Main LV Panel to SB-FF	LM	25.00		
I	4core 25mm ² PVC/SWA/PVC/Cu from Main LV Panel to SB-LF	LM	30.00		
J	4core 25mm ² PVC/SWA/PVC/Cu from Main LV Panel to SB-UP	LM	42.00		
K	4core 240mm ² PVC/SWA/PVC/Cu from Main LV Panel to SB-MECH	LM	50.00		
L	1core 185mm ² PVC/SWA/PVC/Cu from Main LV Panel to SB-AC	LM	525.00		
M	4core 35mm ² PVC/SWA/PVC/Cu from Main LV Panel to SB-EXT	LM	95.00		
A	CABLES Supply and Installation of the following cable to Distribution boards from SUB-DBs including all accessories including lugs, glands and shrouds : 4core 25mm ² PVC/SWA/PVC/Cu to DB-GE	LM	55.00		
B	4core 25mm ² PVC/SWA/PVC/Cu to DB-UP	LM	55.00		
C	4core 16mm ² PVC/SWA/PVC/Cu to DB-AV	LM	55.00		
D	4core 16mm ² PVC/SWA/PVC/Cu to DB-UD	LM	25.00		
E	4core 35mm ² PVC/SWA/PVC/Cu to DB-BW	LM	60.00		

F	4core 16mm2 PVC/SWA/PVC/Cu to DB-BS, DB-SP, DB-GC2	LM	25.00		
G	4core 50mm2 PVC/SWA/PVC/Cu to DB-EG, DB-ST	LM	60.00		
H	4core 10mm2 PVC/SWA/PVC/Cu to DB-GC1, DB-GC3	LM	100.00		
I	4core 16mm2 PVC/SWA/PVC/Cu to DB-MS, DB-TS, DB-CS, DB-BT, DB-HS, DB-OS, DB-33, DB-PS, DB-CL, DB-NT, DB-MMS, DB-MTS	LM	300.00		
J	4core 25mm2 PVC/SWA/PVC/Cu to DBHG1, DB-HG2, DB-FL, DB-FP	LM	120.00		
K	4core 50mm2 PVC/SWA/PVC/Cu to DB-HP1, DB-HP2	LM	50.00		
L	4core 16mm2 PVC/SWA/PVC/Cu to DB-FU	LM	20.00		
M	4core 25mm2 PVC/SWA/PVC/Cu to DB-DS	LM	60.00		
N	4core 16mm2 PVC/SWA/PVC/Cu to DB-PH	LM	20.00		
O	4core 70mm2 PVC/SWA/PVC/Cu from SBAC to DB-AC1..... DB-AC6	LM	180.00		
P	4core 95mm2 PVC/SWA/PVC/Cu from SBAC to DB-AC7	LM	40.00		
A	CABLE SUPPORT Supply and Install the following Hot Dip Galvanized Metal Cable tray 300mmx50mm heavy duty cable ladder for installation of cables inside the Electrical Room complete with all accessories	LM	120.00		
B	300mm galvanized cable tray complete with fixing brackets, cover and associated accessories for electrical cables	LM	1,044.00		
C	Ditto but for ICT cables	LM	170.00		
D	250mm galvanized cable tray complete with fixing brackets, cover and associated accessories for electrical cables	LM	400.00		
E	150mm x 50mm Cable Trunking (Hot Dip Galvanized) complete with fixing brackets, cover and associated accessories for electrical cables	LM	350.00		
A	WIRING Supply, install, test and commission the following: a Lighting point comprising of 3x1.5mm2 PVC/Cu single core cables in 20mm diameter galvanized steel conduits wired for one way switching complete with all accessories excluding the light fitting and the switch.	NO	9.00		
B	Outlet point for 13A switch socket comprising of 3x2.5mm2 PVC/Cu cables in in 25mm diameter galvanized steel conduit/ galvanized steel Trunking complete with all accessories excluding the 13A switch socket	NO	4.00		

C	Outlet point for 20A DP switch socket comprising of 3x2.5mm ² PVC/Cu cables in in 25mm diameter galvanized steel conduits complete with all accessories excluding the 20A DP socket plate	NO	3.00		
A	WIRING Cont... FIRST FLOOR Supply, install, test and commission the following: Lighting point comprising of 3x1.5mm ² PVC/Cu single core cables in 20mm diameter galvanized steel conduits wired for one way switching complete with all accessories excluding the light fitting and the switch.	NO	642.00		
B	Ditto but wired for two way switching	NO	40.00		
C	Outlet point for 13A switch socket comprising of 3x2.5mm ² PVC/Cu cables in in 25mm diameter galvanized steel conduit/ galvanized steel Trunking complete with all accessories excluding the 13A switch socket	NO	308.00		
D	Outlet point for 20A DP switch socket comprising of 3x2.5mm ² PVC/Cu cables in in 25mm diameter galvanized steel conduits complete with all accessories excluding the 20A DP socket plate - Air Conditioners (ceiling/wall mounted)	NO	50.00		
E	Hand driers	NO	4.00		
F	Fire control panel	NO	1.00		
G	Water Pumps	NO	2.00		
H	Telephone and data outlet point comprising of galvanized conduit outlet box and draw wire in concealed 25mm diameter galvanized steel conduits complete with all accessories excluding the RJ45 outlet	NO	146.00		
J	TV outlet point comprising of conduit outlet box and draw wire in surface 25mm diameter galvanized conduits complete with all accessories excluding the TV outlet	NO	14.00		
f)	STANDBY GENERATOR				
A	1000-kVA Prime, 415V, 50Hz, 4-wire outdoor diesel engine Containerized power generator, complete with a sound attenuation and weatherproof canopy, with integrated with fuel tank of capacity of running the generator for at least 8hours continuously at full capacity	No	2.00		
B	19,500 liters graduated heavy duty metal fuel tank with level indicator (Material should be suitable for storing diesel fuel and for outdoor installation) with Automatic refill system, fuel tank filling point, offset fill and overflow prevention devices and level switches. Inclusive piping work to and fro Generators with all associated accessories	No	1.00		
C	Genset LV Synchronization panel for 1000kVA Generators with 2 nos of 1600Amps 4 Pole Motorized MCCB as	NO	1.00		

	incomer for both the Genset and 32000Amps ACB as outgoer in the common busbar complete with current and voltage measurement (control cubical), MCCB as Schneider or equivalent. That with (Load Management Unit)LMU to run the minimum number of gensets required based on the load demand in the system c/w control cables.				
g)	TRANSFORMER				
A	An outdoor, ground mounted 2,000kVA, 33/0.4kV 50Hz, three phase mains Transformer, vector group Dyn 11 as TANELEC/HONLE/ABB	No	1.00		
B	2000kVA 400/230±15% V, 50Hz 3P+N Automatic Voltage Regulator complete with 3200A bypass Breaker switch for maintenance purposes	NO	1.00		
A - EARTHING AND LIGHTNING	EARTHING AND LIGHTNING Supply and Install the following Lightning Protection and Earthing Device for LPS CLASS I (BS EN 62305-3, BS EN 62305-2, BS EN 62305-1) AIR TERMINAL SYSTEM BS EN 50164 series 1M galvanized pole for mounting the air terminals above	NO	4.00		
B	500mm high lighting rod conductor of high conductive hard drawn copper c/w lock nut, air rod base, air terminal, multiple point, rod brackets and other accessories for mounting	NO	4.00		
A	DOWN CONDUCTOR SYSTEM - As per LPS System Class I - BS EN 50164 series - a 25mmx3mm Bare flat copper tape to link all the air terminal and down to the earthing point via TEST LINK c/w tape copper tape clips from high quality copper alloys and countersunk wood screws	LM	600.00		
B	Allow for inclusion to the lightning protection with any metallic equipment installed in the vicinity of the protection (water tanks etc at the roof top)	Item	1.00		
C	TEST LINK for linking down conductors to the earthing system and testing of the earthing resistance c/w all installation accessories	NO	4.00		
A	EARTH TERMINATION SYSTEM - a Provide adequate earthing to every down conductor consisting of 900mmx900mmx3mm copper earth plates, 6M earth rod (@1.5m rod), bare copper cable buried into soil of good (enhanced) conductivity through covered concrete inspection pit including mechanical clamps and other accessories	NO	8.00		
B	Provide adequate earthing to the entire electrical installations as per current IEEE regulations and to conform with TANESCO	Item	1.00		

	requirements. This must include HT Switch-gear, transformers ,generators ,change over switch sub panel and distribution boards				
A-FIRE DETECTION AND ALARM SYSTEM (WIRING)	Supply, install, test and commission the following as per specifications: Fire detection point comprising of 1.5 mm ² 2 core and earth FIRETUF Power OHLS cable in 20mm diameter galvanized conduit wired in loop form complete with all accessories excluding the detection accessory.	NO	363.00		
B	Supply and Installation of the following Fire Detection Control Panels and Accessories as ARITECH, EST, GST, CTEC - 4 loop, analogue addressable fire alarm control panel complete with power supply units, plug in modules, loop extension board, charger and 24 hours battery standby unit	NO	1.00		
C	Addressable Fire Alarm repeater panel with LCD display	NO	3.00		
D	Fire control panel communication interface to the evacuation system through the access control system complete with all accessories including cabling and connection to the evacuation and access control systems	NO	1.00		
E	Photoelectric smoke detector with base Ground Floor	NO	115.00		
F	DITTO Mezzanine Floor	NO	33.00		
G	DITTO First Floor	NO	102.00		
H	DITTO Dark Store	NO	20.00		
I	DITTO Service Building	NO	7.00		
A	FIRE DETECTION AND ALARM SYSTEM - WIRING Heat detector with base Ground Floor	NO	2.00		
B	DITTO Mezzanine Floor	NO	1.00		
C	DITTO First Floor	NO	1.00		
D	DITTO Dark Store	NO	1.00		
E	DITTO Service Building	NO	1.00		
A	Addressable sounder with flashing beacon (Wall Mounted) Ground Floor	NO	23.00		
B	DITTO Mezzanine Floor	NO	5.00		
C	DITTO First Floor	NO	8.00		
D	DITTO Dark Store	NO	2.00		
E	DITTO Service Building	NO	2.00		
A	Break glass addressable call point Ground Floor	NO	12.00		
B	DITTO Mezzanine Floor	NO	5.00		
C	DITTO First Floor	NO	6.00		
D	DITTO Dark Store	NO	2.00		

E	DITTO Service Building	NO	2.00		
F	Beam Detector point	NO	10.00		
G	Short Circuit Isolator	NO	4.00		
H	Interface Unit	NO	2.00		
h)	MAIN LV SWITCHGEAR				
A	An outdoor 36kV, 16kA, 630A rated switch gear with one SF6 circuit breaker incomer and 2Nos. SF6 circuit breakers out-goers as ABB/Schneider power factor correction, surge arresters and shunt trip relays to shut down power in the event of fire including delivery to site, earthing, testing and commissioning as Eaton Mem or approved equal	NO	1.00		
A	MAIN LV CABLES - Supply and install main cables complete with glands, lugs and shrouds and all other accessories : 1core 630mm2 XLPE/SWA/PVC/Cu from TX via AVS to Main LV Panel	LM	420.00		
B	1core 630mm2 XLPE/SWA/PVC/Cu from DG1 to DG Synch Panel	LM	140.00		
C	1core 630mm2 XLPE/SWA/PVC/Cu from DG2 via DG Synch Panel	LM	210.00		
D	1core 630mm2 XLPE/SWA/PVC/Cu from DDG Synch Panel to ATS Panel on Main LV Panel	LM	700.00		
E	1core 630mm ² PVC/Cu Green / Yellow earth cable for the above equipment complete with glands, lugs and shrouds and all other accessories:	LM	300.00		
A	ISOLATORS Supply and Installation of the following Isolators as shown on the Schematics (including testing and commissioning) IP54 45A TPN Isolator for Lifts	Ea	7.00		
B	IP65 63A TPN Isolator for ODU	Ea	20.00		
C	IP65 45A TPN Isolator for ODU	Ea	25.00		
D	IP65 32A TPN Isolator for ODU	Ea	5.00		
E	IP54 63A TPN Isolator	Ea	10.00		
F	IP54 45A TPN Isolator	Ea	20.00		
G	IP54 32A TPN Isolator	Ea	160.00		
H	IP54 63A SPN Isolator	Ea	5.00		
I	IP54 45A SPN Isolator	Ea	5.00		
J	IP54 32A SPN Isolator	Ea	5.00		
A	Supply and Installation of the following cable to Isolators / Distribution boards from Sub distribution boards including all accessories such as Lugs and Glands : 4core 10mm2 PVC/SWA/PVC/Cu from SB-LF to LIFTS	LM	90.00		
B	4core 10mm2 PVC/SWA/PVC/Cu from	LM	90.00		

	SB-LF to LIFTS				
C	4core 16mm2 PVC/SWA/PVC/Cu to Isolators for ODU	LM	300.00		
D	4core 10mm2 PVC/SWA/PVC/Cu to Isolators for ODU	LM	375.00		
E	4core 6mm2 PVC/SWA/PVC/Cu to Isolators for ODU	LM	300.00		
F	4core x 10mm2 PVC/SWA/PVC/Cu to Water Transfer Pump via Isolator	LM	70.00		
G	4core x 10mm2 PVC/SWA/PVC/Cu for Hose Reel Pump	LM	45.00		
H	3core x 6mm2 PVC/SWA/PVC/Cu to Irrigation Pump	LM	60.00		
I	4core x 4mm2 PVC/SWA/PVC/Cu	LM	1,300.00		
j)	SUB LV PANEL				
A	Main Sub-Distribution - supply and install the followings: - a 8 way TPN, bus bar rated at 200A at 400V, 50Hz and short circuit withstand of 16kA for 1sec. free standing/wall mounted rigid folded sheet construction with removable gland plates and end walls to IP43 protection panel board comprising of 1 No.TP 200A MCCB incomer and three pole MCCB out-goers SPD type II with lamps indicator and reading parameters as per schematics and specifications shown as SB- HG1.	No	1.00		
B	6 way TPN, bus bar rated at 320A at 400V, 50Hz and short circuit withstand of 16kA for 1sec. free standing/wall mounted rigid folded sheet construction with removable gland plates and end walls to IP43 protection panel board comprising of 1 No.TP 320A MCCB incomer and three pole MCCB out-goers SPD type II with lamps indicator and reading parameters as per schematics and specifications shown as SB-HG2.	NO	1.00		
C	6 way TPN, bus bar rated at 160A at 400V, 50Hz and short circuit withstand of 16kA for 1sec. free standing/wall mounted rigid folded sheet construction with removable gland plates and end walls to IP43 protection panel board comprising of 1 No.TP 160A MCCB incomer and three pole MCCB out-goers SPD type II with lamps indicator and reading parameters as per schematics and specifications shown as SB-HG3.	NO	1.00		
D	6 way TPN, bus bar rated at 125A at 400V, 50Hz and short circuit withstand of 16kA for 1sec. free standing/wall mounted rigid folded sheet construction with removable gland plates and end walls to IP43 protection panel board comprising of 1 No.TP 125A MCCB incomer and three pole	NO	1.00		

	MCCB out-goers SPD type II with lamps indicator and reading parameters as per schematics and specifications shown as SB-HG4.				
E	8 way TPN, bus bar rated at 125A at 400V, 50Hz and short circuit withstand of 16kA for 1sec. free standing/wall mounted rigid folded sheet construction with removable gland plates and end walls to IP43 protection panel board comprising of 1 No.TP 125A MCCB incomer and three pole MCCB out-goers SPD type II with lamps indicator and reading parameters as per schematics and specifications shown as SB-HG5.	NO	1.00		
F	6 way TPN, bus bar rated at 400A at 400V, 50Hz and short circuit withstand of 16kA for 1sec. free standing/wall mounted rigid folded sheet construction with removable gland plates and end walls to IP43 protection panel board comprising of 1 No.TP 400A MCCB incomer and three pole MCCB out-goers SPD type II with lamps indicator and reading parameters as per schematics and specifications shown as SB-HG6.	NO	1.00		
G	6 way TPN, bus bar rated at 125A at 400V, 50Hz and short circuit withstand of 16kA for 1sec. free standing/wall mounted rigid folded sheet construction with removable gland plates and end walls to IP43 protection panel board comprising of 1 No.TP 125A MCCB incomer and three pole MCCB out-goers SPD type II with lamps indicator and reading parameters as per schematics and specifications shown as SB-OF.	NO	1.00		
H	8 way TPN, bus bar rated at 200A at 400V, 50Hz and short circuit withstand of 16kA for 1sec. free standing/wall mounted rigid folded sheet construction with removable gland plates and end walls to IP43 protection panel board comprising of 1 No.TP 200A MCCB incomer and three pole MCCB out-goers SPD type II with lamps indicator and reading parameters as per schematics and specifications shown as SB-FF.	NO	1.00		
I	8 way TPN, bus bar rated at 100A at 400V, 50Hz and short circuit withstand of 16kA for 1sec. free standing/wall mounted rigid folded sheet construction with removable gland plates and end walls to IP43 protection panel board comprising of 1 No.TP 100A MCCB incomer and three pole MCCB out-goers SPD type II with lamps indicator and reading parameters as per schematics and specifications shown as SB-LF.	NO	1.00		
J	6 way TPN, bus bar rated at 100A at 400V,	NO	1.00		

	50Hz and short circuit withstand of 16kA for 1sec. free standing/wall mounted rigid folded sheet construction with removable gland plates and end walls to IP43 protection panel board comprising of 1 No.TP 100A MCCB incomer and three pole MCCB out-goers SPD type II with lamps indicator and reading parameters as per schematics and specifications shown as SB-UP.				
K	6 way TPN, bus bar rated at 630A at 400V, 50Hz and short circuit withstand of 16kA for 1sec. free standing/wall mounted rigid folded sheet construction with removable gland plates and end walls to IP43 protection panel board comprising of 1 No.TP 630A MCCB incomer and three pole MCCB out-goers SPD type II with lamps indicator and reading parameters as per schematics and specifications shown as SB-MECH.	NO	1.00		
L	8 way TPN, bus bar rated at 800A at 400V, 50Hz and short circuit withstand of 16kA for 1sec. free standing/wall mounted rigid folded sheet construction with removable gland plates and end walls to IP43 protection panel board comprising of 1 No.TP 800A MCCB incomer and three pole MCCB out-goers SPD type II with lamps indicator and reading parameters as per schematics and specifications shown as SB-AC.	NO	1.00		
M	4 way TPN, bus bar rated at 125A at 400V, 50Hz and short circuit withstand of 16kA for 1sec. free standing/wall mounted rigid folded sheet construction with removable gland plates and end walls to IP43 protection panel board comprising of 1 No.TP 125A MCCB incomer and three pole MCCB out-goers SPD type II with lamps indicator and reading parameters as per schematics and specifications shown as SB-EXT.	NO	1.00		
m)	“AS BUILT/ INSTALLED” DRAWINGS				
	Supply, Install, Test and Commission the following to the satisfaction of the Engineer				
	Distribution System				
A	DISTRIBUTION BOARDS Supply and Installation (including testing and commissioning) of the following Distribution boards as ABB, Schneider 6 way SPN distribution board with MCB outgoers and 45A/300mA TPN RCBO incomer shown as DB-GH (Guard House)	NO	1.00		
B	12 way TPN distribution board with MCB outgoers and 100A/300mA TPN RCCB incomer shown as in the Schematics for DBGE, DB-UP, DB-HG1, DB-HG2	NO	4.00		
C	10 way TPN distribution board with MCB	NO	2.00		

	outgoers and 63A/300mA TPN RCCB incomer shown as in the Schematics for DB-AV and DB-SP				
D	6 way TPN distribution board with MCB outgoers and 63A/300mA TPN RCCB incomer shown as in the Schematics for DB-UD, DBBS, DB-GC2	NO	3.00		
E	12 way TPN distribution board with MCB outgoers and 125A/300mA TPN RCCB incomer shown as in the Schematics for DBBW	NO	1.00		
F	12 way TPN distribution board with MCB outgoers and 160A/300mA TPN RCCB incomer shown as in the Schematics for DBEG, DB-ST, DB-HP1, DB-HP2	NO	4.00		
G	6 way TPN distribution board with MCB outgoers and 45A/300mA TPN RCCB incomer shown as in the Schematics for DB-GC1	NO	1.00		
H	4 way TPN distribution board with MCB outgoers and 45A/300mA TPN RCCB incomer shown as in the Schematics for DB-GC3	NO	1.00		
I	12 way TPN distribution board with MCB outgoers and 63A/300mA TPN RCCB incomer shown as in the Schematics for DB-MS	NO	1.00		
J	8 way TPN distribution board with MCB outgoers and 63A/300mA TPN RCCB incomer shown as in the Schematics for DB-TS, DB-CS, DB-BT, DB-HS, DB-MMS, DB-MTS, DB-FU, DB-PH	NO	8.00		
K	6 way TPN distribution board with MCB outgoers and 63A/300mA TPN RCCB incomer shown as in the Schematics for DB-OS, DBEE, DB-NT	NO	2.00		
L	4 way TPN distribution board with MCB outgoers and 63A/300mA TPN RCCB incomer shown as in the Schematics for DB-PS, DB-CL	NO	2.00		
M	10 way TPN distribution board with MCB outgoers and 100A/300mA TPN RCCB incomer shown as in the Schematics for DBFL, DB-FP, DB-DS	NO	3.00		
N	4 way TPN distribution board with MCB outgoers and 45A/300mA TPN RCCB incomer FOR CLEAN POWER shown as in the Schematics for DB-SEC, DB-UG1, DB-UG2	NO	3.00		
O	4 way TPN distribution board with MCB outgoers and 45A/300mA TPN RCCB incomer shown as in the Schematics for DB-GM	NO	1.00		
P	10 way TPN, bus bar rated at 200A at 400V, 50Hz and short circuit withstand of 16kA for 1sec. wall mounted rigid folded	NO	6.00		

	sheet construction with removable gland plates and end walls to IP54 protection panel board comprising of 1 No.TP 400A MCCB incomer and three pole MCCB outgoers as per schematics and specifications shown as DBAC1,..... DB-AC6				
	Power Points				
A	SWITCHES AND OUTLETS Supply and Install the following (WHITE /RED FINISH) Switch and Sockets as HAGER, MEM EATON & MK a 10A 1gang 1way switch	NO	2.00		
B	10A 2gang 1way switch	NO	1.00		
C	13A twin switched socket outlet	NO	4.00		
D	20A DP switch with neon indicator	NO	3.00		
E	Photocell operated switch in an area affected by natural light, 4P 40A AC1 400Vac coil contactor, three position selector switch, status indicating lamps - AUTO, MANUAL, OFF, enclosure for the above components protects to IP54 and associated cabling	NO	4.00		
A	WIRING Cont... Supply, install, test and commission the following: Lighting point comprising of 3x1.5mm ² PVC/Cu single core cables in 20mm diameter galvanized steel conduits wired for one way switching complete with all accessories excluding the light fitting and the switch.	NO	1,198.00		
B	Ditto but wired for two way switching	NO	36.00		
C	Outlet point for 13A switch socket comprising of 3x2.5mm ² PVC/Cu cables in in 25mm diameter galvanized steel conduit/ galvanized steel Trunking complete with all accessories excluding the 13A switch socket	NO	274.00		
D	Outlet point for 20A DP switch socket comprising of 3x2.5mm ² PVC/Cu cables in in 25mm diameter galvanized steel conduits complete with all accessories excluding the 20A DP socket plate - Air Conditioners (ceiling/wall mounted)	NO	68.00		
E	Hand driers	NO	8.00		
F	Fire control panel	NO	2.00		
G	Water Pumps	NO	3.00		
H	Telephone and data outlet point comprising of galvanized conduit outlet box and draw wire in concealed 25mm diameter galvanized steel conduits complete with all accessories excluding the RJ45 outlet	NO	96.00		
J	TV outlet point comprising of conduit outlet box and draw wire in surface 25mm diameter galvanized conduits complete with all accessories excluding the TV outlet	NO	2.00		
A	SWITCHES AND OUTLETS Supply and	NO	95.00		

	Install the following (WHITE /RED FINISH) Switch and Sockets as HAGER, LEGRANDE & MK 10A 1gang 1way switch				
B	10A 2gang 1way switch	NO	10.00		
C	10A 3gang 1way switch	NO	11.00		
D	10A 1gang 2way switch	NO	36.00		
E	13A single switched socket outlet	NO	36.00		
F	13A twin switched socket outlet	NO	115.00		
G	13A twin switched socket outlet (RED COLOUR) UPS SOCKETS	NO	95.00		
H	16A Industrial Plug and Socket, 3 Pin, IP54	NO	10.00		
I	32A Industrial Plug and Socket, 3 Pin, IP54	NO	8.00		
J	16A Industrial Plug and Socket, 5 Pin, IP54	NO	10.00		
K	20A DP switch with neon indicator	NO	81.00		
L	Satellite and TV socket outlet	NO	2.00		
M	IP43 Industrial plug and socket Distribution box 16A + 20A, 400V ((16A 2P+E-2 Socket controlled by separate MCB) and (20A 3PE-2 Socket controlled by 2 separate MCB))	NO	10.00		
N	IP65 Floor Industrial plug and socket Distribution box 16A + 20A, 400V ((16A 2P+E-2 Socket controlled by separate MCB) 20A 3PE-2 sockets and (45A 3PE-2 Socket controlled by 2 separate MCB))	NO	5.00		
A	SWITCHES AND OUTLETS Supply and Install the following (WHITE /RED FINISH) Switch and Sockets as HAGER, LEGRANDE & MK 10A 1gang 1way switch	NO	95.00		
B	10A 1gang Intermediate switch	NO	5.00		
C	10A 3gang 1way switch	NO	2.00		
D	10A 1gang 2way switch	NO	36.00		
E	13A single switched socket outlet	NO	5.00		
F	13A twin switched socket outlet	NO	12.00		
G	16A Industrial Plug and Socket, 3 Pin, IP54	NO	5.00		
H	32A Industrial Plug and Socket, 3 Pin, IP54	NO	6.00		
I	16A Industrial Plug and Socket, 5 Pin, IP54	NO	2.00		
J	20A DP switch with neon indicator	NO	10.00		
A	SWITCHES AND OUTLETS FIRST FLOOR Supply and Install the following (WHITE /RED FINISH) Switch and Sockets as HAGER, LEGRANDE & MK 10A 1gang 1way switch	NO	65.00		
B	10A 2gang 1way switch	NO	4.00		
C	10A 3gang 1way switch	NO	2.00		
D	10A 1gang 2way switch	NO	40.00		

E	13A single switched socket outlet	NO	20.00		
F	13A twin switched socket outlet	NO	148.00		
G	13A twin switched socket outlet (RED COLOUR) UPS SOCKETS	NO	140.00		
H	20A DP switch with neon indicator	NO	35.00		
I	Satelite and TV socket outlet	NO	14.00		
J	Full 3-Compartment Floor Boxes (with Clean 4 Single sockets, 2 number Voice/Data and 2 USB port) to be fitted with lid and trim for carpet and support plate. Accept PVC and metal screed floor ducting and conduits. Auto-adjustable to screed height 65 up to 90mm as Arteor Legrand	NO	15.00		
K	45A DP Cooker Control switch with neon indicator	NO	1.00		
L	IP54 32A TPN Isolator	NO	2.00		
A	SWITCHES AND OUTLETS DARK STORE Supply and Install the following (WHITE /RED FINISH) Switch and Sockets as HAGER, LEGRANDE & MK 10A 1gang 1way switch	NO	3.00		
B	10A 3gang 1way switch	NO	2.00		
C	13A single switched socket outlet	NO	5.00		
D	13A twin switched socket outlet	NO	2.00		
E	16A Industrial Plug and Socket, 3 Pin, IP54	NO	2.00		
F	32A Industrial Plug and Socket, 3 Pin, IP54	NO	2.00		
G	16A Industrial Plug and Socket, 5 Pin, IP54	NO	2.00		
H	20A DP switch with neon indicator	NO	10.00		
I	IP43 Industrial plug and socket Distribution box 16A + 20A, 400V ((16A 2P+E-2 Socket controlled by separate MCB) and (20A 3PE-2 Socket controlled by 2 separate MCB))	NO	4.00		
A	LIGHT FITTINGS SERVICES BUILDING Type FL	NO	5.00		
B	Type D	NO	26.00		
C	Type EXIT	NO	6.00		
D	Type WL	NO	2.00		
E	Motion Sensor PIR	NO	3.00		
Light Fittings, Fans and Switches					
A	LIGHT FITTINGS - Type WL	NO	6.00		
B	Type PS	NO	6.00		
C	Type PD	NO	20.00		
A	LIGHT FITTINGS Type BK	NO	34.00		
B	Type FL	NO	12.00		
C	Type E	NO	6.00		

D	Type D	NO	434.00		
E	Type H	NO	2.00		
F	Type He	NO	1.00		
G	Type L	NO	58.00		
H	Type R	NO	7.00		
I	Type Re	NO	4.00		
J	Type B	NO	67.00		
K	Type Ste	NO	10.00		
L	Type EXIT	NO	35.00		
M	Motion Sensor PIR	NO	68.00		
N	Type ST	NO	56.00		
O	Type J	NO	13.00		
P	Type WL	NO	10.00		
Q	Type HB	NO	276.00		
A	WIRING Cont... Supply, install, test and commission the following: Lighting point comprising of 3x1.5mm ² PVC/Cu single core cables in 20mm diameter galvanized steel conduits wired for one way switching complete with all accessories excluding the light fitting and the switch.	NO	232.00		
B	Ditto but wired for two way switching	NO	36.00		
C	Outlet point for 13A switch socket comprising of 3x2.5mm ² PVC/Cu cables in in 25mm diameter galvanized steel conduit/ galvanized steel Trunking complete with all accessories excluding the 13A switch socket	NO	30.00		
D	Outlet point for 20A DP switch socket comprising of 3x2.5mm ² PVC/Cu cables in in 25mm diameter galvanized steel conduits complete with all accessories excluding the 20A DP socket plate - Air Conditioners (ceiling/wall mounted)	NO	10.00		
E	Telephone and data outlet point comprising of galvanized conduit outlet box and draw wire in concealed 25mm diameter galvanized steel conduits complete with all accessories excluding the RJ45 outlet	NO	2.00		
A	LIGHT FITTINGS Cont.. Type E	NO	3.00		
B	Type D	NO	98.00		
C	Type Ste	NO	6.00		
D	Type EXIT	NO	6.00		
E	Motion Sensor PIR	NO	2.00		
F	Type ST	NO	13.00		
G	Type J	NO	4.00		
A	LIGHT FITTINGS FIRST FLOOR Type BK	NO	20.00		
B	Type H	NO	185.00		

C	Type He	NO	22.00		
D	Type L	NO	38.00		
E	Type R	NO	85.00		
F	Type Re	NO	18.00		
G	Type Ste	NO	6.00		
H	Type EXIT	NO	18.00		
I	Motion Sensor PIR	NO	82.00		
J	Type E	NO	4.00		
K	Type CS	NO	60.00		
L	Type C	NO	25.00		
M	Type D	NO	10.00		
A	WIRING DARK STORE Supply, install, test and commission the following: a Lighting point comprising of 3x1.5mm ² PVC/Cu single core cables in 20mm diameter galvanized steel conduits wired for one way switching complete with all accessories excluding the light fitting and the switch.	NO	76.00		
B	Outlet point for 13A switch socket comprising of 3x2.5mm ² PVC/Cu cables in in 25mm diameter galvanized steel conduit/ galvanized steel Trunking complete with all accessories excluding the 13A switch socket	NO	17.00		
C	Outlet point for 20A DP switch socket comprising of 3x2.5mm ² PVC/Cu cables in in 25mm diameter galvanized steel conduits complete with all accessories excluding the 20A DP socket plate - Air Conditioners (ceiling/wall mounted)	NO	10.00		
D	Telephone and data outlet point comprising of galvanized conduit outlet box and draw wire in concealed 25mm diameter galvanized steel conduits complete with all accessories excluding the RJ45 outlet	NO	2.00		
A	LIGHT FITTINGS Type FL	NO	5.00		
B	Type D	NO	60.00		
C	Type EXIT	NO	6.00		
A	WIRING SERVICES BUILDING Supply, install, test and commission the following: Lighting point comprising of 3x1.5mm ² PVC/Cu single core cables in 20mm diameter galvanized steel conduits wired for one way switching complete with all accessories excluding the light fitting and the switch.	NO	49.00		
B	Outlet point for 13A switch socket comprising of 3x2.5mm ² PVC/Cu cables in in 25mm diameter galvanized steel conduit/ galvanized steel Trunking complete with all accessories excluding the 13A switch socket	NO	21.00		
C	Outlet point for 20A DP switch socket	NO	6.00		

	comprising of 3x2.5mm ² PVC/Cu cables in in 25mm diameter galvanized steel conduits complete with all accessories excluding the 20A DP socket plate - Air Conditioners (ceiling/wall mounted)				
D	Telephone and data outlet point comprising of galvanized conduit outlet box and draw wire in concealed 25mm diameter galvanized steel conduits complete with all accessories excluding the RJ45 outlet	NO	4.00		
A	SWITCHES AND OUTLETS SERVICES BUILDING Supply and Install the following (WHITE /RED FINISH) Switch and Sockets as HAGER, LEGRANDE & MK 10A 1gang 1way switch	NO	5.00		
B	10A 2gang 1way switch	NO	2.00		
C	13A single switched socket outlet	NO	2.00		
D	13A twin switched socket outlet	NO	13.00		
E	16A Industrial Plug and Socket, 3 Pin, IP54	NO	2.00		
F	32A Industrial Plug and Socket, 3 Pin, IP54	NO	2.00		
G	16A Industrial Plug and Socket, 5 Pin, IP54	NO	2.00		
H	20A DP switch with neon indicator	NO	6.00		
PASSENGER LIFT INSTALLATIONS					
ELEVATOR					
1.1 PASSENGER AND FIRE FIGHTING LIFT					
a	The contractor is to allow here for the full cost of Lift Systems installations strictly in accordance with the Specifications, Engineer's drawings and the Manufacturer's recommended instructions, including testing, commissioning and setting to work of the entire system. Passenger Lift Rated load - 1080Kg (12 Passenger), Speed - 1.0m/s. Maximum stops -3, Travel height 18.0m, center opening door, Gearless machine, Power supply 400V 3Ph 50Hz. Stainless steel internal car finishes. Complete with all necessary operating features, controls and accessories.(SHAFT SIZE.2170W*2920mmD)	No	2.00		
Voltage Stabilizer.					
a	Complete Voltage stabilizer for the above lift with all incidentals necessary for the works and as specified herein and as per specification - In put voltage 3PH +400VAC , In put voltage range $\pm 20\%$,Output voltage 3PH + N 400VAC RMS Stabilised ,Output voltage accuracy $\pm 1\%$, Frequency 50 Hz $\pm 5\%$, rated power as per vendor specification, rated current as per vendor specification, admitted load variation 0 to 100%, admitted load unbalance up to 100%,efficiency greater than 98%, cooling free convection, ambient temperature -10 °C to + 40°C, storage	NO	2.00		

	temperature -20°C to +60°C, and relative humidity 90% (without condensate), passenger voice addressing system				
	EMERGENCY LANDING DEVICE				
b	Emergency Landing Device	NO	2.00		
c	Overload Control	NO	2.00		
d	Music system	NO	2.00		
ICT AND SECURITY INSTALLATIONS					
4	BILL NUMBER FOUR - BUILDING SERVICES INSTALLATIONS				
4.5	ELEMENT NUMBER FIVE - STRUCTURED CABLING, VOICE AND DATA INSTALLATIONS				
	STRUCTURED CABLING INSTALLATION				
E	Preparation of Shop Drawings (to be approved prior to laying of stainless steel pipes for for all ict & security sub-systems)	Item	1.00		
F	Preparation of As built drawings (3sets A1 size), operation and maintenance manuals	Item	1.00		
G	Training of the whole systems for client's operation staff for the period of one week.	Item	1.00		
H	Allow for maintenance (for at least twice) during the defect liability	Item	1.00		
A	Provisional Sum for charges payable to TTCL services extension to the building	Item	1.00		
B	Add 10% to the above item being Contractor's attendance charges to TTCL services Item 1 1,327,500.00 1,327,500.00	Item	1.00		
C	Provisional amount to cover for six motors (automated and driven at a single point) to run the Esavian Type 126 sliding hangar doors as per details from the structural Engineer)	Item	1.00		
D	Provisional amount to cover for Bird Control System Item	Item	1.00		
1.1	1/4" 8MP High Definition pole mount outdoor network day & night bullet camera (embedded with smart IR, up to 80m distance) with varifocal 2.7 mm to 13.5 mm motorized varifocal lens complete (HIKVISION DS-2CD2685G0-IZS) with outdoor wall mounting bracket, heavy duty weather proof (IP 67 rated) enclosure, wall brackets and all other mounting accessories.	Nos	7.00		
1.2	9MP High Performance Automatic Number Plate Day & Night Camera embedded IR cut filter complete with all hardware & software (as HIKVISION iDS-TCV900-BI)	Nos	2.00		
1.3	5m Long heavy duty galvanised steel tubular pole suitable for root mounting complete with lightning spike, secure lockable access and corresponding bracket for mounting the cameras Nos. 5 550,000.00 2,750,000.00	Nos	5.00		

1.4	Heavy Duty Access Controlled Operated Vehicle Barrier (as Avon EB500 or approved equivalence) complete with Module TCP/IP or RS485 for network operation, Barrier Cabinet, Barrier Controllers, Sensors and Boom Arm maximum of 2.5 Metres in length, stop disks and all other mounting accessories Nos. 4 11,250,000.00 45,000,000.00	Nos	4.00		
1.5	Electrical infrastructure required for all above items and other associated accessories to be used including cables and wires	Item	1.00		
2.1	Supply, install, test and commission the following: CCTV Surveillance System Supply, install, test and commission the following: CCTV Surveillance System 1/3" 8MP High Definition fixed network indoor camera powered by darkfighter with varifocal lens, motorized lens, 2.8 - 12mm, built-in with micro SD/SDHC/SDXC card slot of 128GB (HIKVISION DS-2CD2783G2-IZS) complete with ceiling brackets, indoor housing and all mounting accessories including the RJ-45 jack for incoming UTP cable and screws. Nos.	Nos	11.00		
2.2	1/4" 8MP High Definition pendant wall mount dome indoor network day & night bullet camera (embedded with smart IR, up to 80m distance) with vari-focal 2.7 mm to 13.5 mm motorized varifocal lens complete (HIKVISION DS2CD2685G0-IZS) with outdoor wall mounting bracket (DS-1473ZJ-155), heavy duty weather proof (IP 67 rated) enclosure, wall brackets and all other mounting accessories. Nos. 16 1,125,000.00 18,000,000.00	Nos	16.00		
2.3	1/4" 8MP High Definition pole mount outdoor network day & night bullet camera (embedded with smart IR, up to 80m distance) with varifocal 2.7 mm to 13.5 mm motorized varifocal lens complete (HIKVISION DS-2CD2685G0-IZS) with outdoor wall mounting bracket, heavy duty weather proof (IP 67 rated) enclosure, wall brackets and all other mounting accessories. Nos. 20 1,225,000.00 24,500,000.00	Nos	20.00		
2.4	12MP Network Fisheye Camera embedded with three independently controlled IR lights which can offer a range of 15m. (as HIKVISION DS2CD63C5G0-IVS(B)). The camera is to be supplied with 3m brackets from the roof trace, screws and other associated accessories.	Nos	6.00		
Item	Access Control Installations	Item	1.00		
2.5	Four Door Multinode Intelligent Card Reader Controller capable to support Wiegand and Biometric readers and capable to connect smart card or proximity card	Nos	20.00		

	complete with power supply, enclosure, wall brackets and all other mounting accessories.				
2.5	Indoor Smart Card Reader with keypad for a wide range of security applications complete with (88x88)mm back box and all mounting accessories Nos. 40 445,000.00 17,800,000.00	Nos	40.00		
2.6	Request to Exit Button embedded with Infrared Sensor Switch Contactless No Touch Door Exit Button with Backlight complete with base and all other mounting accessories	Nos.	12.00		
2.6	12/24VDC Narrow Line Single EM Locks capable of displaying door status, lock status and bi-color LED and coupled as well with adjustable mounting bracket with choice of self drilling and tapping mounting screws. 22 385,000.00 8,470,000.00	Nos	22.00		
2.7	X-Calibur Heavy Duty Roller Shutter Magnetic Contact capable of displaying door status, lock status and bi-color LED and coupled as well with adjustable mounting bracket with choice of self drilling and tapping mounting screws. (1-HDRS-01) Nos. 16 385,000.00 1,540,000.00	Nos	16.00		
2.8	Breakglass Unit (Emergency Door Release - AVIO DBG005) complete with base and all other mounting accessories. Nos. 40 105,000.00 4,200,000.00	Nos	40.00		
Item	Structured Cabling Installations (Cat.6a as excel, siemon, corning, link basic or dlink)	Item	1.00		
2.8	3m long RJ45 to RJ45 equipment cords	Nos	95.00		
2.9	2 x RJ45 outlets complete with faceplate, spring loaded shutter and a labeling field	Nos	95.00		
2.1	4-pair Shielded Twisted Pair cable	Nos	14,250.00		
2.11	4 pair 1.0m long RJ45 to RJ45 patch cord	Nos	100.00		
2.12	Cable and patch cord management panel	Nos	4.00		
2.13	1U Brush Panel to seal off cable entries as T70- 2372	Nos	4.00		
2.14	48-port RJ45 patch panel complete with RJ-45 jacks, mounting brackets, screws and all other mounting accessories	Nos	4.00		
2.15	27U (600mmx800mm) data cabinet complete with lockable glass door, 2 extract fans and removable side mesh	Nos	2.00		
2.16	12-way power distribution unit	Nos	2.00		
2.17	48-Port 10/100/1000mbps PoE ethernet switch with 2SFP (including 10G 10GBase-T SFP+ Transceiver, up to 80 meters @ CAT.6a Compatible for Cisco/OEM) for uplink: CISCO Catalyst C9200L-48PL-4X	Nos	4.00		
2.18	Wireless Access Point as Cisco Catalyst	Nos	5.00		

	9120 Access Point (C9120AXI-H) or better complete with its cabling works, base and all other mounting and associated accessories.				
2.19	12-core multi mode 50/125 fiber cable from the existing server room to 27U cabinet located in the server room.	LM	185.00		
2.20	Fiber patch panel, at least 4-ways complete with sliding tray, splicing tray of fusion splices and sleeve protection, fiber pigtails (50/125) and LC connectors.	Nos	2.00		
2.21	1m long fiber patch cord with LC connector.	Nos	11.00		
2.22	Reception Phone as Yealink SIP-T46G. 00	Nos	2.00		
2.23	Standard Office Phone as Yealink SIP-T33P.	Nos	40.00		
2.24	X-ray inspection machine as SECURITY DETECTION PX 5.3 as Nucleate CX100100D or other approved equivalence	No	1.00		
2.25	2000mm (h) x 760mm (w) free standing walk through metal detector as Garrett PD6500i, hikvision or other approved equivalence.	No	1.00		
2.26	Hand held metal detector as Garrett	Nos	4.00		
	IMPORTED	Item	1.00		
2.27	2.8" TimTime Attendance e Attendance Terminal, with multiple verification methods; Fingerprint Reader, Face Recognition & RFID Card Reader, 2,000 face, 3,000 Fingerprints, 100,000 Records & 2000 cards, TCP/IP. Built-in Battery, 12V 3A PSU, Support ZKTime Web.	Item	2.00		
2.28	Web based Time & Attendance Software with 3 years of Licence.	Item	1.00		
2.29	All other additional associated accessories to be used in connection with the above installations	Item	1.00		
2.3	SCHEDULE No. 3: MEZZANINE PLAN - SECURITY SYSTEM INSTALL	Item	1.00		
3.1	Supply, install, test and commission the following: 1/4" 8MP High Definition pendant wall mount bullet indoor network day & night bullet camera (embedded with smart IR, up to 80m distance) with varifocal 2.7 mm to 13.5 mm motorized varifocal lens complete (HIKVISION DS-2CD2685G0-IZS) with outdoor wall mounting bracket (DS-1473ZJ-155), heavy duty weather proof (IP 67 rated) enclosure, wall brackets and all other mounting accessories.	Nos	7.00		
3.2	Electrical infrastructure required for all above items and other associated accessories to be used including cables and wires	Item	1.00		

	SCHEDULE No. 4: FIRST FLOOR - ICT & SECURITY SYSTEM INSTALLATIONS	Item	1.00		
	Supply, install, test and commission the following: CCTV Surveillance System	Item	1.00		
4.1	41/3" 8MP High Definition fixed network indoor camera powered by darkfighter with varifocal lens, motorized lens, 2.8 - 12mm, built-in with micro SD/SDHC/SDXC card slot of 128GB (HIKVISION DS-2CD2783G2-IZS) complete with ceiling brackets, indoor housing and all mounting accessories including the RJ-45 jack for incoming UTP cable and screws.	Nos	18.00		
	Access Control Installations	Item	1.00		
4.2	Four Door Multinode Intelligent Card Reader Controller capable to support Wiegand and Biometric readers and capable to connect smart card or proximity card complete with power supply, enclosure, wall brackets and all other mounting accessories.	Nos	3.00		
4.4	Indoor Smart Card Reader with keypad for a wide range of security applications complete with (88x88)mm back box and all mounting accessories	Nos	8.00		
4.5	Request to Exit Button embedded with Infrared Sensor Switch Contactless No Touch Door Exit Button with Backlight complete with base and all other mounting accessories	Nos	4.00		
4.6	4.6 12/24VDC Narrow Line Single EMLocks capable of displaying door status, lock status and bi-color LED and coupled as well with adjustable mounting bracket with choice of self drilling and tapping mounting screws.	Nos	6.00		
4.7	Breakglass Unit (Emergency Door Release - AVIO DBG005) complete with base and all other mounting accessories.	Nos	6.00		
D	Intruder Alarm System as Bosch	ITEM	1.00		
4.8	Motion Sensor	Nos	20.00		
4.9	Touch Screen Keypad (B942)	Nos	5.00		
	Structured Cabling Installations (Cat.6a as excel, siemon, corning, link basic or dlink)	Item	1.00		
4.8	3m long RJ45 to RJ45 equipment cords	Nos	146.00		
4.9	2 x RJ45 outlets complete with faceplate, spring loaded shutter and a labelling field	Nos	146.00		
4.10	4-pair Unshielded Twisted Pair cable	Nos	21,900.00		
4.11	4 pair 1.0m long RJ45 to RJ45 patch cord	Nos	300.00		
4.12	Standard Office Phone as Yealink SIP-T33P	Nos	60.00		
4.13	Cable and patch cord management panel	Nos	12.00		
4.14	1U Brush Panel to seal off cable entries as	Nos	12.00		

	T70-2372				
4.15	48-port RJ45 patch panel complete with RJ-45 jacks, mounting brackets, screws and all other mounting accessories	Nos	8.00		
4.16	42U (1000mmx8000mm) data cabinet complete with lockable glass door, 4 extract fans and removable side mesh panels	Nos	2.00		
4.17	12-way power distribution unit	Nos	4.00		
4.18	48-Port 10/100/1000mbps PoE ethernet switch with 2SFP (including 10G 10GBase-T SFP+ Transceiver, up to 80 meters @ CAT.6a Compatible for Cisco/OEM) for uplink: CISCO Catalyst C9200L-48PL-4X	Nos	8.00		
4.19	Wireless Access Point as Cisco Catalyst 9120 Access Point (C9120AXI-H) or better complete with its cabling works, base and all other mounting and associated accessories.	Nos.	7.00		
4.20	12-core multimode 50/125 fiber cable from the existing server room to 27U cabinet located in the server room.	LM	350.00		
4.12	Fiber patch panel, at least 4-ways complete with sliding tray, splicing tray of fusion splices and sleeve protection, fiber pigtails (50/125) and LC connectors.	Nos	2.00		
4.21	1m long fiber patch cord with LC connector.	Nos	22.00		
4.22	All other additional associated accessories to be used in connection with the above installations	Item	1.00		
	SCHEDULE No.5: ELECTRICAL WORKS ASSOCIATED WITH ICT & SECURITY WORKS	Item	1.00		
	Evacuation System	Item	1.00		
5.1	Intelligent Voice Alarm Controller (VA-6200MA) built-in with 500W amplifier, 8 zones, independent dual speaker loop partition complete with all mounting accessories.	No	1.00		
5.2	Fireman Microphone (VA-6000FM)	Nos	2.00		
5.3	Remote Microphone (VA-6000RM)	Nos	2.00		
5.4	Voice Recorder (VA-6000RC)	No	1.00		
	8-Channel Amplifier Changeover (VA-6000MS)	Nos	4.00		
5.6	Power Amplifier (VA-P4500)	Nos	4.00		
5.7	Backup Power Amplifier (VA-P5000)	Nos	4.00		
5.8	DC Power Supply and Battery Charger (VA-6000BC)	Nos	4.00		
5.9	CD/MP3 Player with AM/FM Tuner	Nos	1.00		
5.1	Terminal Detector (VA-6000T)	Nos	20.00		
5.11	10W Fireproof Ceiling Mount Speaker	Nos	40.00		

	(VA-585)				
5.12	16-Channel Power Sequencer (T-6216) No. 4	Nos	4.00		
5.13	Speaker Cable in accordance with EN50200, class PH30.	Item	1.00		
5.14	Audio Visual System & Video Conference for conference rooms	Item	1.00		
Item	SCHEDULE No. 6: ELECTRICAL WORKS ASSOCIATED WITH ICT & SECURITY WORKS	Item	1.00		
Item	Supply, install, test and commission the following:	Item	1.00		
6.1	Outlet points for 13A switched socket for data cabinet wired using 3x2.5mm ² PVC/Cu cables in 25mm diameter concealed PVC conduits complete with all accessories including the 13A switched socket outlet	Nos	6.00		
	- 62 32mm diameter PVC sleeves for fiber optic and incoming cable from the existing building to the server room through ground floor.	LM	150.00		
	- 6.3 Camera outlet point for signal cables concealed in 25mm diameter PVC conduit complete with all accessories excluding the camera	LM	98.00		
6.5	Ditto but for the card reader controllers, readers, magnetic locks & break-glass	Nos	120.00		
	Outlet point for 20A DP switch comprising of 3x2.5mm ² PVC/Cu cables in 20mm ² concealed PVC conduits complete with all accessories including the 20A DP switch and the final connection to:	Item	1.00		
6.7	Time Attendance & Security Desk -	Nos	3.00		
6.8	Vehicle Barrier	Nos	3.00		
6.9	Cardreader Controller Nos. 22 72,500.00 1,595,000.00	Nos	22.00		
6.9	Keypad and Intruder Alarm Panel	Nos	6.00		
	SCHEDULE No.7: MAIN EQUIPMENT - ICT & SECURITY SYSTEM INSTALLATIO	Item	1.00		
Item	Supply, install, test and commission the following: CCTV Surveillance System	Item	1.00		
7.1	65" TR3DJ-B Series IPS UHD IR Multi Touch Interactive Whiteboard with Embedded Writing Software, Built-in Speakers, & VESA™ Mount Compatibility complete with universal wall mount brackets and other accessories.	Nos	2.00		
7.2	64-channel Network Video Recorder embedded with 64TB (As HIKVISION DS-9664NI-M16) with advanced motion detection and latest video Compression as	Nos	2.00		

	specified in the documents				
7.3	Table/Console for control room sizable for two operators including three executive chairs for operators (hardwood preferable mkongo or mninga).	No	1.00		
7.4	42U, 19" (1000x800) mm rack mount standing cabinet complete with lockable glass door, extract fans and removable side panels.	Nos	1.00		
7.5	Video Management Software to optimize the bandwidth utilization and camera management	No	1.00		
7.6	30KVA, Modular based UPS, Decentralized parallel architecture, Rack UPS 3ph in 3ph phase out with backup time of 30 minutes at full load as RIELLO, APC or equal approved equivalence.	No	1.00		
7.7	24-Port 10/100/1000mbps PoE ethernet switch with 2SFP (including 10G 10GBase-T SFP+ Transceiver, up to 80 meters @ CAT.6a Compatible for Cisco/OEM) for uplink: CISCO Catalyst C9200L-24PL-4X for CCTV cameras & Access Control System	No	6.00		
7.8	Recommend Category 6, 4-pair stp cable complete with RJ45 outlet, RJ45 to RJ45 patch cord, enough to accommodate all cameras from the ground floor to second floor.	Nos	1.00		
7.9	Operator workstation for installation and upgrading of the software for network cameras.	Nos	1.00		
	Access Control System	Item	1.00		
7.10	Server for Management of Door Access Control and Time Attendance Complete with platform Software, Access control module, Time attendance module, Enrolment Station Software, and License	Item	1.00		
7.11	Main workstation including keyboard and mouse, 1x22 inches TFT monitors for the software and graphics (as i7 dell or hp). Should supplied with all nessary software such as latest window, microsoft packages, pdf, zip files etc.	No	1.00		
7.12	Badging /Smart Cards	Nos	100.00		
7.13	7.13 ID card colour printer with serviceable spares for printing	Nos	1.00		
7.14	Recommened Category 6, 4-pair stp/utp cable alarm cable for the entire installation of access control system	Nos	1.00		
7.15	24-port RJ45 patch panel complete with RJ-45 jacks, mounting brackets, screws and all other mounting accessories (for cameras)	Nos	6.00		
Item	Intruder Alarm System Installations as Bosch	Item	1.00		

7.16	IP control panel, 32 areas, 599 points (B9512G) complete with hardware & necessary software for complete installation of the system.	Nos	1.00		
7.17	System Sensor L-series indoor horn/ strobes (as SS-BZW-PG)	Nos	1.00		
Item	ICT Installations	Item	1.00		
7.18	IEEE 802.1ba AV Bridging embeded Cisco Catalyst 9300X Series Layer Three Switch capable to accommodate all network switches for data & voice complete with hardware/software, SFPs and all other associated accessories	Nos	1.00		
7.19	YEALINK VoIP PABX P560 capable of supporting 5 direct lines and 100 extensions	Nos	1.00		
7.20	Cisco ISR 4431 Series Edge Platforms Router (ISR 4431) 500mbps embedded with all latest features and a licence of at least 3 years.	Nos	1.00		
7.21	Cisco IOS XE Catalyst 9800-40 Wireless Controller to be supplied with lifetime licence and all accessories including the mounting brackets.	No	1.00		
7.22	All other associated accessories such uplink cables for switches, patch cords in the server roomm, alarm cable for intruder alarm system and any other required items for this installation are hereby grouped under one item	Item	1.00		

HVAC INSTALLATIONS

DOCUMENTS					
3	Test and Commissioning				
A	2 Allow Sum for the Shop Drawings, As Built Drawings,Manuals,Warranties and all Documentations as maybe required by the Client	ITEM	1.00		
	Allow Sum for the Labelling and Tagging of the installed Mechanical Engineering Systems	Item	1.00		
A	550mm x 300mm	LM	3.50		
B	500mm x 250mm	LM	3.50		
C	450mm x 250mm	LM	16.00		
D	450mm x 200mm 3 D 450mm x 200mm	LM	3.00		
E	400mm x 200mm	LM	9.50		
F	350mm x 200mm	LM	15.50		
G	G300mm x 200mm	LM	20.00		
H	300mm x 150mm	LM	3.50		
I	250mm x 200mm	LM	7.00		
J	250mm x 150mm	LM	21.00		
K	200mm x 150mm	LM	58.00		

L	150mm x 100mm	LM	37.00		
M	Dia 200mm Flexible Ducting	LM	30.00		
A	TROX or equivalent approved four-way horizontal exhaust air, with fixed air control blades -aluminum diffuser face with nominal size of 250x250	Nos	19.00		
D	TROX or equivalent approved circular horizontal exhaust air, with fixed air control blades -aluminum diffuser face with nominal size of 150mm Dia	Nos	24.00		
A	Exhaust Grille (Whether Louvre) 750mm x 400mm	Nos	1.00		
B	Size 600mm x 300mm	Nos	3.00		
C	Size 500mm x 250mm	Nos	2.00		
D	500mm x 300mm Door Grille	Nos	5.00		
A	250mm Dia	Nos	19.00		
B	300mm Dia	Nos	24.00		
A	Wall mounted Exhaust Air Fan, 1,800l/s NO 3 18,360,000.00	Nos	3.00		
B	Wall mounted Exhaust Air Fan, 1,200l/s	Nos	4.00		
C	CWall mounted Exhaust Air Fan, 1,800l/s	Nos	3.00		
D	Wall mounted Exhaust Air Fan, 1,200l/s	Nos	4.00		
A	Inline Ducted Type, 327l/s - 50Pa	Nos	2.00		
B	Inline Ducted Type, 385l/s - 50Pa	Nos	1.00		
C	Inline Ducted Type, 455l/s - 50Pa	Nos	1.00		
D	Inline Ducted Type, 525l/s - 100Pa	Nos	1.00		
E	Inline Ducted Type, 705l/s - 100Pa	Nos	1.00		
	VRF System Outdoor Condensing Units	Item	1.00		
tem	All inverter, Outdoor Condensing Units, modular multi-system units using R-410A or equal and approved ozone-friendly refrigerant. Complete with controls, mounting brackets and all necessary accessories and to be as TOSHIBA Manufactured or equal. Units shall be supplied with anti-corrosion treatment.	Item	1.00		
A	A Total Cooling Capacity: 6HP	Nos	1.00		
B	BTotal Cooling Capacity: 18HP	Nos	1.00		
C	Total Cooling Capacity: 24HP	Nos	1.00		
D	Total Cooling Capacity: 46HP	Nos	1.00		
Item	Indoor Evaporating Units	Item	1.00		
m	Four way Cassette type fan coil units, connected to the same VRV refrigerant circuit and supplied with wired/wireless room controllers, Complete with drain pump, and all necessary accessories	item	1.00		
E	Cooling Capacity: 5,500BTU/H (1.70kW)	Nos	1.00		
F	Cooling Capacity: 7,500BTU/H (2.20kW)	Nos	13.00		

G	Cooling Capacity: 9,000BTU/H (2.80kW)	Nos	6.00		
H	Cooling Capacity: 12,000BTU/H (3.60kW)	Nos	10.00		
I	Cooling Capacity: 15,000BTU/H (4.50kW)	Nos	5.00		
J	Cooling Capacity: 18,000BTU/H (5.60kW)	Nos	6.00		
K	Cooling Capacity: 36,000BTU/H (11.2kW)	Nos	1.00		
tem	Concealed Duct Standard type fan coil units, connected to the same VRV refrigerant circuit and supplied with wired/wireless room controllers, Complete with drain pump, and all necessary accessories.	item	1.00		
L	Cooling Capacity: 48,000BTU/H (14.20kW)	Nos	3.00		
M	Cooling Capacity: 56,000BTU/H (16.00kW)	Nos	2.00		
item	Floor Standing type fan coil units, connected to the same VRV refrigerant circuit and supplied with wired/wireless room controllers, Complete with drain pump, and all necessary accessories.	item	1.00		
N	Cooling Capacity: 56,000BTU/H (16.0kW)	Nos	1.00		
	Gas and liquid copper refrigerant piping and fittings; all pipes covered in rigid preformed sectional Armaflex insulation sleeves	item	1.00		
A	41.3mm Φ	LM	42.00		
B	34.9mm Φ	LM	41.00		
C	C 28.6mm Φ	LM	123.00		
D	D 22.2mm Φ	LM	42.00		
E	E 19.1mm Φ	LM	97.00		
F	15.9mm Φ	LM	297.00		
G	12.7mm Φ	LM	150.00		
H	H 9.5mm Φ	LM	353.00		
I	6.4mm Φ	LM	150.00		
J	Branch Connectors: Standard headers/branch connectors to suite the above piping installations; all as specified and supplied by VRF air conditioning units manufacturer	NO	45.00		
Item	Additional Refrigerant Charge	Item	1.00		
K	Additional R410A Refrigerant Charge	Kg	130.00		
Item	Condensate Drainage Piping	Item	1.00		
Item	Hard uPVC drain pipes, complete with U trap and associated fittings , insulation and supports. all pipes covered in rigid preformed sectional Armaflex insulation sleeves and shall be terminated into storm water runways	Item	1.00		
L	32mm Diameter	LM	100.00		

M	40mm Diameter	LM	65.00		
N	50mm Diameter	LM	100.00		
Item	Power supply and controls	Item	1.00		
A	Control (communication) cabling and Power connection in association with the VRV air conditioning system; cable type and sizes as per VRV air conditioners manufacturer's recommendation, complete with standard lags, grands and all necessary accessories	Item	1.00		
B	Ditto armoured type for outdoor unit supply estimated from isolation (ISOLATOR) switch, complete with standard lags, grands and all necessary accessories	Item	1.00		
C	Power cabling in association with the VRF Indoor Units; cable sizes as per manufacturer's recommendation.	Item	1.00		
D	Power cabling in association with the Ventilations Fans; cable sizes as per	Item	1.00		
Item	Protection of Installation	Item	1.00		
A	Provide canvas lapping/PVC trunking for refrigerant and condensate drainage installations chased into block walls.	LM	15.00		
B	Provide Aluminium Cladding for the externally exposed copper pipework.	Item	1.00		
Item	MEZZANNINE FLOOR: AIR CONDITIONING AND VENTILATION Insulated Sheet Metal Ducting	Item	1.00		
Item	Supply install Galvanised Steel Sheets 22 Gauge (0.7 mm thick) complete with sleeves, elbows, duct connections, spigots, reducers, insulation, hangers, supports, accessories, plenum boxes and associated fittings as per SMACNA standard, specifications and drawing	Item	1.00		
A	850mm x 350mm	LM	15.00		
B	750mm x 350mm	LM	62.00		
C	600mm x 300mm	LM	39.00		
D	600mm x 250mm	LM	367.00		
E	550mm x 250mm	LM	30.00		
F	400mm x 250mm	LM	39.00		
K	400mm x 200mm	LM	150.00		
L	Dia 350mm Flexible Ducting	LM	175.00		
Item	Air terminal Grilles, Throw height 5.0m - 6.0M Selected at 32NC noise level	Item	1.00		
A	TROX or equivalent approved Supply Air Grille vertical/horizontal supply air discharge, with nominal size of 1500x300	No	70.00		
B	Size 1200x250	Nos	44.00		
Item	Volume control Damper (VCD)	Item	1.00		

A	Dia 350mm	LM	114.00		
Item	VRF System	Item	1.00		
Item	Outdoor Condensing Units	Item	1.00		
Item	All inverter, Outdoor Condensing Units, modular multi-system units using R-410A or equal and approved ozone-friendly refrigerant. Complete with controls, mounting brackets and all necessary accessories and to be as TOSHIBA Manufactured or equal. Units shall be supplied with anti-corrosion treatment.	Item	1.00		
A	Total Cooling Capacity: 62HP	Nos	1.00		
B	Total Cooling Capacity: 82HP	Nos	1.00		
C	Total Cooling Capacity: 88HP	Nos	1.00		
D	Total Cooling Capacity: 120HP	Nos	1.00		
	Indoor Evaporating Units	Item	1.00		
Item	Concealed Duct Standard type fan coil units, connected to the same VRV refrigerant circuit and supplied with wired/wireless room controllers, Complete with drain pump, and all necessary accessories.	Item	1.00		
E	Cooling Capacity: 56,000BTU/H (16.00kW)	Nos	7.00		
item	Concealed Duct High Static Pressure type fan coil units, connected to the same VRV refrigerant circuit and supplied with wired/wireless room controllers, Complete with drain pump, and all necessary accessories.	item	1.00		
F	Cooling Capacity: 72,000BTU/H (22.40kW)	Nos	35.00		
G	Cooling Capacity: 96,000BTU/H (28.00kW)	Nos	5.00		
item	Gas and liquid copper refrigerant piping and fittings; all pipes covered in rigid preformed sectional Armaflex insulation sleeves	item	1.00		
A	54.0mm Φ	LM	357.00		
B	41.3mm Φ	LM	166.00		
C	34.9mm Φ	LM	95.00		
D	28.6mm Φ	LM	93.00		
E	22.4mm Φ	LM	101.00		
F	22.2mm Φ	LM	742.00		
G	19.1mm Φ	LM	95.00		
H	15.9mm Φ	LM	145.00		
I	12.7mm Φ	LM	321.00		
J	9.5mm Φ	LM	53.00		
Item	Branch Connectors:	Item	1.00		

K	Standard headers/branch connectors to suite the above piping installations; all as specified and supplied by VRF air conditioning units manufacturer	Nos	57.00		
	Additional Refrigerant Charge	Item	1.00		
L	Additional R410A Refrigerant Charge	Kg	510.00		
	Condensate Drainage Piping Hard uPVC drain pipes, complete with U trap and associated fittings , insulation and supports. all pipes covered in rigid preformed sectional Armaflex insulation sleeves and shall be terminated into storm water runways	Item	1.00		
M	32mm Diameter	LM	200.00		
N	40mm Diameter	LM	200.00		
O	50mm Diameter	LM	350.00		
	Power Supply and Controls	Item	1.00		
A	Control (communication) cabling and Power connection in association with the VRV air conditioning system; cable type and sizes as per VRV air conditioners manufacturer's recommendation, complete with standard lags, grands and all necessary accessories	Item	1.00		
B	Ditto armoured type for outdoor unit supply estimated from isolation (ISOLATOR) switch, complete with standard lags, grands and all necessary accessories	Item	1.00		
C	Power cabling in association with the VRF Indoor Units; cable sizes as per manufacturer's recommendation.	Item	1.00		
	Protection of Installation	Item	1.00		
A	Provide canvas lapping/PVC trunking for refrigerant and condensate drainage installations chased into block walls.	LM	25.00		
B	Provide Aluminium Cladding for the externally exposed copper pipework.	Item	1.00		
item	FIRST FLOOR: AIR CONDITIONING AND VENTILATION Un-Insulated Sheet Metal Ducting	item	1.00		
	Supply install Galvanised Steel Sheets 22 Gauge (0.7 mm thick) complete with sleeves, elbows,duct connections,spigots,reducers, hangers , supports, accessories and associated fittings as per SMACNA standard, specifications and drawing	Item	1.00		
A	550mm x 250mm	LM	50.00		
B	500mm x 250mm	LM	6.00		
C	350mm x 250mm	LM	8.00		
D	350mm x 200mm L	LM	11.00		
E	300mm x 200mm	LM	6.00		

F	250mm x 150mm	LM	5.00		
K	K 200mm x 150mm	LM	12.00		
L	150mm x 100mm	LM	35.00		
M	Dia 200mm Flexible Ducting	LM	33.00		
	Air terminal diffusers, Throw height 2.4m Selected at 32NC noise level	Item	1.00		
A	TROX or equivalent approved four-way horizontal exhaust air, with fixed air control blades -aluminum diffuser face with nominal size of 250x250	Nos	6.00		
b	TROX or equivalent approved circular horizontal exhaust air, with fixed air control blades -aluminum diffuser face with nominal size of 150mm Dia	Nos	16.00		
item	Grilles and Louvres (Aluminium Profile, Natural Anodized)	item	1.00		
D	500mm x 300mm Door Grille	Nos	6.00		
	Volume control Damper (VCD)	Item	1.00		
A	250mm Dia	Nos	6.00		
B	300mm Dia	Nos	16.00		
item	VRF System Outdoor Condensing Units	item	1.00		
item	All inverter, Outdoor Condensing Units, modular multi-system units using R-410A or equal and approved ozone-friendly refrigerant. Complete with controls, mounting brackets and all necessary accessories and to be as TOSHIBA Manufactured or equal. Units shall be supplied with anti-corrosion treatment.	item	1.00		
A	Total Cooling Capacity: 56HP	Nos	1.00		
B	Total Cooling Capacity: 106HP	Nos	1.00		
	Indoor Evaporating Units	Item	1.00		
	Four way Cassette type fan coil units, connected to the same VRV refrigerant circuit and supplied with wired/wireless room controllers, Complete with drain pump, and all necessary accessories.	Item	1.00		
C	Cooling Capacity: 9,000BTU/H (2.80kW)	Nos	5.00		
E	Cooling Capacity: 12,000BTU/H (3.60kW)	Nos	2.00		
F	Cooling Capacity: 15,000BTU/H (4.50kW)	Nos	22.00		
G	Cooling Capacity: 18,000BTU/H (5.60kW)	Nos	1.00		
H	Cooling Capacity: 24,000BTU/H (7.10kW)	Nos	5.00		
J	Cooling Capacity: 30,000BTU/H (9.0kW)	Nos	8.00		
K	Cooling Capacity: 36,000BTU/H (11.2kW)	Nos	10.00		
L	Cooling Capacity: 48,000BTU/H (14.0kW)	Nos	2.00		
item	High Wall type fan coil units, connected to the same VRV refrigerant circuit and supplied with wired/wireless room controllers, Complete with drain pump, and	item	1.00		

	all necessary accessories.				
N	Cooling Capacity: 18,000BTU/H (5.60kW)	Nos	2.00		
O	Cooling Capacity: 30,000BTU/H (9.0kW)	Nos	1.00		
	Split Unit System Installations Outdoor Condensing Unit	Item	1.00		
	Units with DUAL inverter technology, the Outdoor should operate up to 35o C dB temperaure. The Outdoor Unit should be Eurovent Certified and minimum 3.7 EER. Condensing Units must have Corrossion Resistance certification and to be manufactured by LG or SAMSUNG or equal.	Item	1.00		
	Indoor Evaporating Unit	Item	1.00		
	High-Wall Mounted Type fan coil units, supplied with remote controllers, Complete with all necessary accessories.	Item	1.00		
A	Cooling Capacity: 18,000BTU/H	Nos	2.00		
	Gas and liquid copper refrigerant piping and fittings; all pipes covered in rigid preformed sectional Armaflex insulation sleeves	Item	1.00		
A	54.0mm Φ	LM	39.00		
B	41.3mm Φ	LM	85.00		
C	34.9mm Φ	LM	68.00		
D	28.6mm Φ	LM	104.00		
E	22.4mm Φ	LM	35.00		
F	22.2mm Φ	LM	180.00		
G	19.1mm Φ	LM	81.00		
H	15.9mm Φ	LM	273.00		
I	12.7mm Φ	LM	185.00		
J	9.5mm Φ	LM	215.00		
K	6.4mm Φ	LM	121.00		
	Branch Connectors:	Item	1.00		
K	Standard headers/branch connectors to suite the above piping installations; all as specified and supplied by VRF air conditioning units manufacturer	Nos	63.00		
	Additional Refrigerant Charge	Item	1.00		
L	Additional R410A Refrigerant Charge	Kg	210.00		
Item	Condensate Drainage Piping Hard uPVC drain pipes, complete with U trap and associated fittings , insulation and supports. all pipes covered in rigid preformed sectional Armaflex insulation sleeves and shall be terminated into storm water runways	Item	1.00		
M	M 32mm Diameter	LM	200.00		

N	40mm Diameter	LM	200.00		
O	50mm Diameter	LM	350.00		
Item	Toilet Extract Fans	Item	1.00		
A	Wall Mounted Type, 48l/s	Nos	4.00		
	Power Supply and Controls	null	1.00		
A	Control (communication) cabling and Power connection in association with the VRV air conditioning system; cable type and sizes as per VRV air conditioners manufacturer's recommendation, complete with standard lags, grands and all necessary accessories	Item	1.00		
B	Ditto armoured type for outdoor unit supply estimated from isolation (ISOLATOR) switch, complete with standard lags, grands and all necessary accessories	Item	1.00		
C	Power cabling in association with the VRF Indoor Units; cable sizes as per manufacturer's recommendation.	Item	1.00		
D	Power cabling in association with the Extract Fans; cable sizes as per manufacturer's recommendation.	Item	1.00		
	Protection of Installation	Item	1.00		
A	Provide canvas lapping/PVC trunking for refrigerant and condensate drainage installations chased into block walls.	LM	25.00		
B	Provide Aluminium Cladding for the externally exposed copper pipework.	Item	1.00		
	ROOF FLOOR: AIR CONDITIONING AND VENTILATION	Item	1.00		
	Exhaust Fans	Item	1.00		
A	Inline Ducted type , 620/s - 150 Pa	Nos	2.00		
	Grilles and Louvres (Hot Dip Galvanized Steel with Wire Mesh)	Item	1.00		
A	850mm x 350mm Exhaust Air Grille	Nos	2.00		
	Power Supply and Controls	Item	1.00		
B	Power cabling in association with the above Fans; cable sizes as per Fans manufacturer's recommendation.	Item	1.00		
	Testing	Item	1.00		
C	Allow for the testing the whole of the HVAC Engineering installations to the Engineer's satisfaction	Item	1.00		
EXTERNAL WORKS					
SERIES 3000	EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE				
3300	Breaking Up Existing Pavement Layers				
33.01	Excavating Material From an Existing Pavements				
A	Generally SECTION NR.1 SITE CLEARANCE AND SOFT LANDSCAPING EXCAVATION AND	Item	1.00		

	EARTH WORKS ARTHWORK SUPPORT ALLOW FOR PROVISION AND SUBSEQUENT				
	SITE PREPARATION	Item	1.00		
B	EXCAVATING TOP SOIL AND REMOVE FROM SITE Average 150mm deep	m2	142,682.00		
C	CLEARING SITE Bushes, scrub, undergrowth and general debris; grubbing up roots; cutting down small trees; filling in voids left by removal of roots with selected excavated material arising from excavations; grubbing up roots	m2	142,682.00		
	FILLING; IMPORTED VEGETABLE SOIL; SUBJECT TO ARCHITECT'S APPROVAL	Item	1.00		
	TO MAKE UP LEVELS	item	1.00		
D	Spreading; levelling; average 200mm thick	m2	6,543.00		
	LANDSCAPING	ITEM	1.00		
	BOTTOMS OF EXCAVATIONS	ITEM	1.00		
	Digging over holes ; preparing for tree planting; planking and strutting; filling in with vegetable soil well mixed with manure; disposal of excavated material by removing from site	Nr	104.00		
	SURFACES OF FILLING	ITEM	1.00		
F	Harrowing; removing debris; preparing for turfing	m2	6,543.00		
	IMPORTED AFRICAN TULIP TREES	ITEM	1.00		
G	Planting; watering; maintaining for not less than months after planting until fully developed to the entire satisfaction of the Architect	Nr	52.00		
item	SECTION NR.1 SITE CLEARANCE AND SOFT LANDSCAPING (Cont'd)	item	1.00		
item	EXCAVATION AND EARTHWORKS (Cont'd)	item	1.00		
item	IMPORTED BOUGAINVILLEA SHRUBS	item	1.00		
A	Planting at 200mm centres; in two rows spaced at m 20 50,000.00 1,000,000.00 300mm; watering; pruning; maintaining for not less than six months after planting until fully developed to the entire satisfaction of the Architec	m	20.00		
item	IMPORTED DATE PALM TREES	item	1.00		
B	Planting; watering; maintaining for not less than six months after planting until fully developed to the entire satisfaction of the Architect	Nr	52.00		
item	IMPORTED AFRICAN TULIP TREES	item	1.00		
G	Planting; watering; maintaining for not less than six months after planting until fully	Nr	52.00		

	developed to the entire satisfaction of the Architect				
item	SECTION NR.1 SITE CLEARANCE AND SOFT LANDSCAPING (Cont'd) EXCAVATION AND EARTHWORKS (Cont'd) LANDSCAPING (Cont'd)	item	1.00		
item	IMPORTED BOUGAINVILLEA SHRUBS	item	1.00		
A	Planting at 200mm centres; in two rows spaced at 300mm; watering; pruning; maintaining for not less than six months after planting until fully developed to the entire satisfaction of the Architect	m	20.00		
	IMPORTED DATE PALM TREES	item	1.00		
B	Planting; watering; maintaining for not less than six months after planting until fully developed to the entire satisfaction of the Architect	Nr	52.00		
item	IMPORTED EUPHORIA SHRUBS	item	1.00		
C	Planting at 200mm centres; in two rows spaced at m 25 50,000.00 1,250,000.00 300mm; watering; pruning; maintaining for not less than six months after planting until fully developed to the entire satisfaction of the Architect	m	25.00		
item	IMPORTED GINGER SHRUBS	item	1.00		
D	Planting at 200mm centers; in two rows spaced at 300mm; watering; pruning; maintaining for not less than six months after planting until fully developed to the entire satisfaction of the Architect.	m	25.00		
	IMPORTED HELICONIA SHRUBS	Item	1.00		
E	Planting at 200mm centres; in two rows spaced at 300mm; watering; pruning; maintaining for not less than six months after planting until fully developed to the entire satisfaction of the Architect	m	30.00		
item	IMPORTED LANTANA SHRUBS	item	1.00		
F	Planting at 200mm centres; in two rows spaced at 300mm; watering; pruning; maintaining for not less than six months after planting until fully developed to the entire satisfaction of the Architect	m	4.00		
G	IMPORTED PEMBA GRASS Planting at a maximum of 150mm centres both ways;; watering; maintaining for not less than six months after planting until fully developed to the entire satisfaction of the Architect	m	6,543.00		
item	SECTION NR.1 SITE CLEARANCE AND SOFT LANDSCAPING (Cont'd) EXCAVATION AND EARTHWORKS (Cont'd) DISPOSAL OF WATER KEEPING EXCAVATIONS FREE OF	item	1.00		
A	General water Item	Item	1.00		
item	SECTION NR.2 ROADS AND CAR	item	1.00		

	PARKING EXCAVATION AND EARTHWORKS EXCAVATION EXCAVATE TO REDUCE LEVELS; SPREAD ON SITE MATERIALS ARISING FROM EXCAVATION				
A	Average 300mm deep	m2	17,061.00		
item	SURFACE TREATMENTS BOTTOMS OF EXCAVATIONS	item	1.00		
B	Levelling; compacting to not less than 95%	m2	17,061.00		
	FILLING; IMPORTED SAND BASE MATERIAL TO RECEIVE INTERLOCKING BLOCKS (MEASURED ELSEWHERE)	Item	1.00		
item	TO MAKE UP LEVELS	item	1.00		
C	Average 150mm thick	Item	1.00		
item	FILLING; IMPORTED SUB-BASE MATERIAL GRADE G15 COURSE AGGREGATES FROM APPROVED QUARRY COMPACTED TO NOT LESS NOT LESS THAN 95% MOD.AASHO MDD AND CBR MIN.15% TO RECEIVE BASE MATERIALS	item	1.00		
item	TO MAKE UP LEVELS	item	1.00		
D	TO MAKE UP LEVELS Average 200mm thick	m2	17,061.00		
item	SECTION NR.2 ROADS AND CAR PARKING (Cont'd) CONCRETE WORK SUNDRIES	item	1.00		
item	1000 GAUGE POLYTHENE SHEET DAMP-PROOF MEMBRANE; 200MM LAPPED JOINTS	item	1.00		
A	Over 300mm wide; horizontal	m2	17,061.00		
item	SECTION NR.3 APRON EXCAVATION AND EARTHWORKS EXCAVATION EXCAVATE PITS TO RECEIVE COLUMN BASES	item	1.00		
A	A Not exceeding 1.50m deep	m3	30,600.00		
	EARTHWORK SUPPORT	Item	1.00		
	ALLOW FOR PROVISION AND SUBSEQUENT REMOVAL OF PLANKING AND STRUTTING TO UPHOLD AND MAINTAIN ALL VERTICAL FACES OF EXCAVATION	Item	1.00		
B	Generally Item	Item	1.00		
item	FILLING IMPORTED CRUSHED AGGREGATES (CRR) TO STANDARD SPECIFICATIONS	item	1.00		
	TO MAKE UP LEVELS	Item	1.00		
C	Average 150mm thick	m2	20,000.00		
	FILLING IMPORTED CRUSHED STONES (CRS) TO STANDARD SPECIFICATIONS	Item	1.00		

	TO MAKE UP LEVEL	Item	1.00		
D	Average 150mm thick	m2	20,000.00		
	FILLING; IMPORTED SUB-BASE MATERIAL GRADE G15; WELL COMPACTED	Item	1.00		
	TO MAKE UP LEVELS	Item	1.00		
E	Average 100mm thick	m2	20,000.00		
	FILLING; IMPORTED SUB-BASE MATERIAL GRADE G45; COMPACTED TO MAKE UP LEVEL	Item	1.00		
F	Average 150mm thick	m2	20,000.00		
	DISPOSAL EXCAVATED MATERIAL	Item	1.00		
G	Removing from site	m3	20,000.00		
	SECTION NR.3 APRRON (Cont'd) EXCAVATION AND EARTHWORKS (Cont'd) DISPOSAL OF WATER KEEPING EXCAVATIONS FREE OF	Item	1.00		
A	General water	Item	1.00		
	SURFACE TREATMENTS SOIL STERILIZATION; ALDRIN 0.50% SOLUTION OR OTHER EQUAL AND APPROVED ANTI-TERMITE TREATMENT APPLIED AT A RATE OF 7 LITRES PER SQUARE METRE	Item	1.00		
B	To surfaces of excavation or backfilling	m2	20,000.00		
item	FILLING; HARDCORE; BLINDED WITH SAND TO RECEIVE DAMP PROOF MEMBRANE (MEASURED SEPARATELY) TO MAKE UP LEVEL	item	1.00		
C	300mm thick	m2	20,000.00		
item	SECTION NR.3 APRRON (Cont'd) CONCRETE WORK	item	1.00		
item	PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 30; 20MM AGGREGATE MAXIMUM SIZE SLAB; LAID ON EARTH OR HARDCORE	item	1.00		
A	300mm thick	m2	20,000.00		
	REINFORCEMENT; BARS; BS4449; HOT ROLLED PLAIN ROUND MILD STEEL STRAIGHT OR BENT	Item	1.00		
B	12mm diameter	Kg	189,677.00		
C	32mm diameter	Kg	327,352.00		
item	SUNDRIES 1000 GAUGE POLYTHENE SHEET DAMP-PROOF MEMBRANE; 200MM LAPPED JOINTS	item	1.00		
D	Over 300mm wide; horizontal; on floors or the like	m2	20,000.00		
item	SECTION NR.4 TAX WAY EXCAVATION AND EARTHWORKS EXCAVATION EXCAVATE PITS TO RECEIVE FOUNDATION BASES	item	1.00		

A	Not exceeding 1.50m deep	m3	28,050.00		
item	EARTHWORK SUPPORT ALLOW FOR PROVISION AND SUBSEQUENT REMOVAL OF PLANKING AND STRUTTING TO UPHOLD AND MAINTAIN ALL VERTICAL FACES OF EXCAVATIONS	item	1.00		
B	Generally	Item	1.00		
	FILLING IMPORTED CRUSHED AGGREGATES (CRR) TO STANDARD SPECIFICATIONS TO MAKE UP LEVELS	Item	1.00		
C	C Average 150mm thick	m2	26,950.00		
	FILLING IMPORTED CRUSHED STONES (CRS) TO STANDARD SPECIFICATIONS TO MAKE UP LEVELS	Item	1.00		
D	D Average 150mm thick	m2	26,950.00		
item	FILLING; IMPORTED SUB-BASE MATERIAL GRADE G15; WELL COMPACTED TO MAKE UP LEVELS	item	1.00		
E	Average 100mm thick	m2	26,950.00		
item	FILLING; IMPORTED SUB-BASE MATERIAL GRADE G45; COMPACTED TO MAKE UP LEVEL TO MAKE UP LEVELS	item	1.00		
F	F Average 150mm thick	m2	26,950.00		
item	DISPOSAL EXCAVATED MATERIAL	item	1.00		
G	Removing from site	m3	26,950.00		
item	SECTION NR.4 TAX WAY (Cont'd) EXCAVATION AND EARTHWORKS (Cont'd) DISPOSAL OF WATER KEEPING EXCAVATIONS FREE OF	item	1.00		
A	A General water Item 500,000.00 A General water	Item	1.00		
item	SURFACE TREATMENTS SOIL STERILIZATION; ALDRIN 0.50% SOLUTION OR OTHER EQUAL AND APPROVED ANTI-TERMITE TREATMENT APPLIED AT A RATE OF 7 LITRES PER SQUARE METRE	item	1.00		
B	To surfaces of excavation or backfilling	m2	226,950.00		
item	FILLING; HARDCORE; BLINDED WITH SAND TO RECEIVE DAMP PROOF MEMBRANE (MEASURED SEPARATELY) TO MAKE UP LEVEL	item	1.00		
C	300mm thick	m2	26,950.00		
item	SECTION NR.4 TAX WAY (Cont'd) CONCRETE WORK PLAIN AND REINFORCED IN-SITU CONCRETE; GRADE 30; 20MM AGGREGATE MAXIMUM SIZE SLAB; LAID ON EARTH OR HARDCORE	item	1.00		

A	300mm thick	m2	26,950.00		
item	REINFORCEMENT; BARS; BS4449; HOT ROLLED PLAIN ROUND MILD STEEL STRAIGHT OR BENT	item	1.00		
B	12mm diameter	Kg	165,390.00		
C	32mm diameter	Kg	300,073.00		
item	SUNDRIES 1000 GAUGE POLYTHENE SHEET DAMP-PROOF MEMBRANE; 200MM LAPPED JOINTS	item	1.00		
D	Over 300mm wide; horizontal; on floors or the like	m2	26,950.00		
3600	Selecting and Utilizing Material From Borrow Pits and Cuttings				
36.01	Excavations:				
36.02	Fill and improved subgrade layers				
a	Improved subgrade layer as specified in the Drawings to require minimum G15 quality material	m3	1.00		
3700	Pavement Layers of Natural Gravel Materials				
37.02	Natural Gravel for Sub-base Course				
a	Natural Gravel Class G45	m3	1.00		
Summary					
BILL No 3 MEASURED WORKS					0.00
BILL NO. 2 PRIME COST AND PROVISIONAL SUMS					0.00
BILL NO. 1 PRELIMINARIES AND GENERAL MATTERS					0.00
BILL NO. 5 SCHEDULE OF DAYWORKS					0.00
BILL No 2 PRIME COST AND PROVISIONAL SUMS					0.00
ELEVATOR					0.00
4 BILL NUMBER FOUR - BUILDING SERVICES INSTALLATIONS					0.00
DOCUMENTS					0.00
SERIES 3000 EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE					0.00
A. Total of Bills					150,000.00
B. Less Specified Provisional Sum					150,000.00
C. SUB TOTAL [(A) - (B)]					0.00
D. ADD Provisional Sum of Physical Contingency					0.00
E. SUB TOTAL [(C) + (D)]					0.00
F. ADD Provisional Sum of Variation of Prices					0.00
G. Sub Total [(E) + (F)]					0.00
H. ADD Value Added Tax (VAT) [18% of G]					0.00
I. Bid Price [(A) + (D) +(F) + (H)] Carried to the Form of Tender					150,000.00

CONTRACT CONDITIONS AND CONTRACT FORMS

SECTION VIII: GENERAL CONDITIONS OF CONTRACT

GENERAL CONDITIONS OF CONTRACT

1. General Provisions

GCC Clause	GCC Sub Clause	GCC Sub Clause Description
1.1 Definitions	1.1.0	<p>In the Conditions of Contract (“these Conditions”), which include Special Conditions of Contract and these General Conditions, the following words and expressions shall have the meanings stated. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.</p>
1.1.1 The Contract	1.1.1	<p>“Arbitrator” is the person appointed by the Appointing Authority specified in the Special Conditions of Contract (SCC) to resolve contractual disputes, and as provided for in Sub-Clause 20.6 hereunder.</p> <p>“Contract” means the Contract Agreement, the Letter of Acceptance, the Form of Tender, these Conditions, the Specification, the Drawings, the Schedules, and the further documents (if any) which are listed in the Contract Agreement or in the Letter of Acceptance.</p> <p>“Form of Contract” means the contract agreement referred to in Sub-Clause 1.6 [Contract Agreement].</p> <p>“Letter of Acceptance” means the letter of formal acceptance, signed by the Employer, including any annexed memoranda comprising agreements between and signed by both Parties. If there is no such letter of acceptance, the expression “Letter of Acceptance” means the Contract Agreement and the date of issuing or receiving the Letter of Acceptance means the date of signing the Contract Agreement.</p> <p>“Form of Tender” means the document entitled Form of Tender which was completed by the Contractor and includes the signed offer to the Employer for the Works.</p> <p>“Specification” means the document entitled specification, as included in the Contract, and any additions and modifications to the specification in accordance with the Contract. Such document specifies the Works.</p> <p>“Drawings” means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Employer in accordance with the Contract.</p> <p>“Schedules” means the document(s) entitled schedules, completed by the Contractor and submitted with the Form of Tender, as included in the Contract. Such document may include the Bill of Quantities, data, lists, and schedules of rates and/or prices.</p> <p>“Tender” means the Form of Tender and all other documents which the Contractor submitted with the Form of Tender, as included in the Contract.</p> <p>“Bill of Quantities” and “Daywork Schedule” and “Schedule of Payment Currencies” mean the documents so named (if any) which are comprised in the Schedules.</p> <p>“Value Engineering” is a systematic and organized approach to provide the necessary functions at optimal cost. Value Engineering should normally enhance performance, reliability, quality, safety, durability, effectiveness, or other desirable characteristics Resulting in more efficient methods, alternatives, time reduction substitution of better materials, or less expensive inputs without sacrificing needed functionality or reliability. Value Engineering could result in the reduction of time or cost or all without sacrificing the needed functionality, longevity, or reliability.</p>
1.1.2 Parties and Persons	1.1.2	<p>“Party” means the Employer or the Contractor, as the context requires.</p> <p>“Employer” means the person named as employer in the SCC and the legal successors in title to this person.</p> <p>“Contractor” means the person(s) named as contractor in the Form of Tender accepted by the Employer and the legal successors in title to this</p>

person(s).

“Project Manager” means the person appointed by the Employer to act as the Project Manager for the purposes of the Contract and named in the SCC, or other person appointed from time to time by the Employer and notified to the Contractor under Sub-Clause 3.5.

“Contractor’s Representative” means the person named by the Contractor in the Contract or appointed from time to time by the Contractor under Sub-Clause 4.3, who acts on behalf of the Contractor.

“Employer’s Personnel” means the Project Manager, the assistants referred to in Sub-Clause 3.2 and all other staff, labour and other employees of the Project Manager and of the Employer; and any other personnel notified to the Contractor, by the Employer or the Project Manager, as Employer’s Personnel.

“Contractor’s Personnel” means the Contractor’s Representative and all personnel whom the Contractor utilises on Site, who may include the staff, labour and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the Works.

“Subcontractor” means any person named in the Contract as a subcontractor, or any person appointed as a subcontractor, for a part of the Works; and the legal successors in title to each of these persons.

“DARB” one or three persons appointed under Sub-Clause 20.2 [Appointment of the Dispute Avoidance and Resolution Board] or Sub-Clause 20.3 [Failure to Agree on the Composition of the Dispute Avoidance and Resolution Board].

“Base Date” means the date 28 days prior to the latest date for submission of the Tender.

“Commencement Date” means the date notified under Sub-Clause 8.1 [Commencement of Works].

“Time for Completion” means the time for completing the Works or a Section (as the case may be) under Sub-Clause 8.2 [Time for Completion], as stated in the SCC (with any extension under Sub-Clause 8.4 [Extension of Time for Completion]), calculated from the Commencement Date.

“Tests on Completion” means the tests which are specified in the Contract or agreed by both Parties or instructed as a Variation, and which are carried out under Clause 9 [Tests on Completion] before the Works or a Section (as the case may be) are taken over by the Employer.

“Taking-Over Certificate” means a certificate issued under Clause 10 [Employer’s Taking Over].

“Tests after Completion” means the tests (if any) which are specified in the Contract and which are carried out in accordance with the Specification after the Works or a Section (as the case may be) are taken over by the Employer.

“Defects Notification Period” means the period for notifying defects in the Works or a Section (as the case may be) under Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects], which extends over twelve months except if otherwise stated in the SCC (with any extension under Sub-Clause 11.3 [Extension of Defects Notification Period]), calculated from the date on which the Works or Section is completed as certified under Sub-Clause 10.1 [Taking Over of the Works and Sections].

“Performance Certificate” means the certificate issued under Sub-Clause 11.9 [Performance Certificate].

“day” means a calendar day and **“year”** means 365 days.

“Accepted Contract Amount” means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.

“Contract Price” means the price defined in Sub-Clause 14.1 [The Contract Price], and includes adjustments in accordance with the Contract.

**1.1.3 Dates, Tests,
Periods and Completion**

1.1.3

**1.1.4 Money and
Payments**

1.1.4

“**Cost**” means all expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.

“**Final Payment Certificate**” means the payment certificate issued under Sub-Clause 14.13 [Issue of Final Payment Certificate].

“**Final Statement**” means the statement defined in Sub-Clause 14.11 [Application for Final Payment Certificate].

“**Foreign Currency**” means a currency in which part (or all) of the Contract Price is payable, but not the Local Currency.

“**Interim Payment Certificate**” means a payment certificate issued under Clause 14 [Contract Price and Payment], other than the Final Payment Certificate.

“**Local Currency**” means the currency of the Country.

“**Payment Certificate**” means a payment certificate issued under Clause 14 [Contract Price and Payment].

“**Provisional Sum**” means a sum (if any) which is specified in the Contract as a provisional sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub-Clause 13.5 [Provisional Sums].

“**Retention Money**” means the accumulated retention moneys which the Employer retains under Sub-Clause 14.3 [Application for Interim Payment Certificates] and pays under Sub-Clause 14.9 [Payment of Retention Money].

“**Statement**” means a statement submitted by the Contractor as part of an application, under Clause 14 [Contract Price and Payment], for a payment certificate.

1.1.5 Works and Goods 1.1.5

“**Contractor’s Equipment**” means all apparatus, machinery, vehicles and other things required for the execution and completion of the Works and the remedying of any defects. However, Contractor’s Equipment excludes Temporary Works, Employer’s Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.

“**Goods**” means Contractor’s Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.

“**Materials**” means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the Contractor under the Contract.

“**Permanent Works**” means the permanent works to be executed by the Contractor under the Contract.

“**Plant**” means the apparatus, machinery and other equipment intended to form or forming part of the Permanent Works, including vehicles purchased for the Employer and relating to the construction or operation of the Works.

“**Section**” means a part of the Works specified in the SCC as a Section (if any).

“**Temporary Works**” means all temporary works of every kind (other than Contractor’s Equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.

“**Works**” mean the Permanent Works and the Temporary Works, or either of them as appropriate.

1.1.6 Other Definitions 1.1.6

“**Contractor’s Documents**” means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Contractor under the Contract.

“**Country**” means the country in which the Site (or most of it) is located, where the Permanent Works are to be executed.

“**Employer’s Equipment**” means the apparatus, machinery and

vehicles (if any) made available by the Employer for the use of the Contractor in the execution of the Works, as stated in the Specification; but does not include Plant which has not been taken over by the Employer.

“**Force Majeure**” is defined in Clause 19 [Force Majeure].

“**Laws**” means all national (or state) legislation, statutes, ordinances and other laws, and regulations and by-laws of any legally constituted public authority.

“**Performance Security**” means the security (or securities, if any) under Sub-Clause 4.2 [Performance Security].

“**Site**” means the places where the Permanent Works are to be executed including storage and working areas and to which Plant and Materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.

“**Unforeseeable**” means not reasonably foreseeable by an experienced contractor by the Base Date.

“**Variation**” means any change to the Works, which is instructed or approved as a variation under Clause 13 [Variations and Adjustments].

“**ES**” means Environmental and Social (including Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH)). “**ES**” means Environmental and Social (including Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH)).

“**Sexual Exploitation and Abuse**” “(SEA)” stands for the following:

Sexual Exploitation is defined as any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;

Sexual Abuse is defined as the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions; and

“**Sexual Harassment**” “(SH)” is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature by the Contractor’s Personnel with other Contractor’s or Employer’s Personnel.

1.2 Interpretation

1.2.1

In the Contract, except where the context requires otherwise:

- (a) words indicating one gender include all genders;
- (b) words indicating the singular also include the plural and words indicating the plural also include the singular;
- (c) provisions including the word “agree,” “agreed” or “agreement” require the agreement to be record in writing;
- (d) “written” or “in writing” means hand-written, type-written, printed or electronically made, and resulting in a permanent record; and
- (e) the word “bid” is synonymous with “Tender”, and “bidder” with “Tenderer” and the words “Bid documents” with “Tendering documents”

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

1.3 Communications

1.3.1

Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices, requests and discharges, these communications shall be:

- (a) in writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the SCC; and
- (b) delivered, sent or transmitted to the address for the recipient’s communications as stated in the SCC. However: (i) if the recipient gives notice of another address, communications shall thereafter be

		delivered accordingly; and (ii) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued.
1.4 Law and Language	1.3.2	Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Project Manager, a copy shall be sent to the Project Manager or the other Party, as the case may be.
	1.4.1	The Contract shall be governed by the law of Tanzania.
	1.4.2	The ruling language of the Contract shall be that stated in the SCC.
	1.4.3	The language for communications shall be that stated in the SCC. If no language is stated there, the language for communications shall be the ruling language of the Contract.
1.5 Priority of Documents	1.5.1	The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence: (a) Form of Contract; (b) Letter of Acceptance; (c) Special Conditions of Contract; (d) General Conditions of Contract; (e) Specification; (f) Drawings; (g) Bills of Quantities; (h) Completed Schedule (including Price Schedule); and (i) Any other additional documents stated in SCC forming part of contract. The additional documents will be indicated as Appendices [from Appendix 1 - Appendix nth].
	1.5.2	If an ambiguity or discrepancy is found in the documents, the Project Manager shall issue any necessary clarification or instruction.
	1.6 Contract Agreement	1.6.1 The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Employer. 1.6.2 If the Contractor comprises a JV, the authorised representative of the JV shall sign the Contract Agreement in accordance with Sub-Clause 1.15 (Joint and Several Liability).”
1.7 Conditions Precedent to contract effectiveness	1.7.1	The Contract shall come into effect after the Contractor fulfilling the conditions precedent stated in the SCC.
	1.7.2	If the Conditions precedent stipulated on Sub-Clause 1.7.1 is not met by the date specified in the SCC this contract shall not come into effect;
	1.7.3	If the Employer is satisfied that each of the conditions precedent in this contract has been satisfied (except to the extent waived by him, but subject to such conditions as he shall impose in respect of such waiver) he shall promptly issue to the contractor a certificate of Contract commencement, which shall confirm the start date
1.8 Assignment	1.8.1	Neither Party shall assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, either Party: (a) may assign the whole or any part with the prior agreement of the other Party, at the sole discretion of such other Party, and (b) may, as security in favour of a bank or financial institution, assign its

right to any moneys due, or to become due, under the Contract.

1.9 Care and Supply of Documents

1.9.1 The Specification and Drawings shall be in the custody and care of the Employer. Unless otherwise stated in the Contract, two copies of the Contract and of each subsequent Drawing shall be supplied to the Contractor, who may make or request further copies at the cost of the Contractor.

1.9.2 Each of the Contractor's Documents shall be in the custody and care of the Contractor, unless and until taken over by the Employer. Unless otherwise stated in the Contract, the Contractor shall supply to the Project Manager six copies of each of the Contractor's Documents.

1.9.3 The Contractor shall keep, on the Site, a copy of the Contract, publications named in the Specification, the Contractor's Documents (if any), the Drawings and Variations and other communications given under the Contract. The Employer's Personnel shall have the right of access to all these documents at all reasonable times.

1.9.4 If a Party becomes aware of an error or defect in a document which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect.

1.10 Delayed Drawings or Instructions

1.10.1 The Contractor shall give notice to the Project Manager whenever the Works are likely to be delayed or disrupted if any necessary drawing or instruction is not issued to the Contractor within a particular time, which shall be reasonable. The notice shall include details of the necessary drawing or instruction, details of why and by when it should be issued, and the nature and amount of the delay or disruption likely to be suffered if it is late.

1.10.2 If the Contractor suffers delay and/or incurs Cost as a result of a failure of the Project Manager to issue the notified drawing or instruction within a time which is reasonable and is specified in the notice with supporting details, the Contractor shall give a further notice to the Project Manager and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

1.10.3 After receiving this further notice, the Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine these matters.

1.10.4 However, if and to the extent that the Project Manager's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit.

1.11 Employer's Use of Contractor's Documents

1.11.1 As between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor.

1.11.2 The Contractor shall be deemed (by signing the Contract) to give to the Employer a non-terminable transferable non-exclusive royalty-free license to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This license shall:

- (a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,
- (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and

		(c) in the case of Contractor's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor.
	1.11.3	The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Employer for purposes other than those permitted under this Sub-Clause.
1.12 Contractor's Use of Employer's Documents	1.12.1	As between the Parties, the Employer shall retain the copyright and other intellectual property rights in the Specification, the Drawings and other documents made by (or on behalf of) the Employer. The Contractor may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without the Employer's consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract.
1.13 Confidential Details	1.13.1	The Contractor's and the Employer's Personnel shall disclose all such confidential and other information as may be reasonably required in order to verify the Contractor's compliance with the Contract and allow its proper implementation.
	1.13.2	Each of them shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out their respective obligations under the Contract or to comply with applicable Laws. Each of them shall not publish or disclose any particulars of the Works prepared by the other Party without the previous agreement of the other Party. However, the Contractor shall be permitted to disclose any publicly available information, or information otherwise required to establish his qualifications to compete for other projects.
1.14 Compliance with Laws	1.14.1	The Contractor shall, in performing the Contract, comply with applicable Laws. Unless otherwise stated in the SCC: (a) the Employer shall have obtained (or shall obtain) the planning, zoning, building permit or similar permission for the Permanent Works, and any other permissions described in the Specification as having been (or to be) obtained by the Employer; and the Employer shall indemnify and hold the Contractor harmless against and from the consequences of any failure to do so; and (b) the Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licenses and approvals, as required by the Laws in relation to the execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so, unless the Contractor is impeded to accomplish these actions and shows evidence of its diligence.
1.15 Joint and Several Liability	1.15.1	If the Contractor constitutes (under applicable Laws) a joint venture or other unincorporated grouping of two or more persons: (a) these persons shall be deemed to be jointly and severally liable to the Employer for the performance of the Contract; (b) these persons shall notify the Employer of their leader who shall have authority to bind the Contractor and each of these persons; and (c) (c) the Contractor shall not alter its composition or legal status without the prior consent of the Employer.

**1.16 Instructions,
Inspections and Audits**

1.16.1

The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the site is located.

1.16.2

The Contractor shall permit the Government of the United Republic of Tanzania to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the Government of United Republic of Tanzania if so required by the Government of the Republic of Tanzania.

2. THE EMPLOYER

2.1 Right of Access to the Site	2.1.1	The Employer shall give the Contractor right of access to, and possession of, all parts of the Site within the time (or times) stated in the SCC. The right and possession may not be exclusive to the Contractor. If, under the Contract, the Employer is required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Employer shall do so in the time and manner stated in the Specification.
	2.1.2	If no such time is stated in the GCC 2.2.1, the Employer shall give the Contractor right of access to, and possession of, the Site within such times as required to enable the Contractor to proceed without disruption in accordance with the programme submitted under Sub-Clause 8.3 [Programme].
	2.1.3	If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Employer to give any such right or possession within such time, the Contractor shall give notice to the Project Manager and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to: (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and (b) payment of any such Cost-plus profit, which shall be included in the Contract Price.
	2.1.4	After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine these matters.
	2.1.5	However, if and to the extent that the Employer's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit.
2.2 Permits, Licenses or Approvals	2.2.1	The Employer shall provide, at the request of the Contractor, such reasonable assistance as to allow the Contractor to obtain properly: (a) copies of the Laws Tanzania which are relevant to the Contract but are not readily available, and (b) any permits, licenses or approvals required by the Laws of Tanzania: (i) which the Contractor is required to obtain under Sub-Clause 1.14 [Compliance with Laws], (ii) for the delivery of Goods, including clearance through customs, and (iii) for the export of Contractor's Equipment when it is removed from the Site.
2.3 Employer's Personnel	2.3.1	The Employer shall be responsible for ensuring that the Employer's Personnel and the Employer's other contractors on the Site: (a) co-operate with the Contractor's efforts under Sub-Clause 4.6 [Co-operation], and (b) take actions similar to those which the Contractor is required to take under sub-paragraphs (a), (b) and (c) of Sub-Clause 4.8 [Safety Procedures] and under Sub-Clause 4.18 [Protection of the Environment].
2.4 Employer's Claims	2.4.1	If the Employer considers himself to be entitled to any payment under any Clause of these Conditions or otherwise in connection with the Contract, and/or to any extension of the Defects Notification Period, the Employer or the Project Manager shall give notice and particulars to the Contractor. However, notice is not required for payments due under Sub-Clause 4.19 [Electricity, Water and Gas], under Sub-Clause 4.20 [Employer's Equipment and Free-Issue Material], or for other services requested by the Contractor.
	2.4.2	The notice shall be given as soon as practicable and no longer than 28 days after the Employer became aware, or should have become aware, of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Notification Period shall be given

before the expiry of such period.

2.4.3

The particulars shall specify the Clause or other basis of the claim, and shall include substantiation of the amount and/or extension to which the Employer considers himself to be entitled in connection with the Contract. The Project Manager shall then proceed in accordance with Sub- Clause 3.6 [Determinations] to agree or determine (i) the amount (if any) which the Employer is entitled to be paid by the Contractor, and/or (ii) the extension (if any) of the Defects Notification Period in accordance with Sub- Clause 11.3 [Extension of Defects Notification Period].

2.4.4

This amount may be included as a deduction in the Contract Price and Payment Certificates. The Employer shall only be entitled to set off against or make any deduction from an amount certified in a Payment Certificate, or to otherwise claim against the Contractor, in accordance with this Sub-Clause.

3. THE PROJECT MANAGER

3.1 Project Manager's Duties and Authority	3.1.1	The Employer shall appoint the Project Manager who shall carry out the duties assigned to him in the Contract. The Project Manager's staff shall include suitably qualified architects, engineers, quantity surveyors and other professionals who are competent to carry out these duties.
	3.1.2	The Project Manager shall have no authority to amend the Contract.
	3.1.3	The Project Manager may exercise the authority attributable to the Project Manager as specified in or necessarily to be implied from the Contract. If the Project Manager is required to obtain the approval of the Employer before exercising a specified authority, the requirements shall be as stated in the SCC. The Employer shall promptly inform the Contractor of any change to the authority attributed to the Project Manager.
	3.1.4	However, whenever the Project Manager exercises a specified authority for which the Employer's approval is required, then (for the purposes of the Contract) the Employer shall be deemed to have given approval.
	3.1.5	Except as otherwise stated in these Conditions: (a) whenever carrying out duties or exercising authority, specified in or implied by the Contract, the Project Manager shall be deemed to act for the Employer; (b) the Project Manager has no authority to relieve either Party of any duties, obligations or responsibilities under the Contract; and (c) any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by the Project Manager (including absence of disapproval) shall not relieve the Contractor from any responsibility he has under the Contract, including responsibility for errors, omissions, discrepancies and non-compliances. (d) Any act by the Project Manager in response to a Contractor's request except otherwise expressly specified shall be notified in writing to the Contractor within 28 days of receipt.
	3.1.6	The Project Manager shall obtain the specific approval of the Employer before taking action under the following Sub-Clauses of these Conditions: (a) Sub-Clause 4.12: Agreeing or determining an extension of time and/or additional cost. (b) Sub-Clause 13.1: Instructing a Variation, except in an emergency situation as determined by the Project Manager. (c) Sub-Clause 13.3: Approving a proposal for Variation submitted by the Contractor in accordance with Sub Clause 13.1 or 13.2. (d) Sub-Clause 13.4: Specifying the amount payable in each of the applicable currencies (e) Notwithstanding the obligation, as set out above, to obtain approval, if, in the opinion of the Project Manager, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibility under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Project Manager, be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite the absence of approval of the Employer, with any such instruction of the Project Manager. The Project Manager shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 13 and shall notify the Contractor accordingly, with a copy to the Employer.

**3.2. The Project
Manager's Representative**

3.2.1 The Project Manager may appoint a Project Manager's Representative and delegate to him/her in accordance with Sub-Clause 3.3 [Delegation by the Project Manager] the authority necessary to act on the Project Manager's behalf at the Site, except to replace the Project Manager's Representative.

3.2.2 The Project Manager's Representative (if appointed) shall comply with Sub-Clause 3.1 [Project Manager's Appointment, Duties and Authority] and shall be based at the Site for the whole time that the Works are being executed at the Site. If the Project Managers' Representative is to be temporarily absent from the Site during the execution of the Works, an equivalently qualified, experienced and competent replacement shall be appointed by the Project Manager, and the Contractor shall be given a Notice of such replacement

3.2.3 The Project Manager shall obtain the consent of the Employer before appointing or replacing an Project Managers' Representative

**3.3 Delegation by the
Project Manager**

3.3.1 The Project Manager may from time to time assign duties and delegate authority to assistants, and may also revoke such assignment or delegation. These assistants may include a resident Project Manager, and/or independent inspectors appointed to inspect and/or test items of Plant and/or Materials. The assignment, delegation or revocation shall be in writing and shall not take effect until copies have been received by both Parties.

3.3.2 However, unless otherwise agreed by both Parties, the Project Manager shall not delegate the authority to determine any matter in accordance with Sub-Clause 3.6 [Determinations].

3.3.3 Assistants shall be suitably qualified persons, who are competent to carry out these duties and exercise this authority, and who are fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language]. [Variations and Adjustments] shall apply.

3.3.4 Each assistant, to whom duties have been assigned or authority has been delegated, shall only be authorised to issue instructions to the Contractor to the extent defined by the delegation. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by an assistant, in accordance with the delegation, shall have the same effect as though the act had been an act of the Project Manager. However:

- (a) any failure to disapprove any work, Plant or Materials shall not constitute approval, and shall therefore not prejudice the right of the Project Manager to reject the work, Plant or Materials;
- (b) if the Contractor questions any determination or instruction of an assistant, the Contractor may refer the matter to the Project Manager, who shall promptly confirm, reverse or vary the determination or instruction.

**3.4 Instructions of the
Project Manager**

3.4.1 The Project Manager may issue to the Contractor (at any time) instructions and additional or modified Drawings which may be necessary for the execution of the Works and the remedying of any defects, all in accordance with the Contract. The Contractor shall only take instructions from the Project Manager, or from an assistant to

whom the appropriate authority has been delegated under this Clause. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.

The Contractor shall comply with the instructions given by the Project Manager or delegated assistant, on any matter related to the Contract. Whenever practicable, their instructions shall be given in writing. If the Project Manager or a delegated assistant:

- (a) gives an oral instruction,
- (b) receives a written confirmation of the instruction, from (or on behalf of) the Contractor, within two working days after giving the instruction, and
- (c) does not reply by issuing a written rejection and/or instruction within two working days after receiving the confirmation, then the confirmation shall constitute the written instruction of the Project Manager or delegated assistant (as the case may be).

3.5 Replacement of the Project Manager

3.5.1

Notwithstanding Sub-Clause 3.1, if the Employer intends to replace the Project Manager, the Employer shall, not less than 21 days before the intended date of replacement, give notice to the Contractor of the name, address and relevant experience of the intended replacement Project Manager. If the Contractor considers the intended replacement Project Manager to be unsuitable, he has the right to raise reasonable objection against him by notice to the Employer, with supporting particulars, and the Employer shall give full and fair consideration to this objection.

3.6 Determinations

3.6.1

Whenever these Conditions provide that the Project Manager shall proceed in accordance with this Sub Clause 3.5 to agree or determine any matter, the Project Manager shall consult with each Party in an endeavour to reach agreement. If agreement is not achieved, the Project Manager shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.

3.6.2

The Project Manager shall give notice to both Parties of each agreement or determination, with supporting particulars within 28 days from the receipt of the corresponding claim or request except when otherwise specified. Each Party shall give effect to each agreement or determination unless and until revised under Clause 20 [Claims, Disputes and Arbitration]

4. THE CONTRACTOR

- 4.1 Contractor's General Obligations**
- 4.1.1** The Contractor shall design (to the extent specified in the Contract), execute and complete the Works in accordance with the Contract and with the Project Manager 's instructions, and shall remedy any defects in the Works.
- 4.1.2** The Contractor shall provide the Plant and Contractor's Documents specified in the Contract, and all Contractor's Personnel, Goods, consumables and other things and services, whether of a temporary or permanent nature, required in and for this design, execution, completion and remedying of defects.
- 4.1.3** All equipment, material, and services to be incorporated in or required for the Works shall have their origin in any eligible country.
- 4.1.4** The Contractor shall be responsible for the adequacy, stability and safety of all Site operations and of all methods of construction. Except to the extent specified in the Contract, the Contractor;
(i) shall be responsible for all Contractor 's Documents, Temporary Works, and such design of each item of Plant and Materials as is required for the item to be in accordance with the Contract, and
(ii) shall not otherwise be responsible for the design or specification of the Permanent Works.
- 4.1.5** The Contractor shall, whenever required by the Project Manager, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No significant alteration to these arrangements and methods shall be made without this having previously been notified to the Project Manager.
- 4.1.6** The Contractor shall not carry out mobilization to Site (e.g. limited clearance for haul roads, site accesses and work site establishment, geotechnical investigations or investigations to select ancillary features such as quarries and borrow pits) unless the Project Manager gives a Notice of No-objection to the Contractor, a Notice that shall not be unreasonably delayed, to the measures the Contractor proposes to manage the environmental and social risks and impacts, which at a minimum shall include applying the Management Strategies and Implementation Plans (MSIPs) and Code of Conduct for Contractor's Personnel submitted as part of the Tender and agreed as part of the Contract.
- 4.1.7** The Contractor shall submit, to the Project Manager for Review and approval, any additional MSIPs as are necessary to manage the ES risks and impacts of ongoing Works (e.g. excavation, earth works, bridge and structure works, stream and road diversions, quarrying or extraction of materials, concrete batching and asphalt manufacture). These MSIPs collectively comprise the Contractor's Environmental and Social Management Plan (C-ESMP). The Contractor shall review the C-ESMP, periodically (but not less than every six (6) months), and update it as required to ensure that it contains measures appropriate to the Works. The updated C-ESMP shall be submitted to the Project Manager for Review.
- 4.1.8** If the Contract specifies that the Contractor shall design any part of the Permanent Works, then unless otherwise stated in the SCC:
(a) the Contractor shall submit to the Project Manager the Contractor's Documents for this part in accordance with the procedures specified in the Contract;
(b) these Contractor's Documents shall be in accordance with the Specification and Drawings, shall be written in the language for communications defined in Sub-Clause 1.4 [Law and Language], and shall include additional information required by the Project

Manager to add to the Drawings for co[1]ordination of each Party's designs;

- (c) the Contractor shall be responsible for this part and it shall, when the Works are completed, be fit for such purposes for which the part is intended as are specified in the Contract; and
- (d) prior to the commencement of the Tests on Completion, the Contractor shall submit to the Project Manager the as-built documents and, if applicable, operation and maintenance manuals in accordance with the Specification and in sufficient detail for the Employer to operate, maintain, dismantle, reassemble, adjust and repair this part of the Works. Such part shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections] until these documents and manuals have been submitted to the Project Manager

4.2 Performance Security and ES Performance Security

- 4.2.1** The Contractor shall obtain (at its cost) a Performance Security for proper performance and, if applicable, an Environmental and Social (ES) Performance Security for compliance with the Contractor's ES obligations, in the amounts stated in the SCC and denominated in the currency(ies) of the Contract or in a freely convertible currency acceptable to the Employer. If amounts are not stated in the SCC, this Sub-Clause shall not apply.
- 4.2.2** The Contractor shall deliver the Performance Security and, if applicable, an ES Performance Security to the Employer within 28 days after receiving the Letter of Acceptance and shall send a copy to the Project Manager. The Performance Security shall be issued by a reputable bank or financial institution selected by the Contractor and shall be in the form annexed to the SCC, as stipulated by the Employer in the Contract Data, or in another form approved by the Employer. The ES Performance Security shall be issued by a reputable bank selected by the Contractor and shall be in the form annexed to the SCC, as stipulated by the Employer in the Contract Data, or in another form approved by the Employer
- 4.2.3** The Contractor shall ensure that the Performance Security and, if applicable, an ES Performance Security is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects. If the terms of the Performance Security and, if applicable, an ES Performance Security specify its expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the Performance Security and, if applicable, an ES Performance Security until the Works have been completed and any defects have been remedied.
- 4.2.4** The Employer shall not make a claim under the Performance Security and, if applicable, an ES Performance Security, except for amounts to which the Employer is entitled under the Contract. The Employer shall indemnify and hold the Contractor harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from a claim under the Performance Security and, if applicable, an ES Performance Security to the extent to which the Employer was not entitled to make the claim.
- 4.2.5** The Employer shall return the Performance Security and, if applicable, an ES Performance Security to the Contractor within 21 days after receiving a copy of the Performance Certificate.
- 4.2.6** Without limitation to the provisions of the rest of this Sub Clause, whenever the Project Manager determines an addition or a reduction to the Contract Price as a result of a change in cost and/or legislation or as a result of cumulative Variations amounting to more than 10 percent of the portion of the Contract Price payable in a specific currency, the Contractor shall at the Project Manager's request promptly increase, or

may decrease, as the case may be, the value of the Performance Security and, if applicable, an ES Performance Security in that currency by an equal percentage.

4.3 Contractor's Representative

- 4.3.1** The Contractor shall appoint the Contractor's Representative and shall give him all authority necessary to act on the Contractor's behalf under the Contract.
- 4.3.2** Unless the Contractor's Representative is named in the Contract, the Contractor shall, prior to the Commencement Date, submit to the Project Manager for consent the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If consent is withheld or subsequently revoked in terms of Sub-Clause 6.9 [Contractor's Personnel], or if the appointed person fails to act as Contractor's Representative, the Contractor shall similarly submit the name and particulars of another suitable person for such appointment.
- 4.3.3** The Contractor shall not, without the prior consent of the Project Manager, revoke the appointment of the Contractor's Representative or appoint a replacement.
- 4.3.4** The whole time of the Contractor's Representative shall be given to directing the Contractor's performance of the Contract. If the Contractor's Representative is to be temporarily absent from the Site during the execution of the Works, a suitable replacement person shall be appointed, subject to the Project Manager's prior consent, and the Project Manager shall be notified accordingly.
- 4.3.5** The Contractor's Representative shall, on behalf of the Contractor, receive instructions under Sub-Clause 3.4 [Instructions of the Project Manager].
- 4.3.6** The Contractor's Representative may delegate any powers, functions and authority to any competent person, and may at any time revoke the delegation. Any delegation or revocation shall not take effect until the Project Manager has received prior notice signed by the Contractor's Representative, naming the person and specifying the powers, functions and authority being delegated or revoked.
- 4.3.7** The Contractor's Representative shall be fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language]. If the Contractor's Representative's delegates are not fluent in the said language, the Contractor shall make competent interpreters available during all working hours in a number deemed sufficient by the Project Manager.

4.4 Sub Contractors

- 4.4.1** The Contractor shall not subcontract the whole of the Works.
- 4.4.2** The Contractor shall be responsible for the acts or defaults of any Subcontractor, his agents or employees, as if they were the acts or defaults of the Contractor. Unless otherwise stated in the SCC:
- (a) the Contractor shall not be required to obtain consent to suppliers solely of Materials, or to a subcontract for which the Subcontractor is named in the Contract;
 - (b) the prior consent of the Project Manager shall be obtained to other proposed Subcontractors;
 - (c) the Contractor shall give the Project Manager not less than 28 days' notice of the intended date of the commencement of each Subcontractor's work, and of the commencement of such work on the Site; and
 - (d) each subcontract shall include provisions which would entitle the Employer to require the subcontract to be assigned to the Employer under Sub-Clause 4.5 [Assignment of Benefit of Subcontract] (if or when applicable) or in the event of termination under Sub-Clause 15.2 [Termination by Employer].

	4.4.3	The Contractor shall ensure that the requirements imposed on the Contractor by Sub-Clause 1.13 [Confidential Details] apply equally to each Subcontractor.
	4.4.4	Where practicable, the Contractor shall give fair and reasonable opportunity for contractors from the Country to be appointed as Subcontractors.
4.5 Assignment of Benefit of Subcontract	4.5.1	If a Subcontractor's obligations extend beyond the expiry date of the relevant Defects Notification Period and the Project Manager, prior to this date, instructs the Contractor to assign the benefit of such obligations to the Employer, then the Contractor shall do so. Unless otherwise stated in the assignment, the Contractor shall have no liability to the Employer for the work carried out by the Subcontractor after the assignment takes effect.
4.6 Co-operation	4.6.1	The Contractor shall, as specified in the Contract or as instructed by the Project Manager, allow appropriate opportunities for carrying out work to: <ul style="list-style-type: none"> (a) the Employer's Personnel, (b) any other contractors employed by the Employer, and (c) the personnel of any legally constituted public authorities, who may be employed in the execution on or near the Site of any work not included in the Contract.
	4.6.2	Any such instruction shall constitute a Variation if and to the extent that it causes the Contractor to suffer delays and/or to incur Unforeseeable Cost. Services for these personnel and other contractors may include the use of Contractor's Equipment, Temporary Works or access arrangements which are the responsibility of the Contractor
	4.6.3	If, under the Contract, the Employer is required to give to the Contractor possession of any foundation, structure, plant or means of access in accordance with Contractor's Documents, the Contractor shall submit such documents to the Project Manager in the time and manner stated in the Specification.
4.7 Setting Out	4.7.1	The Contractor shall set out the Works in relation to original points, lines and levels of reference specified in the Contract or notified by the Project Manager. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works.
	4.7.2	The Employer shall be responsible for any errors in these specified or notified items of reference, but the Contractor shall use reasonable efforts to verify their accuracy before they are used.
	4.7.3	If the Contractor suffers delay and/or incurs Cost from executing work which was necessitated by an error in these items of reference, and an experienced contractor could not reasonably have discovered such error and avoided this delay and/or Cost, the Contractor shall give notice to the Project Manager and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to: <ul style="list-style-type: none"> (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and (b) payment of any such Cost-plus profit, which shall be included in the Contract Price.
	4.7.4	After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine (i) whether and (if so) to what extent the error could not reasonably have been discovered, and (ii) the matters described in subparagraphs (a) and (b) above related to this extent.
4.8 Safety Procedures	4.8.1	The Contractor shall: <ul style="list-style-type: none"> (a) comply with all applicable safety regulations, (b) take care for the safety of all persons entitled to be on the Site, (c) use reasonable efforts to keep the Site and Works clear of

- unnecessary obstruction so as to avoid danger to these persons,
- (d) provide fencing, lighting, guarding and watching of the Works until completion and taking over under Clause 10 [Employer's Taking Over], and
- (e) provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.

4.9 Quality Assurance	4.9.1	The Contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The Project Manager shall be entitled to audit any aspect of the system.
	4.9.2	Details of all procedures and compliance documents shall be submitted to the Project Manager for information before each design and execution stage is commenced. When any document of a technical nature is issued to the Project Manager, evidence of the prior approval by the Contractor himself shall be apparent on the document itself.
	4.9.3	Compliance with the quality assurance system shall not relieve the Contractor of any of his duties, obligations or responsibilities under the Contract.
4.10 Site Data	4.10.1	The Employer shall have made available to the Contractor for his information, prior to the Base Date, all relevant data in the Employer's possession on sub- surface and hydrological conditions at the Site, including environmental aspects. The Employer shall similarly make available to the Contractor all such data which come into the Employer's possession after the Base Date. The Contractor shall be responsible for interpreting all such data.
	4.10.2	To the extent which was practicable (taking account of cost and time), the Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Tender or Works. To the same extent, the Contractor shall be deemed to have inspected and examined the Site, its surroundings, the above data and other available information, and to have been satisfied before submitting the Tender as to all relevant matters, including (without limitation): <ul style="list-style-type: none"> (a) the form and nature of the Site, including sub- surface conditions, (b) the hydrological and climatic conditions, (c) the extent and nature of the work and Goods necessary for the execution and completion of the Works and the remedying of any defects, (d) the Laws, procedures and labour practices of the Country, and (e) the Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services
4.11 Sufficiency of the Accepted Contract Amount	4.11.1	The Contractor shall be deemed to: <ul style="list-style-type: none"> (a) have satisfied himself as to the correctness and sufficiency of the Accepted Contract Amount, and (b) have based the Accepted Contract Amount on the data, interpretations, necessary information, inspections, examinations and satisfaction as to all relevant matters referred to in Sub-Clause 4.10 [Site Data].
	4.11.2	Unless otherwise stated in the Contract, the Accepted Contract Amount covers all the Contractor's obligations under the Contract (including those under Provisional Sums, if any) and all things necessary for the

4.12 Unforeseeable Physical Conditions

proper execution and completion of the Works and the remedying of any defects.

4.12.1 In this Sub-Clause, “physical conditions” means natural physical conditions and man-made and other physical obstructions and pollutants, which the Contractor encounters at the Site when executing the Works, including sub-surface and hydrological conditions but excluding climatic conditions.

4.12.2 If the Contractor encounters adverse physical conditions which he considers to have been Unforeseeable, the Contractor shall give notice to the Project Manager as soon as practicable. This notice shall describe the physical conditions, so that they can be inspected by the Project Manager, and shall set out the reasons why the Contractor considers them to be Unforeseeable. The Contractor shall continue executing the Works, using such proper and reasonable measures as are appropriate for the physical conditions, and shall comply with any instructions which the Project Manager may give. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.

4.12.3 If and to the extent that the Contractor encounters physical conditions which are Unforeseeable, gives such a notice, and suffers delay and/or incurs Cost due to these conditions, the Contractor shall be entitled subject to notice under Sub-Clause 20.1 [Contractor’s Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

4.12.4 Upon receiving such notice and inspecting and/or investigating these physical conditions, the Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine

- (i) whether and (if so) to what extent these physical conditions were Unforeseeable, and
- (ii) the matters described in sub- paragraphs (a) and (b) above related to this extent.

4.12.5 However, before additional Cost is finally agreed or determined under sub-paragraph (ii), the Project Manager may also review whether other physical conditions in similar parts of the Works (if any) were more favourable than could reasonably have been foreseen when the Contractor submitted the Tender. If and to the extent that these more favourable conditions were encountered, the Project Manager may proceed in accordance with Sub- Clause 3.6 [Determinations] to agree or determine the reductions in Cost which were due to these conditions, which may be included (as deductions) in the Contract Price and Payment Certificates. However, the net effect of all adjustments under sub-paragraph (b) and all these reductions, for all the physical conditions encountered in similar parts of the Works, shall not result in a net reduction in the Contract Price.

4.12.6 The Project Manager shall take account of any evidence of the physical conditions foreseen by the Contractor when submitting the Tender, which shall be made available by the Contractor, but shall not be bound by the Contractor’s interpretation of any such evidence

4.13 Rights of Way and Facilities

4.13.1 Unless otherwise specified in the Contract, the Employer shall provide access to and possession of the Site including special and/or temporary

rights-of-way which are necessary for the Works. The Contractor shall obtain, at his risk and cost, any additional rights of way or facilities outside the Site which he may require for the purposes of the Work

4.14 Avoidance of Interference

4.14.1

The Contractor shall not interfere unnecessarily or improperly with:

- (a) the convenience of the public, or
- (b) the access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the Employer or of others.

4.14.2

The Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

4.15 Access Route

4.15.1

The Contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the Site at Base Date. The Contractor shall use reasonable efforts to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These efforts shall include the proper use of appropriate vehicles and routes.

4.15.2

Except as otherwise stated in these Conditions:

- (a) the Contractor shall (as between the Parties) be responsible for any maintenance which may be required for his use of access routes;
- (b) the Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of routes, signs and directions;
- (c) the Employer shall not be responsible for any claims which may arise from the use or otherwise of any access route;
- (d) the Employer does not guarantee the suitability or availability of particular access routes; and
- (e) Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne by the Contractor the execution of the Works. The Contractor shall not remove from the Site any major items of Contractor's Equipment without the consent of the Project Manager. However, consent shall not be required for vehicles transporting Goods or Contractor's Personnel off Site.

4.16 Transport of Goods

4.16.1

Unless otherwise stated in the SCC:

- (a) the Contractor shall give the Project Manager not less than 21 days' notice of the date on which any Plant or a major item of other Goods will be delivered to the Site;
- (b) the Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works; and
- (c) the Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the transport of Goods, and shall negotiate and pay all claims arising from their transport.

4.17 Contractor's Equipment

4.17.1

The Contractor shall be responsible for all Contractor's Equipment. When brought on to the Site, Contractor's Equipment shall be deemed to be exclusively intended for.

4.18 Protection of the Environment

4.18.1

The Contractor shall take all necessary measures to:

- (a) protect the environment (both on and off the Site); and
- (b) limit damage and nuisance to people and property resulting from pollution, noise and other results of the Contractor's operations and/ or activities.

The Contractor shall ensure that emissions, surface discharges, effluent and any other pollutants from the Contractor's activities shall exceed neither the values indicated in the Specification, nor those prescribed

		by applicable Laws.
	4.18.2	In the event of damage to the environment, property and/or nuisance to people, on or off Site as a result of the Contractor's operations, the Contractor shall agree with the Project Manager the appropriate actions and time scale to remedy, as practicable, the damaged environment to its former condition. The Contractor shall implement such remedies at its cost to the satisfaction of the Project Manager.
4.19 Electricity, Water and Gas	4.19.1	The Contractor shall, except as stated below, be responsible for the provision of all power, water and other services he may require for his construction activities and to the extent defined in the Specifications, for the tests.
	4.19.2	The Contractor shall be entitled to use for the purposes of the Works such supplies of electricity, water, gas and other services as may be available on the Site and of which details and prices are given in the Specification. The Contractor shall, at his risk and cost, provide any apparatus necessary for his use of these services and for measuring the quantities consumed.
	4.19.3	The quantities consumed and the amounts due (at these prices) for such services shall be agreed or determined by the Project Manager in accordance with Sub-Clause 2.4 [Employer's Claims] and Sub-Clause 3.6 [Determinations]. The Contractor shall pay these amounts to the Employer.
4.20 Employer's Equipment and Free-Issue Materials	4.20.1	The Employer shall make the Employer's Equipment (if any) available for the use of the Contractor in the execution of the Works in accordance with the details, arrangements and prices stated in the Specification. Unless otherwise stated in the Specification: (a) the Employer shall be responsible for the Employer's Equipment, except that (b) the Contractor shall be responsible for each item of Employer's Equipment whilst any of the Contractor's Personnel is operating it, driving it, directing it or in possession or control of it.
	4.20.2	The appropriate quantities and the amounts due (at such stated prices) for the use of Employer's Equipment shall be agreed or determined by the Project Manager in accordance with Sub-Clause 2.4 [Employer's Claims] and Sub-Clause 3.6 [Determinations]. The Contractor shall pay these amounts to the Employer.
	4.20.3	The Employer shall supply, free of charge, the "free-issue materials" (if any) in accordance with the details stated in the Specification. The Employer shall, at his risk and cost, provide these materials at the time and place specified in the Contract. The Contractor shall then visually inspect them, and shall promptly give notice to the Project Manager of any shortage, defect or default in these materials. Unless otherwise agreed by both Parties, the Employer shall immediately rectify the notified shortage, defect or default.
	4.20.4	After this visual inspection, the free-issue materials shall come under the care, custody and control of the Contractor. The Contractor's obligations of inspection, care, custody and control shall not relieve the Employer of liability for any shortage, defect or default not apparent from a visual inspection
4.21 Progress Reports	4.21.1	Unless otherwise stated in the SCC, monthly progress reports shall be prepared by the Contractor and submitted to the Project Manager in six copies. The first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the period to which it relates.
	4.21.2	Reporting shall continue until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.
	4.21.3	Each report shall include:

- (a) charts and detailed descriptions of progress, including each stage of design (if any), Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection and testing; and including these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),
- (b) photographs showing the status of manufacture and of progress on the Site;
- (c) for the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of: (i) commencement of manufacture, (ii) Contractor's inspections, (iii) tests, and (iv) shipment and arrival at the Site;
- (d) the details described in Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment];
- (e) copies of quality assurance documents, test results and certificates of Materials;
- (f) list of notices given under Sub-Clause 2.4 [Employer's Claims] and notices given under Sub-Clause 20.1 [Contractor's Claims];
- (g) the Environmental and Social (ES) metrics set out in Appendix A; and comparisons of actual and planned progress, with details of any events or circumstances which may jeopardise the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.

4.21.4 In addition to the reporting requirement of sub-paragraph (g) of Sub-Clause 4.21.3 the Contractor shall inform the Project Manager immediately of any allegation, incident or accident, which has or is likely to have a significant adverse effect on the environment, the affected communities, the public, Employer's Personnel or Contractor's Personnel. This includes, but is not limited to, any incident or accident-causing fatality or serious injury; significant adverse effects or damage to private property; or any allegation of SEA and/or SH. In case of SEA and/or SH, while maintaining confidentiality as appropriate, the type of allegation (sexual exploitation, sexual abuse or sexual harassment), gender and age of the person who experienced the alleged incident should be included in the information.

4.21.5 The Contractor, upon becoming aware of the allegation, incident or accident, shall also immediately inform the Project Manager of any such incident or accident on the Subcontractors' or suppliers' premises relating to the Works which has or is likely to have a significant adverse effect on the environment, the affected communities, the public, Employer's Personnel or Contractor's, its Subcontractors' and suppliers' personnel. The notification shall provide sufficient detail regarding such incidents or accidents. The Contractor shall provide full details of such incidents or accidents to the Project Manager within the timeframe agreed with the Project Manager. The Contractor shall require its Subcontractors and suppliers (other than Subcontractors) to immediately notify the Contractor of any incidents or accidents referred to in this Sub-Clause

4.22 Security of the Site

4.22.1 The Contractor shall be responsible for the security of the Site, and:

- (a) for keeping unauthorized persons off the Site;
- (b) authorized persons shall be limited to the Contractor's Personnel, the Employer's Personnel, and to any other personnel identified as authorized personnel (including the Employer's other contractors on the Site), by a Notice from the Employer or the Engineer to the Contractor.

4.22.2 Subject to Sub-Clause 4.1 [Contractor's General Obligations], the Contractor shall submit for the Project Manager's No-objection a security management plan that sets out the security arrangements for the Site.

	4.22.3	The Contractor shall (i) conduct appropriate background checks on any personnel retained to provide security; (ii) train the security personnel adequately (or determine that they are properly trained) in the use of force (and where applicable, firearms), and appropriate conduct towards Contractor's Personnel, Employer's Personnel and affected communities; and (iii) require the security personnel to act within the applicable Laws and any requirements set out in the Specification.
	4.22.4	The Contractor shall not permit any use of force by security personnel in providing security except when used for preventive and defensive purposes in proportion to the nature and extent of the threat.
	4.22.5	In making security arrangements, the Contractor shall also comply with any additional requirements stated in the Specification."
4.23 Contractor's Operations on Site	4.23.1	The Contractor shall confine his operations to the Site, and to any additional are as which may be obtained by the Contractor and agreed by the Project Manager as additional working areas. The Contractor shall take all necessary precautions to keep Contractor's Equipment and Contractor's Personnel within the Site and these additional areas, and to keep them off adjacent land.
	4.23.2	During the execution of the Works, the Contractor shall keep the Site free from all unnecessary obstruction, and shall store or dispose of any Contractor's Equipment or surplus materials. The Contractor shall clear away and remove from the Site any wreckage, rubbish and Temporary Works which are no longer required.
	4.23.3	Upon the issue of a Taking-Over Certificate, the Contractor shall clear away and remove, from that part of the Site and Works to which the Taking-Over Certificate refers, all Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works. The Contractor shall leave that part of the Site and the Works in a clean and safe condition. However, the Contractor may retain on Site, during the Defects Notification Period, such Goods as are required for the Contractor to fulfil obligations under the Contract.
4.24 Fossils	4.24.1	All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site shall be placed under the care and authority of the Employer. The Contractor shall take reasonable precautions to prevent Contractor's Personnel or other persons from removing or damaging any of these findings.
	4.24.2	The Contractor shall, upon discovery of any such finding, promptly give notice to the Project Manager, who shall issue instructions for dealing with it. If the Contractor suffers delay and/or incurs Cost from complying with the instructions, the Contractor shall give a further notice to the Project Manager and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to: (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and (b) payment of any such Cost, which shall be included in the Contract Price.
	4.24.3	After receiving this further notice, the Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine these matters.

5. NOMINATED SUBCONTRACTORS

5.1 Definition of “nominated Subcontractor”	5.1.1	In the Contract, “nominated Subcontractor” means a Subcontractor: (a) who is stated in the Contract as being a nominated Subcontractor, or (b) whom the Project Manager, under Clause 13 [Variations and Adjustments], instructs the Contractor to employ as a Subcontractor subject to Sub-Clause 5.2 [Objection to Notification].
5.2 Objection to Nomination	5.2.1	The Contractor shall not be under any obligation to employ a nominated Subcontractor against whom the Contractor raises reasonable objection by notice to the Project Manager as soon as practicable, with supporting particulars.
	5.2.2	An objection shall be deemed reasonable if it arises from (among other things) any of the following matters, unless the Employer agrees in writing to indemnify the Contractor against and from the consequences of the matter: (a) there are reasons to believe that the Subcontractor does not have sufficient competence, resources or financial strength; (b) the nominated Subcontractor does not accept to indemnify the Contractor against and from any negligence or misuse of Goods by the nominated Subcontractor, his agents and employees; or (c) the nominated Subcontractor does not accept to enter into a subcontract which specifies that, for the subcontracted work (including design, if any), the nominated Subcontractor shall: (i) undertake to the Contractor such obligations and liabilities as will enable the Contractor to discharge his obligations and liabilities under the Contract; (ii) indemnify the Contractor against and from all obligations and liabilities arising under or in connection with the Contract and from the consequences of any failure by the Subcontractor to perform these obligations or to fulfil these liabilities; and (iii) be paid only if and when the Contractor has received from the Employer payments for sums due under the Subcontract referred to under Sub-Clause 5.3 [Payment to nominated Subcontractors].
5.3 Payments to nominated Subcontractors	5.3.1	The Contractor shall pay to the nominated Subcontractor the amounts shown on the nominated Subcontractor’s invoices approved by the Contractor which the Project Manager certifies to be due in accordance with the subcontract.
	5.3.2	These amounts plus other charges shall be included in the Contract Price in accordance with sub-paragraph (b) of Sub-Clause 13.5 [Provisional Sums], except as stated in Sub-Clause 5.4 [Evidence of Payments].
5.4 Evidence of Payments	5.4.1	Before issuing a Payment Certificate which includes an amount payable to a nominated Subcontractor, the Project Manager may request the Contractor to supply reasonable evidence that the nominated Subcontractor has received all amounts due in accordance with previous Payment Certificates, less applicable deductions for retention or otherwise.
	5.4.2	Unless the Contractor: (a) submits this reasonable evidence to the Project Manager, or (b) satisfies the Project Manager in writing that the Contractor is reasonably entitled to withhold or refuse to pay these amounts, and submits to the Project Manager reasonable evidence that the nominated Subcontractor has been notified of the Contractor’s entitlement, then the Employer may (at his sole discretion) pay, direct to the nominated Subcontractor, part or all of such amounts previously certified (less applicable deductions) as are due to the nominated Subcontractor and for which the Contractor has failed to submit the evidence described in sub-paragraphs (a) or (b) above. The Contractor shall then repay, to the Employer, the

amount which the nominated Subcontractor was directly paid by the Employer.

6. STAFF AND LABOUR

6.1 Engagement of Staff and Labour	6.1.1	Except as otherwise stated in the Specification, the Contractor shall make arrangements for the engagement of all staff and labour, local or otherwise, and for their payment, feeding, transport, and, when appropriate, housing.
	6.1.2	The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labour with appropriate qualifications and experience from sources within Tanzania.
6.2 Rates of Wages and Conditions of Labour	6.2.1	The Contractor shall pay rates of wages, and observe conditions of labour, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor.
	6.2.2	The Contractor shall inform the Contractor's Personnel about their liability to pay personal income taxes in the Country in respect of such of their salaries, wages, allowances, and any benefits as are subject to taxes under the Laws of Tanzania for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such Laws.
6.3 Persons in the Service of Employer	6.3.1	The Contractor shall not recruit, or attempt to recruit, staff and labour from amongst the Employer's Personnel.
6.4 Labour Laws	6.4.1	The Contractor shall comply with all the relevant labour Laws applicable to the Contractor's Personnel, including Laws relating to their employment, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights.
	6.4.2	The Contractor shall require his employees to obey all applicable Laws, including those concerning safety at work.
6.5 Working Hours	6.5.1	No work shall be carried out on the Site on locally recognised days of rest, or outside the normal working hours stated in the SCC, unless: (a) otherwise stated in the Contract, (b) the Project Manager gives consent, or (c) the work is unavoidable, or necessary for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Project Manager.
	6.5.2	The Contractor shall provide the Contractor's Personnel annual holiday and sick, maternity and family leave, as required by applicable Laws or as stated in the Specification.
6.6 Facilities for Staff and Labour	6.6.1	Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. The Contractor shall also provide facilities for the Employer's Personnel as stated in the Specification
	6.6.2	The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.
6.7 Health and Safety	6.7.1	The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and ambulance service are available at all times at the Site and at any accommodation for Contractor's and Employer's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.
	6.7.2	Subject to Sub-Clause 6.7.1, the Contractor shall submit to the Project

Manager for Review a health and safety manual which has been specifically prepared for the Works, the Site and other places (if any) where the Contractor intends to execute the Works

- 6.7.3** The health and safety manual shall be in addition to any other similar document required under applicable health and safety regulations and Laws. The health and safety manual shall set out all the health and safety requirements under the Contract, which shall include at a minimum:
- (a) the procedures to establish and maintain a safe working environment without risk to health at all workplaces, machinery, equipment and processes under the control of the Contractor, including control measures for chemical, physical and biological substances and agents;
 - (b) details of the training to be provided, records to be kept;
 - (c) the procedures for prevention, preparedness and response activities to be implemented in the case of an emergency event (i.e. an unanticipated incident, arising from both natural and man-made hazards, typically in the form of fire, explosions, leaks or spills, which may occur for a variety of different reasons including failure to implement operating procedures that are designed to prevent their occurrence, extreme weather or lack of early warning);
 - (d) the measures to be taken to avoid or minimize the potential for community exposure to water- borne, water-based, water-related, and vector- borne diseases,
 - (e) the measures to be implemented to avoid or minimize the spread of communicable diseases (including transfer of Sexually Transmitted Diseases or Infections (STDs), such as HIV virus) and non-communicable diseases associated with the execution of the Works, taking into consideration differentiated exposure to and higher sensitivity of vulnerable groups. This includes taking measures to avoid or minimize the transmission of communicable diseases that may be associated with the influx of temporary or permanent Contract-related labour;
 - (f) the policies and procedures on the management and quality of accommodation and welfare facilities if such accommodation and welfare facilities are provided by the Contractor in accordance with Sub-Clause 6.6.1; and any other requirements stated in the Specification.
- 6.7.4** The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility, and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility.
- 6.7.5** The Contractor shall send, to the Project Manager, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Project Manager may reasonably require.
- 6.7.6** The Contractor shall conduct a COVID-19 and an HIV- AIDS awareness programme via an approved service provider, and shall undertake such other measures as are specified in this Contract to reduce the risk of the transfer of the COVID-19 and HIV virus between and among the Contractor's Personnel and the local community, to promote early diagnosis and to assist affected individuals.
- 6.7.7** The Contractor shall throughout the contract (including the Defects Notification Period): (i) conduct Information, Education and Consultation Communication (IEC) campaigns, at least every other month, addressed to all the Site staff and labour (including all the Contractor's employees, all Sub-Contractors and Consultants'

employees, and all truck drivers and crew making deliveries to Site for construction activities) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behaviour with respect to, of Sexually Transmitted Diseases (STD)—or Sexually Transmitted Infections (STI) in general and HIV/AIDS in particular; (ii) provide male or female condoms for all Site staff and labour as appropriate; and (iii) provide for STI and HIV/AIDS screening, diagnosis, counselling and referral to a dedicated national STI and HIV/AIDS program, (unless otherwise agreed) of all Site staff and labour.

6.7.8 The Contractor shall include in the program to be submitted for the execution of the Works under Sub- Clause 8.3 an alleviation program for Site staff and labour and their families in respect of Sexually Transmitted Infections (STI) and Sexually Transmitted Diseases (STD) including HIV/AIDS. The STI, STD and HIV/AIDS alleviation program shall indicate when, how and at what cost the Contractor plans to satisfy the requirements of this Sub-Clause and the related specification. For each component, the program shall detail the resources to be provided or utilized and any related sub-contracting proposed. The program shall also include provision of a detailed cost estimate with supporting documentation. Payment to the Contractor for preparation and implementation this program shall not exceed the Provisional Sum dedicated for this purpose

6.8 Contractor’s Superintendence

6.8.1 Throughout the execution of the Works, and as long thereafter as is necessary to fulfil the Contractor’s obligations, the Contractor shall provide all necessary superintendence to plan, arrange, direct, manage, inspect and test the work.

6.8.2 Superintendence shall be given by a sufficient number of persons having adequate knowledge of the language for communications (defined in Sub-Clause 1.4 [Law and Language]) and of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

6.9 Contractor’s Personnel

6.9.1 The Contractor’s Personnel (including Key Personnel, if any) shall be appropriately qualified, skilled, experienced and competent in their respective trades or occupations.

6.9.2 The Project Manager may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor’s Representative and Key Personnel (if any), who:

- (a) persists in any misconduct or lack of care;
- (b) carries out duties incompetently or negligently;
- (c) fails to comply with any provision of the Contract;
- (d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment;
- (e) based on reasonable evidence, is determined to have engaged in Fraud and Corruption during the execution of the Works;
- (f) has been recruited from the Employer’s Personnel in breach of Sub-Clause 6.3 [Persons in the Service of Employer];
- (g) undertakes behavior which breaches the Code of Conduct for Contractor’s Personnel (ES).

6.9.3 If appropriate, the Contractor shall then promptly appoint (or cause to be appointed) a suitable replacement with equivalent skills and experience. In the case of replacement of the Contractor’s Representative, Sub- Clause 4.3 [Contractor’s Representative] shall apply. In the case of replacement of Key Personnel (if any), Sub-Clause 6.12 [Key Personnel] shall apply. Subject to the requirements in

Sub-Clause 4.3 [Contractor's Representative] and 6.12 [Key Personnel], and notwithstanding any requirement from the Engineer to remove or cause to remove any person, the Contractor shall take immediate action as appropriate in response to any violation of (a) through (g) above. Such immediate action shall include removing (or causing to be removed) from the Site or other places where the Works are being carried out, any Contractor's Personnel who engages in (a), (b), (c), (d),(e) or (g) above or has been recruited as stated in (f) above."

6.10 Records of Contractor's Personnel and Equipment	6.10.1	The Contractor shall submit, to the Project Manager, details showing the number of each class of Contractor's Personnel and of each type of Contractor's Equipment on the Site. Details shall be submitted each calendar month, in a form approved by the Project Manager, until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking- Over Certificate for the Works.
6.11 Disorderly Conduct	6.11.1	The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site.
6.12 Key Personnel	6.12.1	The Contractor shall, appoint the natural persons named in the SCC to the positions of Key Personnel. If an appointed person fails to act in the relevant position of Key Personnel, the Contractor shall submit to the Project Manager for consent the name and particulars of another person the Contractor proposes to appoint to such position. If consent is withheld or if the Project Manager does not respond within 14 days after receiving any such submission, by giving a Notice stating his/her objection to the appointment of such person (or replacement) with reasons, the Project Manager shall be deemed to have given his/her consent.
	6.12.2	The Contractor shall not, without the Project Manager's prior consent, revoke the appointment of any of the Key Personnel or appoint a replacement (unless the person is unable to act as a result of death, illness, disability or resignation, in which case the appointment shall be deemed to have been revoked with immediate effect and the appointment of a replacement shall be treated as a temporary appointment until the Project Manager gives his/her consent to this replacement, or another replacement is appointed, under this Sub-Clause).
	6.12.3	All Key Personnel shall be based at the Site (or, where Works are being executed off the Site, at the location of the Works) for the whole time that the Works are being executed. If any of the Key Personnel is to be temporarily absent during execution of the Works, a suitable replacement shall be temporarily appointed, subject to the Project Manager's prior consent.
	6.12.4	All Key Personnel shall be fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language]. If any of the Key Personnel are not fluent in this language, the Contractor shall make competent interpreters available during all working hours in a number deemed sufficient by the Project Manager.
6.13 Foreign Personnel	6.13.1	The Contractor may bring in to the country any foreign personnel who are necessary for the execution of the Works to the extent allowed by the applicable Laws. The Contractor shall ensure that these personnel are provided with the required residence visas and work permits. The Employer will, if requested by the Contractor, use his best endeavours in a timely and expeditious manner to assist the Contractor in obtaining any local, state, national, or government permission required for bringing in the Contractor's personnel.
	6.13.2	The Contractor shall be responsible for the return of these personnel to

the place where they were recruited or to their domicile. In the event of the death in Tanzania of any of these personnel or members of their families, the Contractor shall similarly be responsible for making the appropriate arrangements for their return or burial.

6.14 Supply of Food stuffs and Water	6.14.1	The Contractor shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Specification at reasonable prices for the Contractor's Personnel for the purposes of or in connection with the Contract.
	6.14.2	The Contractor shall, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of the Contractor's Personnel.
6.15 Measures against Insect and Pest Nuisance	6.15.1	The Contractor shall at all times take the necessary precautions to protect the Contractor's Personnel employed on the Site from insect and pest nuisance, and to reduce their danger to health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.
6.16 Alcoholic Liquor or Drugs	6.16.1	The Contractor shall not, otherwise than in accordance with the Laws of Tanzania, import, sell, give barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift barter or disposal thereto by Contractor's Personnel.
6.17 Arms and Ammunition	6.17.1	The Contractor shall not give, barter, or otherwise dispose of, to any person, any arms or ammunition of any kind, or allow Contractor's Personnel to do so.
6.18 Festivals and Religious Customs	6.18.1	The Contractor shall respect Tanzania's recognized festivals, days of rest and religious or other customs.
6.19 Funeral Arrangements	6.19.1	The Contractor shall be responsible, to the extent required by local regulations, for making any funeral arrangements for any of his local employees who may die while engaged upon the Works.
6.20 Prohibition of Forced or Compulsory Labour	6.20.1	The Contractor, including its Subcontractors, shall not employ or engage forced labour. Forced labour consists of any work or service, not voluntarily performed, that is exacted from an individual under threat of force or penalty, and includes any kind of involuntary or compulsory labour, such as indentured labour, bonded labour or similar labour-contracting arrangements.
	6.20.2	No persons shall be employed or engaged who have been subject to trafficking. Trafficking in persons is defined as the recruitment, transportation, transfer, harbouring or receipt of persons by means of the threat or use of force or other forms of coercion, abduction, fraud, deception, abuse of power, or of a position of vulnerability, or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purposes of exploitation.
6.21 Prohibition of Harmful Child Labour	6.21.1	The Contractor, including its Subcontractors, shall not employ or engage a child under the age of 14 unless the Laws of Tanzania specifies a higher age (the minimum age). The Contractor, including its Subcontractors, shall not employ or engage a child between the minimum age and the age of 18 in a manner that is likely to be hazardous, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.
	6.21.2	The Contractor including its Subcontractors, shall only employ or engage children between the minimum age and the age of 18 after an appropriate risk assessment has been conducted by the Contractor with the Project Manager's consent. The Contractor shall be subject to regular monitoring by the Project Manager that includes monitoring of health, working conditions and hours of work.
	6.21.3	Work considered hazardous for children is work that, by its nature or the circumstances in which it is carried out, is likely to jeopardize the health, safety, or morals of children. Such work activities prohibited for children include work:

- (a) with exposure to physical, psychological or sexual abuse;
- (b) underground, underwater, working at heights or in confined spaces;
- (c) with dangerous machinery, equipment or tools, or involving handling or transport of heavy loads;
- (d) in unhealthy environments exposing children to hazardous substances, agents, or processes, or to temperatures, noise or vibration damaging to health; or
- (e) under difficult conditions such as work for long hours, during the night or in confinement on the premises of the employer.

6.22 Employment Records of Workers	6.22.1	The Contractor shall keep complete and accurate records of the employment of labour at the Site. The records shall include the names, ages, genders, hours worked and wages paid to all workers. These records shall be summarized on a monthly basis and submitted to the Project Manager, and these records shall be available for inspection by Auditors during normal working hours. These records shall be included in the details to be submitted by the Contractor under Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment].
6.23 Workers' Organisations	6.23.1	In accordance with Tanzania's labour laws which recognise workers' rights to form and to join workers' organisations of their choosing and to bargain collectively without interference, the Contractor shall comply with such laws. In such circumstances, the role of legally established workers' organizations and legitimate workers' representatives will be respected, and they will be provided with information needed for meaningful negotiation in a timely manner.
	6.23.2	Where the relevant labour laws substantially restrict workers' organisations, the Contractor shall enable alternative means for the Contractor's Personnel to express their grievances and protect their rights regarding working conditions and terms of employment. The Contractor shall not seek to influence or control these alternative means. The Contractor shall not discriminate or retaliate against the Contractor's Personnel who participate, or seek to participate, in such organisations and collective bargaining or alternative mechanisms. Workers' organisations are expected to fairly represent the workers in the workforce.
6.24 Non- Discrimination and Equal Opportunity	6.24.1	The Contractor shall not make decisions relating to the employment or treatment of Contractor's Personnel on the basis of personal characteristics unrelated to inherent job requirements. The Contractor shall base the employment of Contractor's Personnel on the principle of equal opportunity and fair treatment, and shall not discriminate with respect to any aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement, and disciplinary practices.
6.25 Contractor's Personnel Grievance Mechanism	6.25.1	The Contractor shall have a grievance mechanism for Contractor's Personnel, and where relevant the workers' organizations stated in GCC 6.23, to raise workplace concerns. The grievance mechanism shall be proportionate to the nature, scale, risks and impacts of the Contract. The mechanism shall address concerns promptly, using an understandable and transparent process that provides timely feedback to those concerned in a language they understand, without any retribution, and shall operate in an independent and objective manner.

- 6.25.2** The Contractor's Personnel shall be informed of the grievance mechanism at the time of engagement for the Contract, and the measures put in place to protect them against any reprisal for its use. Measures will be put in place to make the grievance mechanism easily accessible to all Contractor's Personnel.
- 6.25.3** The grievance mechanism shall not impede access to other judicial or administrative remedies that might be available, or substitute for grievance mechanisms provided through collective agreements.
- 6.25.4** The grievance mechanism may utilize existing grievance mechanisms, providing that they are properly designed and implemented, address concerns promptly, and are readily accessible to such project workers. Existing grievance mechanisms may be supplemented as needed with Contract-specific arrangements.
- 6.26 Training of Contractor's Personnel**
- 6.26.1** The Contractor shall provide appropriate training to relevant Contractor's Personnel on ES aspects of the Contract, including appropriate sensitization on prohibition of SEA and SH, and health and safety training.
- As stated in the Specification or as instructed by the Project Manager, the Contractor shall also allow appropriate opportunities for the relevant Contractor's Personnel to be trained on ES aspects of the Contract by the Employer's Personnel. The Contractor shall provide training on SEA and SH, including its prevention, to any of its personnel who has a role to supervise other Contractor's Personnel.

7. PLANT, MATERIALS AND WORKMANSHIP

7.1 Manner of Execution	7.1.1	The Contractor shall carry out the manufacture of Plant, the production and manufacture of Materials, and all other execution of the Works: (a) in the manner (if any) specified in the Contract, (b) in a proper workmanlike and careful manner, in accordance with recognised good practice, and (c) with properly equipped facilities and non-hazardous Materials, except as otherwise specified in the Contract.
7.2 Samples	7.2.1	The Contractor shall submit the following samples of Materials, and relevant information, to the Project Manager for consent prior to using the Materials in or for the Works: (a) manufacturer's standard samples of Materials and samples specified in the Contract, all at the Contractor's cost, and (b) additional samples instructed by the Project Manager as a Variation. (c) Each sample shall be labelled as to origin and intended use in the Works.
7.3 Inspection	7.3.1	The Employer's Personnel shall at all reasonable times: (a) have full access to all parts of the Site and to all places from which natural Materials are being obtained, and (b) during production, manufacture and construction (at the Site and elsewhere), be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of manufacture of Plant and production and manufacture of Materials.
	7.3.2	The Contractor shall give the Employer's Personnel full opportunity to carry out these activities, including providing access, facilities, permissions and safety equipment. No such activity shall relieve the Contractor from any obligation or responsibility.
	7.3.3	The Contractor shall give notice to the Project Manager whenever any work is ready and before it is covered up, put out of sight, or packaged for storage or transport. The Project Manager shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that the Project Manager does not require to do so. If the Contractor fails to give the notice, he shall, if and when required by the Project Manager, uncover the work and thereafter reinstate and make good, all at the Contractor's cost.
7.4 Testing	7.4.1	This Sub-Clause shall apply to all tests specified in the Contract, other than the Tests after Completion (if any).
	7.4.2	Except as otherwise specified in the Contract, the Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labour, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently. The Contractor shall agree, with the Project Manager, the time and place for the specified testing of any Plant, Materials and other parts of the Works.
	7.4.3	The Project Manager may, under Clause 13 [Variations and Adjustments], vary the location or details of specified tests, or instruct the Contractor to carry out additional tests. If these varied or additional tests show that the tested Plant, Materials or workmanship is not in accordance with the Contract, the cost of carrying out this Variation shall be borne by the Contractor, notwithstanding other provisions of the Contract.
	7.4.5	The Project Manager shall give the Contractor not less than 24 hours' notice of the Project Manager's intention to attend the tests. If the Project

		Manager does not attend at the time and place agreed, the Contractor may proceed with the tests, unless otherwise instructed by the Project Manager, and the tests shall then be deemed to have been made in the Project Manager's presence.
	7.4.6	If the Contractor suffers delay and/or incurs Cost from complying with these instructions or as a result of a delay for which the Employer is responsible, the Contractor shall give notice to the Project Manager and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to: (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and (b) payment of any such Cost-plus profit, which shall be included in the Contract Price.
	7.4.7	After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine these matters.
	7.4.8	The Contractor shall promptly forward to the Project Manager duly certified reports of the tests. When the specified tests have been passed, the Project Manager shall endorse the Contractor's test certificate, or issue a certificate to him, to that effect. If the Project Manager has not attended the tests, he shall be deemed to have accepted the readings as accurate.
7.5 Rejection	7.5.1	If, as a result of an examination, inspection, measurement or testing, any Plant, Materials or workmanship is found to be defective or otherwise not in accordance with the Contract, the Project Manager may reject the Plant, Materials or workmanship by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the defect and ensure that the rejected item complies with the Contract.
	7.5.2	If the Project Manager requires this Plant, Materials or workmanship to be retested, the tests shall be repeated under the same terms and conditions. If the rejection and retesting cause the Employer to incur additional costs, the Contractor shall subject to Sub-Clause 2.4 [Employer's Claims] pay these costs to the Employer.
7.6 Remedial Work	7.6.1	Notwithstanding any previous test or certification, the Project Manager may instruct the Contractor to: (a) remove from the Site and replace any Plant or Materials which is not in accordance with the Contract, (b) remove and re-execute any other work which is not in accordance with the Contract, and (c) execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise.
	7.6.2	The Contractor shall comply with the instruction within a reasonable time, which shall be the time (if any) specified in the instruction, or immediately if urgency is specified under sub-paragraph (c).
	7.6.3	If the Contractor fails to comply with the instruction, the Employer shall be entitled to employ and pay other persons to carry out the work. Except to the extent that the Contractor would have been entitled to payment for the work, the Contractor shall subject to Sub-Clause 2.4 [Employer's Claims] pay to the Employer all costs arising from this failure.
7.7 Ownership of Plant and Materials	7.7.1	Except otherwise specified in the Contract, each item of Plant and Materials shall, to the extent consistent with the Laws of Tanzania, become the property of the Employer at whichever is the earlier of the following times, free from liens and other encumbrances: (a) when it is incorporated in the Works; (b) when the Contractor is paid the corresponding value of the Plant and Materials under Sub-Clause 8.10 [Payment for Plant and Materials in Event of Suspension].

7.8 Royalties	7.8.1	Unless otherwise stated in the Specification, the Contractor shall pay all royalties, rents and other payments for: (a) natural Materials obtained from outside the Site, and (b) the disposal of material from demolitions and excavations and of other surplus material (whether natural or man-made), except to the extent that disposal areas within the Site are specified in the Contract.
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8. COMMENCEMENT, DELAYS AND SUSPENSION

8.1 Commencement of Works	8.1.1	<p>Except otherwise specified in the SCC, the Commencement Date shall be the date at which the following precedent conditions have all been fulfilled and the Project Manager's instruction recording the agreement of both Parties on such fulfilment and instructing to commence the Works is received by the Contractor:</p> <p>(a) except if otherwise specified in the SCC, possession of the Site given to the Contractor together with such permission(s) under (a) of Clause 1.14.1 [Compliance with Laws] as required for the commencement of the Works; and</p> <p>(b) receipt by the Contractor of the Advance Payment under Sub-Clause 14.2 [Advance Payment] provided that the corresponding bank guarantee has been delivered by the Contractor.</p> <p>If the above said Project Manager's instruction is not received by the Contractor within 180 days from his receipt of the Letter of Acceptance, the Contractor shall be entitled to terminate the Contract under Clause 16.2 [Termination by Contractor].</p>
	8.1.2	<p>Subject to Clause 4.1.7 on the Management Strategies and Implementation Plans and the C-ESMP, Sub-Clause 6.7.2 on the health and safety manual and Sub-Clause 4.22.2 on the security management plan, the Contractor, shall commence the execution of the Works as soon as is reasonably practicable after the Commencement Date, and shall then proceed with the Works with due expedition and without delay</p>
8.2 Time for Completion	8.2.1	<p>The Contractor shall complete the whole of the Works, and each Section (if any), within the Time for Completion for the Works or Section (as the case may be), including:</p> <p>(a) achieving the passing of the Tests on Completion, and</p> <p>(b) Completing all work which is stated in the Contract as being required for the Works or Section to be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections].</p>
8.3 Programme	8.3.1	<p>The Contractor shall submit a detailed time programme to the Project Manager within 28 days after receiving the notice under Sub-Clause 8.1 [Commencement of Works]. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor's obligations. Each programme shall include:</p> <p>(a) the order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design (if any), Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing,</p> <p>(b) each of these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),</p> <p>(c) the sequence and timing of inspections and tests specified in the Contract, and</p> <p>(d) a supporting report which includes: (i) a general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works, and (ii) details showing the Contractor's reasonable estimate of the number of each class of Contractor's Personnel and of each type of Contractor's Equipment, required on the Site for each major stage.</p>
	8.3.2	<p>Unless the Project Manager, within 21 days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under</p>

the Contract. The Employer's Personnel shall be entitled to rely upon the programme when planning their activities.

8.3.3 The Contractor shall promptly give notice to the Project Manager of specific probable future events or circumstances which may adversely affect the work, increase the Contract Price or delay the execution of the Works. The Project Manager may require the Contractor to submit an estimate of the anticipated effect of the future event or circumstances, and/or a proposal under Sub-Clause 13.3 [Variation Procedure].

8.3.4 If, at any time, the Project Manager gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Project Manager in accordance with this Sub-Clause.

8.4 Extension of Time for Completion

8.4.1 The Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to an extension of the Time for Completion if and to the extent that completion for the purposes of Sub-Clause 10.1 [Taking-Over of the Works and Sections] is or will be delayed by any of the following causes:

- (a) a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.3 [Variation Procedure]) or other substantial change in the quantity of an item of work included in the Contract,
- (b) a cause of delay giving an entitlement to extension of time under a Sub-Clause of these Conditions,
- (c) exceptionally adverse climatic conditions,
- (d) Unforeseeable shortages in the availability of personnel or Goods caused by epidemic or governmental actions, or
- (e) any delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel, or the Employer's other contractors.

8.4.2 If the Contractor considers himself to be entitled to an extension of the Time for Completion, the Contractor shall give notice to the Project Manager in accordance with Sub-Clause 20.1 [Contractor's Claims]. When determining each extension of time under Sub-Clause 20.1, the Project Manager shall review previous determinations and may increase, but shall not decrease, the total extension of time.

8.5 Delays Caused by Authorities

8.5.1 If the following conditions apply, namely:
(a) the Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities in Tanzania,
(b) these authorities delay or disrupt the Contractor's work, and
(c) the delay or disruption was Unforeseeable, then this delay or disruption will be considered as a cause of delay under subparagraph (b) of Sub-Clause 8.4 [Extension of Time for Completion].

8.6 Rate of Progress

8.6.1 If, at any time:
(a) actual progress is too slow to complete within the Time for Completion, and/or
(b) progress has fallen (or will fall) behind the current programme under Sub-Clause 8.3 [Programme],
other than as a result of a cause listed in Sub-Clause 8.4 [Extension of Time for Completion], then the Project Manager may instruct the Contractor to submit, under Sub-Clause 8.3 [Programme], a revised programme and supporting report describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete within the Time for Completion.

8.6.2 Unless the Project Manager notifies otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Contractor's Personnel and/or

Goods, at the risk and cost of the Contractor. If these revised methods cause the Employer to incur additional costs, the Contractor shall subject to notice under Sub-Clause 2.4 [Employer's Claims] pay these costs to the Employer, in addition to delay damages (if any) under Sub-Clause 8.7 below.

	8.6.3	Additional costs of revised methods, including acceleration measures, instructed by the Project Manager to reduce delays resulting from causes listed under Sub-Clause 8.4 [Extension of Time for Completion] shall be paid by the Employer, without generating, however, any other additional payment benefit to the Contractor.
8.7 Delay Damages	8.7.1	If the Contractor fails to comply with Sub-Clause 8.2 [Time for Completion], the Contractor shall be subject to notice under Sub-Clause 2.4 [Employer's Claims] pay delay damages to the Employer for this default. These delay damages shall be the sum stated in the SCC, which shall be paid for every day which shall elapse between the relevant Time for Completion and the date stated in the Taking-Over Certificate. However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages (if any) stated in the SCC.
	8.7.2	These delay damages shall be the only damages due from the Contractor for such default, other than in the event of termination under Sub-Clause 15.2 [Termination by Employer] prior to completion of the Works. These damages shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under the Contract
8.8 Suspension of Work	8.8.1	The Project Manager may at any time instruct the Contractor to suspend progress of part or all of the Works. During such suspension, the Contractor shall protect, store and secure such part or the Works against any deterioration, loss or damage.
	8.8.2	The Project Manager may also notify the cause for the suspension. If and to the extent that the cause is notified and is the responsibility of the Contractor, the following Sub-Clauses 8.9, 8.10 and 8.11 shall not apply.
8.9 Consequences of Suspension	8.9.1	If the Contractor suffers delay and/or incurs Cost from complying with the Project Manager's instructions under Sub-Clause 8.8 [Suspension of Work] and/or from resuming the work, the Contractor shall give notice to the Project Manager and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to: (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and (b) payment of any such Cost, which shall be included in the Contract Price.
	8.9.2	After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine these matters.
	8.9.3	The Contractor shall not be entitled to an extension of time for, or to payment of the Cost incurred in, making good the consequences of the Contractor's faulty design, workmanship or materials, or of the Contractor's failure to protect, store or secure in accordance with Sub-Clause 8.8 [Suspension of Work].
8.10 Payment for Plant and Materials in Event of Suspension	8.10.1	The Contractor shall be entitled to payment of the value (as at the date of suspension) of Plant and/or Materials which have not been delivered to Site, if: (a) the work on Plant or delivery of Plant and/or Materials has been suspended for more than 28 days, and (b) the Contractor has marked the Plant and/or Materials as the Employer's property in accordance with the Project Manager's instructions.

8.11 Prolonged Suspension 8.11.1

If the suspension under Sub-Clause 8.8 [Suspension of Work] has continued for more than 84 days, the Contractor may request the Project Manager's permission to proceed. If the Project Manager does not give permission within 28 days after being requested to do so, the Contractor may, by giving notice to the Project Manager, treat the suspension as an omission under Clause 13 [Variations and Adjustments] of the affected part of the Works. If the suspension affects the whole of the Works, the Contractor may give notice of termination under Sub-Clause 16.2 [Termination by Contractor].

8.12 Resumption of Work 8.12.1

After the permission or instruction to proceed is given, the Contractor and the Project Manager shall jointly examine the Works and the Plant and Materials affected by the suspension. The Contractor shall make good any deterioration or defect in or loss of the Works or Plant or Materials, which has occurred during the suspension after receiving from the Project Manager an instruction to this effect under Clause 13 [Variations and Adjustments].

9. TESTS ON COMPLETION

9.1 Contractor's Obligations	9.1.1	The Contractor shall carry out the Tests on Completion in accordance with this Clause and Sub-Clause 7.4 [Testing], after providing the documents in accordance with sub-paragraph (d) of Sub-Clause 4.1 [Contractor's General Obligations].
	9.1.2	The Contractor shall give to the Project Manager not less than 21 days' notice of the date after which the Contractor will be ready to carry out each of the Tests on Completion. Unless otherwise agreed, Tests on Completion shall be carried out within 14 days after this date, on such day or days as the Project Manager shall instruct.
	9.1.3	In considering the results of the Tests on Completion, the Project Manager shall make allowances for the effect of any use of the Works by the Employer on the performance or other characteristics of the Works. As soon as the Works, or a Section, have passed any Tests on Completion, the Contractor shall submit a certified report of the results of these Tests to the Project Manager.
9.2 Delayed Tests	9.2.1	If the Tests on Completion are being unduly delayed by the Employer, Sub-Clause 7.4 [Testing] (fifth paragraph) and/or Sub-Clause 10.3 [Interference with Tests on Completion] shall be applicable.
	9.2.2	If the Tests on Completion are being unduly delayed by the Contractor, the Project Manager may by notice require the Contractor to carry out the Tests within 21 days after receiving the notice. The Contractor shall carry out the Tests on such day or days within that period as the Contractor may fix and of which he shall give notice to the Project Manager.
	9.2.3	If the Contractor fails to carry out the Tests on Completion within the period of 21 days, the Employer's Personnel may proceed with the Tests at the risk and cost of the Contractor. The Tests on Completion shall then be deemed to have been carried out in the presence of the Contractor and the results of the Tests shall be accepted as accurate.
9.3 Retesting	9.3.1	If the Works, or a Section, fail to pass the Tests on Completion, Sub-Clause 7.5 [Rejection] shall apply, and the Project Manager or the Contractor may require the failed Tests, and Tests on Completion on any related work, to be repeated under the same terms and conditions.
9.4 Failure to Pass Tests on Completion	9.4.1	If the Works, or a Section, fail to pass the Tests on Completion repeated under Sub-Clause 9.3 [Retesting], the Project Manager shall be entitled to: (a) order further repetition of Tests on Completion under Sub-Clause 9.3; if the failure deprives the Employer of substantially the whole benefit of the Works or Section, reject the Works or Section (as the case may be), in which event the Employer shall have the same remedies as are provided in sub-paragraph (c) of Sub-Clause 11.4 [Failure to Remedy Defects]; or (b) issue a Taking-Over Certificate, if the Employer so requests.
	9.4.2	In the event of sub-paragraph (c), the Contractor shall proceed in accordance with all other obligations under the Contract, and the Contract Price shall be reduced by such amount as shall be appropriate to cover the reduced value to the Employer as a result of this failure. Unless the relevant reduction for this failure is stated (or its method of calculation is defined) in the Contract, the Employer may require the reduction to be (i) agreed by both Parties (in full satisfaction of this failure only) and paid before this Taking-Over Certificate is issued, or (ii) determined and paid under Sub-Clause 2.4 [Employer's Claims] and Sub-Clause 3.6 [Determinations].
10. EMPLOYER'S TAKING OVER		
10.1 Taking Over of the Works and Sections	10.1.1	Except as stated in Sub-Clause 9.4 [Failure to Pass Tests on Completion], the Works shall be taken over by the Employer when (i) the Works have been completed in accordance with the Contract, including the matters described in Sub-Clause 8.2 [Time for

Completion] and except as allowed in sub-paragraph (a) below, and (ii) a Taking-Over Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause.

10.1.2 The Contractor may apply by notice to the Project Manager for a Taking-Over Certificate not earlier than 14 days before the Works will, in the Contractor's opinion, be complete and ready for taking over. If the Works are divided into Sections, the Contractor may similarly apply for a Taking-Over Certificate for each Section.

10.1.3 The Project Manager shall, within 28 days after receiving the Contractor's application:

(a) issue the Taking-Over Certificate to the Contractor, stating the date on which the Works or Section were completed in accordance with the Contract, except for any minor outstanding work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied); or

(b) reject the application, giving reasons and specifying the work required to be done by the Contractor to

(c) enable the Taking-Over Certificate to be issued. The Contractor shall then complete this work before issuing a further notice under this Sub-Clause.

10.1.4 If the Project Manager fails either to issue the Taking-Over Certificate or to reject the Contractor's application within the period of 28 days, and if the Works or Section (as the case may be) are substantially completed in accordance with the Contract, the Taking-Over Certificate shall be deemed to have been issued on the last day of that period.

10.2 Taking Over of Parts of the Works

10.2.1 The Project Manager may, at the sole discretion of the Employer, issue a Taking-Over Certificate for any part of the Permanent Works.

10.2.2 The Employer shall not use any part of the Works (other than as a temporary measure which is either specified in the Contract or agreed by both Parties) unless and until the Project Manager has issued a Taking-Over Certificate for this part. However, if the Employer does use any part of the Works before the Taking-Over Certificate is issued:

(a) the part which is used shall be deemed to have been taken over as from the date on which it is used,

(b) the Contractor shall cease to be liable for the care of such part as from this date, when responsibility shall pass to the Employer, and

(c) if requested by the Contractor, the Project Manager shall issue a Taking-Over Certificate for this part.

10.2.3 After the Project Manager has issued a Taking-Over Certificate for a part of the Works, the Contractor shall be given the earliest opportunity to take such steps as may be necessary to carry out any outstanding Tests on Completion. The Contractor shall carry out these Tests on Completion as soon as practicable before the expiry date of the relevant Defects Notification Period.

10.2.4 If the Contractor incurs Cost as a result of the Employer taking over and/or using a part of the Works, other than such use as is specified in the Contract or agreed by the Contractor, the Contractor shall (i) give notice to the Project Manager and (ii) be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to payment of any such Cost plus profit, which shall be included in the Contract Price. After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine this Cost and profit.

10.2.5 If a Taking-Over Certificate has been issued for a part of the Works (other than a Section), the delay damages thereafter for completion of the remainder of the Works shall be reduced. Similarly, the delay damages for the remainder of the Section (if any) in which this part is included shall also be reduced. For any period of delay after the date stated in this Taking-Over Certificate, the proportional reduction in these delay damages shall be calculated as the proportion which the

value of the part so certified bears to the value of the Works or Section (as the case may be) as a whole. The Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine these proportions. The provisions of this paragraph shall only apply to the daily rate of delay damages under Sub-Clause 8.7 [Delay Damages], and shall not affect the maximum amount of these damages.

10.3 Interference with Tests on Completion

10.3.1 If the Contractor is prevented, for more than 14 days, from carrying out the Tests on Completion by a cause for which the Employer is responsible, the Employer shall be deemed to have taken over the Works or Section (as the case may be) on the date when the Tests on Completion would otherwise have been completed.

10.3.2 The Project Manager shall then issue a Taking-Over Certificate accordingly, and the Contractor shall carry out the Tests on Completion as soon as practicable, before the expiry date of the Defects Notification Period. The Project Manager shall require the Tests on Completion to be carried out by giving 14 days' notice and in accordance with the relevant provisions of the Contract.

10.3.3 If the Contractor suffers delay and/or incurs Cost as a result of this delay in carrying out the Tests on Completion, the Contractor shall give notice to the Project Manager and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

(b) payment of any such Cost-plus profit, which shall be included in the Contract Price.

10.3.4 After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine these matters.

10.4 Surfaces Requiring Reinstatement

10.4.1 Except as otherwise stated in a Taking-Over Certificate, a certificate for a Section or part of the Works shall not be deemed to certify completion of any ground or other surfaces requiring reinstatement.

11. DEFECTS LIABILITY

11.1 Completion of Outstanding Work and Remedying Defects	11.1.1	<p>In order that the Works and Contractor's Documents, and each Section, shall be in the condition required by the Contract (fair wear and tear excepted) by the expiry date of the relevant Defects Notification Period or as soon as practicable thereafter, the Contractor shall:</p> <p>(a) complete any work which is outstanding on the date stated in a Taking-Over Certificate, within such reasonable time as is instructed by the Project Manager, and</p> <p>(b) execute all work required to remedy defects or damage, as may be notified by (or on behalf of) the Employer on or before the expiry date of the Defects Notification Period for the Works or Section (as the case may be).</p>
	11.1.2	<p>If a defect appears or damage occurs, the Contractor shall be notified accordingly, by (or on behalf of) the Employer.</p>
11.2 Cost of Remedying Defects	11.2.1	<p>All work referred to in sub-paragraph (b) of Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects] shall be executed at the risk and cost of the Contractor, if and to the extent that the work is attributable to:</p> <p>(a) any design for which the Contractor is responsible,</p> <p>(b) Plant, Materials or workmanship not being in accordance with the Contract, or</p> <p>(c) failure by the Contractor to comply with any other obligation.</p>
	11.2.2	<p>If and to the extent that such work is attributable to any other cause, the Contractor shall be notified promptly by (or on behalf of) the Employer, and Sub-Clause 13.3 [Variation Procedure] shall apply.</p>
11.3 Extension of Defects Notification Period	11.3.1	<p>The Employer shall be entitled subject to Sub-Clause 2.4 [Employer's Claims] to an extension of the Defects Notification Period for the Works or a Section if and to the extent that the Works, Section or a major item of Plant (as the case may be, and after taking over) cannot be used for the purposes for which they are intended by reason of a defect or by reason of a damage attributable to the Contractor. However, a Defects Notification Period shall not be extended by more than two years.</p>
	11.3.2	<p>If delivery and/or erection of Plant and/or Materials was suspended under Sub-Clause 8.8 [Suspension of Work] or Sub-Clause 16.1 [Contractor's Entitlement to Suspend Work], the Contractor's obligations under this Clause shall not apply to any defects or damage occurring more than two years after the Defects Notification Period for the Plant and/or Materials would otherwise have expired.</p>
11.4 Failure to Remedy Defects	11.4.1	<p>If the Contractor fails to remedy any defect or damage within a reasonable time, a date may be fixed by (or on behalf of) the Employer, on or by which the defect or damage is to be remedied. The Contractor shall be given reasonable notice of this date.</p>
	11.4.2	<p>If the Contractor fails to remedy the defect or damage by this notified date and this remedial work was to be executed at the cost of the Contractor under Sub-Clause 11.2 [Cost of Remedying Defects], the Employer may (at his option):</p> <p>(a) carry out the work himself or by others, in a reasonable manner and at the Contractor's cost, but the Contractor shall have no responsibility for this work; and the Contractor shall subject to Sub-Clause 2.4 [Employer's Claims] pay to the Employer the costs reasonably incurred by the Employer in remedying the defect or damage;</p> <p>(b) require the Project Manager to agree or determine a reasonable reduction in the Contract Price in accordance with Sub-Clause 3.6 [Determinations]; or</p> <p>(c) if the defect or damage deprives the Employer of substantially the whole benefit of the Works or any major part of the Works, terminate the Contract as a whole, or in respect of such major part</p>

which cannot be put to the intended use. Without prejudice to any other rights, under the Contract or otherwise, the Employer shall then be entitled to recover all sums paid for the Works or for such part (as the case may be), plus financing costs and the cost of dismantling the same, clearing the Site and returning Plant and Materials to the Contractor.

11.5 Removal of Defective Work	11.5.1	If the defect or damage cannot be remedied expeditiously on the Site and the Employer gives consent, the Contractor may remove from the Site for the purposes of repair such items of Plant as are defective or damaged. This consent may require the Contractor to increase the amount of the Performance Security by the full replacement cost of these items, or to provide other appropriate security.
11.6 Further Tests	11.6.1	If the work of remedying of any defect or damage may affect the performance of the Works, the Project Manager may require the repetition of any of the tests described in the Contract. The requirement shall be made by notice within 28 days after the defect or damage is remedied.
	11.6.2	These tests shall be carried out in accordance with the terms applicable to the previous tests, except that they shall be carried out at the risk and cost of the Party liable, under GCC 11.2 [Cost of Remedying Defects], for the cost of the remedial work.
11.7 Right of Access after Taking Over	11.7.1	Until the Performance Certificate has been issued, the Contractor shall have such right of access to the Works as is reasonably required in order to comply with this Clause, except as may be inconsistent with the Employer's reasonable security restrictions.
11.8 Contractor to Search	11.8.1	The Contractor shall, if required by the Project Manager, search for the cause of any defect, under the direction of the Project Manager. Unless the defect is to be remedied at the cost of the Contractor under Sub-Clause 11.2 [Cost of Remedying Defects], the Cost of the search plus profit shall be agreed or determined by the Project Manager in accordance with Sub-Clause 3.6 [Determinations] and shall be included in the Contract Price.
11.9 Performance Certificate	11.9.1	Performance of the Contractor's obligations shall not be considered to have been completed until the Project Manager has issued the Performance Certificate to the Contractor, stating the date on which the Contractor completed his obligations under the Contract.
	11.9.2	The Project Manager shall issue the Performance Certificate within 28 days after the latest of the expiry dates of the Defects Notification Periods, or as soon thereafter as the Contractor has supplied all the Contractor's Documents and completed and tested all the Works, including remedying any defects. A copy of the Performance Certificate shall be issued to the Employer.
	11.9.3	Only the Performance Certificate shall be deemed to constitute acceptance of the Works.
11.10 Unfulfilled Obligations	11.10.1	After the Performance Certificate has been issued, each Party shall remain liable for the fulfilment of any obligation which remains unperformed at that time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force.
11.11 Clearance of Site	11.11.1	Upon receiving the Performance Certificate, the Contractor shall remove any remaining Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works from the Site.
	11.11.2	If all these items have not been removed within 28 days after receipt by the Contractor of the Performance Certificate, the Employer may sell or otherwise dispose of any remaining items. The Employer shall be entitled to be paid the costs incurred in connection with, or attributable to, such sale or disposal and restoring the Site
	11.11.3	Any balance of the moneys from the sale shall be paid to the Contractor. If these moneys are less than the Employer's costs, the Contractor shall pay the outstanding balance to the Employer.

12. MEASUREMENT AND EVALUATION

12.1 Works to be Measured	12.1.1	<p>The Works shall be measured, and valued for payment, in accordance with this Clause. The Contractor shall show in each application under Sub-Clauses 14.3 [Application for Interim Payment Certificates], 14.10 [Statement at Completion], and 14.11 [Application for Final Payment Certificate] the quantities and other particulars detailing the amounts which he considers to be entitled under the Contract. Whenever the Project Manager requires any part of the Works to be measured, reasonable notice shall be given to the Contractor's Representative, who shall:</p> <p>(a) promptly either attend or send another qualified representative to assist the Project Manager in making the measurement, and</p> <p>(b) supply any particulars requested by the Project Manager.</p>
	12.1.2	<p>If the Contractor fails to attend or send a representative, the measurement made by (or on behalf of) the Project Manager shall be accepted as accurate.</p>
	12.1.3	<p>Except as otherwise stated in the Contract, wherever any Permanent Works are to be measured from records, these shall be prepared by the Project Manager. The Contractor shall, as and when requested, attend to examine and agree the records with the Project Manager, and shall sign the same when agreed. If the Contractor does not attend, the records shall be accepted as accurate.</p>
	12.1.4	<p>If the Contractor examines and disagrees the records, and/or does not sign them as agreed, then the Contractor shall give notice to the Project Manager of the respects in which the records are asserted to be inaccurate. After receiving this notice, the Project Manager shall review the records and either confirm or vary them and certify the payment of the undisputed part. If the Contractor does not so give notice to the Project Manager within 14 days after being requested to examine the records, they shall be accepted as accurate.</p>
12.2 Method of Measurement	12.2.1	<p>Except as otherwise stated in the Contract and notwithstanding local practice:</p> <p>(a) measurement shall be made of the net actual quantity of each item of the Permanent Works, and</p> <p>(b) the method of measurement shall be in accordance with the Bill of Quantities or other applicable Schedules.</p>
12.3 Evaluation	12.3.1	<p>Except as otherwise stated in the Contract, the Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine the Contract price by evaluating each item of work, applying the measurement agreed or determined in accordance with the above Sub-Clauses 12.1 and 12.2 and the appropriate rate or price for the item.</p>
	12.3.2	<p>For each item of work, the appropriate rate or price for the item shall be the rate or price specified for such item in the Contract or, if there is no such item, specified for similar work.</p>
	12.3.3	<p>Any item of work included in the Bill of Quantities for which no rate or price was specified shall be considered as included in other rates and prices in the Bill of Quantities and will not be paid for separately.</p>
	12.3.4	<p>However, a new rate or price shall be appropriate for an item of work if:</p> <p>(a) (i) the measured quantity of the item is changed by more than 25% from the quantity of this item in the Bill of Quantities or other Schedule, (ii) this change in quantity multiplied by such specified rate for this item exceeds 0.25% of the Accepted Contract Amount, (iii) this change in quantity directly changes the Cost per unit quantity of this item by more than 1%, and (iv) this item is not specified in the Contract as a "fixed rate item";</p> <p>(b) (i) the work is instructed under Clause 13 [Variations and Adjustments], (ii) no rate or price is specified in the Contract for</p>

this item, and (iii) no specified rate or price is appropriate because the item of work is not of similar character, or is not executed under similar conditions, as any item in the Contract.

- 12.3.5** Each new rate or price shall be derived from any relevant rates or prices in the Contract, with reasonable adjustments to take account of the matters described in sub-paragraph (a) and/or (b), as applicable. If no rates or prices are relevant for the derivation of a new rate or price, it shall be derived from the reasonable Cost of executing the work, together with profit, taking account of any other relevant matters.
- 12.3.6** Until such time as an appropriate rate or price is agreed or determined, the Project Manager shall determine a provisional rate or price for the purposes of Interim Payment Certificates as soon as the concerned Works commences.
- 12.4 Omissions** **12.4.1** Whenever the omission of any work forms part (or all) of a Variation, the value of which has not been agreed, if:
- (a) the Contractor will incur (or has incurred) cost which, if the work had not been omitted, would have been deemed to be covered by a sum forming part of the Accepted Contract Amount;
 - (b) the omission of the work will result (or has resulted) in this sum not forming part of the Contract Price; and
 - (c) this cost is not deemed to be included in the evaluation of any substituted work; then the Contractor shall give notice to the Project Manager accordingly, with supporting particulars. Upon receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine this cost, which shall be included in the Contract Price.

13. VARIATIONS AND ADJUSTMENTS

- 13.1 Right to Vary** **13.1.1** Variations may be initiated by the Project Manager at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by a request for the Contractor to submit a proposal.
- 13.1.2** The Contractor shall execute and be bound by each Variation, unless the Contractor promptly gives notice to the Project Manager stating (with supporting particulars) that (i) the Contractor cannot readily obtain the Goods required for the Variation, or (ii) such Variation triggers a substantial change in the sequence or progress of the Works. Upon receiving this notice, the Project Manager shall cancel, confirm or vary the instruction.
- 13.1.3** Each Variation may include:
- (a) changes to the quantities of any item of work included in the Contract (however, such changes do not necessarily constitute a Variation),
 - (b) changes to the quality and other characteristics of any item of work,
 - (c) changes to the levels, positions and/or dimensions of any part of the Works,
 - (d) omission of any work unless it is to be carried out by others,
 - (e) any additional work, Plant, Materials or services necessary for the Permanent Works, including any associated Tests on Completion, boreholes and other testing and exploratory work, or
 - (f) changes to the sequence or timing of the execution of the Works.
- 13.1.4** The Contractor shall not make any alteration and/or modification of the Permanent Works, unless and until the Project Manager instructs or approves a Variation.
- 13.2 Value Engineering** **13.2.1** The Contractor may, at any time, submit to the Project Manager a written proposal which (in the Contractor's opinion) will, if adopted,

		(i) accelerate completion, (ii) reduce the cost to the Employer of executing, maintaining or operating the Works, (iii) improve the efficiency or value to the Employer of the completed Works, or (iv) otherwise be of benefit to the Employer.
	13.2.2	The proposal shall be prepared at the cost of the Contractor and shall include the items listed in Sub Clause 13.3 [Variation Procedure].
	13.2.3	If a proposal, which is approved by the Project Manager, includes a change in the design of part of the Permanent Works, then unless otherwise agreed by both Parties: (a) the Contractor shall design this part, sub-paragraphs (a) to (d) of Sub-Clause 4.1 [Contractor's General Obligations] shall apply, and (b) if this change results in a reduction in the contract value of this part, the Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine a fee, which shall be included in the Contract Price. This fee shall be half (50%) of the difference between the following amounts: (i) such reduction in contract value, resulting from the change, excluding adjustments under Sub Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost], and (ii) the reduction (if any) in the value to the Employer of the varied works, taking account of any reductions in quality, anticipated life or operational efficiencies. However, if amount (i) is less than amount (ii), there shall not be a fee.
13.3 Variation Procedure	13.3.1	If the Project Manager requests a proposal, prior to instructing a Variation, the Contractor shall respond in writing as soon as practicable, either by giving reasons why he cannot comply (if this is the case) or by submitting: (a) a description of the proposed work to be performed and a programme for its execution, (b) the Contractor's proposal for any necessary modifications to the programme according to Sub[1]Clause 8.3 [Programme] and to the Time for Completion, and (c) the Contractor's proposal for evaluation of the Variation.
	13.3.2	The Project Manager shall, as soon as practicable after receiving such proposal (under Sub-Clause 13.2 [Value Engineering] or otherwise), respond with approval, disapproval or comments. The Contractor shall not delay any work whilst awaiting a response.
	13.3.3	Each instruction to execute a Variation, with any requirements for the recording of Costs, shall be issued by the Project Manager to the Contractor, who shall acknowledge receipt
	13.3.4	Each Variation shall be evaluated in accordance with Clause 12 [Measurement and Evaluation], unless the Project Manager instructs or approves otherwise in accordance with this Clause.
13.4 Payment in Applicable Currencies	13.4.1	If the Contract provides for payment of the Contract Price in more than one currency, then whenever an adjustment is agreed, approved or determined as stated above, the amount payable in each of the applicable currencies shall be specified. For this purpose, reference shall be made to the actual or expected currency proportions of the Cost of the varied work, and to the proportions of various currencies specified for payment of the Contract Price.
13.5 Provisional Sums	13.5.1	Each Provisional Sum shall only be used, in whole or in part, in accordance with the Project Manager's instructions, and the Contract Price shall be adjusted accordingly. The total sum paid to the Contractor shall include only such amounts, for the work, supplies or services to which the Provisional Sum relates, as the Project Manager shall have instructed. For each Provisional Sum, the Project Manager may instruct: (a) work to be executed (including Plant, Materials or services to be supplied) by the Contractor and valued under Sub-Clause 13.3 [Variation Procedure]; and/or (b) Plant, Materials or services to be purchased by the Contractor, from

a nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]) or otherwise; and for which there shall be included in the Contract Price: (i) the actual amounts paid (or due to be paid) by the Contractor, and (ii) a sum for overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate (if any) stated in the appropriate Schedule. If there is no such rate, the percentage rate stated in the SCC shall be applied.

13.5.2 The Contractor shall, when required by the Project Manager, produce quotations, invoices, vouchers and accounts or receipts in substantiation.

13.5.3 The Provisional Sum shall be used to cover the Employer's share of the DARB members' fees and expenses, in accordance with Clause 20. No prior instruction of the Project Manager shall be required with respect to the work of the DARB. The Contractor shall submit the DARB members' invoices and satisfactory evidence of having paid 100% of such invoices as part of the substantiation of those Statements submitted under Sub-Clause 14.3 [Application for Interim Payment Certificates]

13.6 Daywork

13.6.1 For work of a minor or incidental nature, the Project Manager may instruct that a Variation shall be executed on a daywork basis. The work shall then be valued in accordance with the Daywork Schedule included in the Contract, and the following procedure shall apply. If a Daywork Schedule is not included in the Contract, this Sub-Clause shall not apply.

13.6.2 Before ordering Goods for the work, the Contractor shall submit quotations to the Project Manager. When applying for payment, the Contractor shall submit invoices, vouchers and accounts or receipts for any Goods.

13.6.3 Except for any items for which the Daywork Schedule specifies that payment is not due, the Contractor shall deliver each day to the Project Manager accurate statements in duplicate which shall include the following details of the resources used in executing the previous day's work:

- (a) the names, occupations and time of Contractor's Personnel,
- (b) the identification, type and time of Contractor's Equipment and Temporary Works, and
- (c) the quantities and types of Plant and Materials used.

13.6.4 One copy of each statement will, if correct, or when agreed, be signed by the Project Manager and returned to the Contractor. The Contractor shall then submit priced statements of these resources to the Project Manager, prior to their inclusion in the next Statement under Sub-Clause 14.3 [Application for Interim Payment Certificates].

13.7 Adjustments for Changes in Legislation

13.7.1 The Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of Tanzania (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the Base Date, which affect the Contractor in the performance of obligations under the Contract.

13.7.2 If the Contractor suffers (or will suffer) delay and/or incurs (or will incur) additional Cost as a result of these changes in the Laws or in such interpretations, made after the Base Date, the Contractor shall give notice to the Project Manager and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

13.7.3 After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or

13.8 Adjustments for Changes in Cost

- determine these matters.
- 13.7.4** Notwithstanding the foregoing, the Contractor shall not be entitled to such an extension of time if the same shall already have been taken into account in determining an extension and such Cost shall not be separately paid if the same shall already have been taken into account in the indexing of any inputs to the table of adjustment data in accordance with the provisions of Sub-Clause 13.8.
- 13.8.1** In this Sub-Clause, “table of adjustment data” means the completed table of adjustment data for local and foreign currencies included in the Schedules. If there is no such table of adjustment data, this Sub-Clause shall not apply.
- 13.8.2** If this Sub-Clause applies, the amounts payable to the Contractor shall be adjusted for rises or falls in the cost of labour, Goods and other inputs to the Works, by the addition or deduction of the amounts determined by the formulae prescribed in this Sub-Clause. To the extent that full compensation for any rise or fall in Costs is not covered by the provisions of this or other Clauses, the Accepted Contract Amount shall be deemed to have included amounts to cover the contingency of other rises and falls in costs.
- 13.8.3** The adjustment to be applied to the amount otherwise payable to the Contractor, as valued in accordance with the appropriate Schedule and certified in Payment Certificates, shall be determined from formulae for each of the currencies in which the Contract Price is payable. No adjustment is to be applied to work valued on the basis of Cost or current prices. The formulae shall be of the following general type:
$$P_n = a + bL_n/L_o + cE_n/E_o + dM_n/M_o + \dots$$
where:
“P_n” is the adjustment multiplier to be applied to the estimated contract value in the relevant currency of the work carried out in period “n”, this period being a month unless otherwise stated in the SCC ;
“a” is a fixed coefficient, stated in the relevant table of adjustment data, representing the non-adjustable portion in contractual payments;
“b”, “c”, “d”, ... are coefficients representing the estimated proportion of each cost element related to the execution of the Works, as stated in the relevant table of adjustment data; such tabulated cost elements may be indicative of resources such as labour, equipment and materials;
“L_n”, “E_n”, “M_n”, ... are the current cost indices or reference prices for period “n”, expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the date 30 days prior to the last day of the period (to which the particular Payment Certificate relates); and
“L_o”, “E_o”, “M_o”, ... are the base cost indices or reference prices, expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the Base Date.
If the currency in which the Contract Price P₀ is expressed is different from the currency of the indices, a correction factor will be applied to avoid incorrect adjustments of the Contract Price.
The correction factor shall be: Z₀/Z_n, where:
Z₀ = the number of units of currency of the origin of the indices which equal to one unit of the currency of the Contract Price on the Base date, and
“L_o”, “E_o”, “M_o”, ... are the base cost indices or reference prices, expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the Base Date.
- 13.8.4** The cost indices or reference prices stated in the table of adjustment data shall be used. If their source is in doubt, it shall be determined by the Project Manager. For this purpose, reference shall be made to the values of the indices at stated dates (quoted in the fourth and fifth columns respectively of the table) for the purposes of clarification of the source; although these dates (and thus these values) may not

correspond to the base cost indices.

- 13.8.5** In cases where the “currency of index” (stated in the table) is not the relevant currency of payment, each index shall be converted into the relevant currency of payment at the selling rate, established by the central bank of Tanzania, of this relevant currency on the above date for which the index is required to be applicable.
- 13.8.6** Until such time as each current cost index is available, the Project Manager shall determine a provisional index for the issue of Interim Payment Certificates. When a current cost index is available, the adjustment shall be recalculated accordingly.
- 13.8.7** If the Contractor fails to complete the Works within the Time for Completion, adjustment of prices thereafter shall be made using either (i) each index or price applicable on the date 49 days prior to the expiry of the Time for Completion of the Works, or (ii) the current index or price: whichever is more favourable to the Employer.
- 13.8.8** The weightings (coefficients) for each of the factors of cost stated in the table(s) of adjustment data shall only be adjusted if they have been rendered unreasonable, unbalanced or inapplicable, as a result of Variations.

14. Contract Price and Payment

14.1 The Contract Price	14.1.1	<p>Unless otherwise stated in the SCC:</p> <p>(a) the Contract Price shall be agreed or determined under Sub-Clause 12.3 [Evaluation] and be subject to adjustments in accordance with the Contract;</p> <p>(b) the Contractor shall pay all taxes, duties and fees required to be paid by him under the Contract, and the Contract Price shall not be adjusted for any of these costs except as stated in Sub-Clause 13.7 [Adjustments for Changes in Legislation];</p> <p>(c) any quantities which may be set out in the Bill of Quantities or other Schedule are estimated quantities and are not to be taken as the actual and correct quantities: (i) of the Works which the Contractor is required to execute, or (ii) for the purposes of Clause 12 [Measurement and Evaluation]; and</p> <p>(d) the Contractor shall submit to the Project Manager, within 28 days after the Commencement Date, a proposed breakdown of each lump sum price in the Schedules. The Project Manager may take account of the breakdown when preparing Payment Certificates, but shall not be bound by it.</p>
14.2 Advance Payment	14.2.1	<p>The Employer shall make an advance payment, as an interest-free loan for mobilisation and cash flow support, when the Contractor submits a guarantee in accordance with this Sub-Clause. The total advance payment, the number and timing of instalments (if more than one), and the applicable currencies and proportions, shall be as stated in the SCC.</p>
	14.2.2	<p>Unless and until the Employer receives this guarantee, or if the total advance payment is not stated in the SCC, this Sub-Clause shall not apply.</p>
	14.2.3	<p>The Project Manager shall deliver to the Employer and to the Contractor an Interim Payment Certificate for the advance payment or its first instalment after receiving a Statement (under Sub-Clause 14.3 [Application for Interim Payment Certificates]) and after the Employer receives (i) the Performance Security in accordance with Sub-Clause 4.2 [Performance Security] and (ii) a guarantee in amounts and currencies equal to the advance payment. This guarantee shall be issued by an entity and from within a country (or other jurisdiction) approved by the Employer, and shall be in the form annexed to the SCC or in another form approved by the Employer.</p>
	14.2.4	<p>The Contractor shall ensure that the guarantee is valid and enforceable until the advance payment has been repaid, but its amount shall be progressively reduced by the amount repaid by the Contractor as indicated in the Payment Certificates. If the terms of the guarantee specify its expiry date, and the advance payment has not been repaid by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the guarantee until the advance payment has been repaid.</p>
	14.2.5	<p>Unless stated otherwise in the SCC, the advance payment shall be repaid through percentage deductions from the interim payments determined by the Project Manager in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates], as follows:</p> <p>(a) deductions shall commence in the next interim Payment Certificate following that in which the total of all certified interim payments (excluding the advance payment and deductions and repayments of retention) exceeds 30 percent of the Accepted Contract Amount Less Provisional Sums; and</p> <p>(b) deductions shall be made at the amortisation rate stated in the SCC of the amount of each Interim Payment Certificate (excluding the advance payment and deductions for its repayments as well as deductions for retention money) in the currencies and proportions of the advance payment until such time as the advance payment</p>

has been repaid; provided that the advance payment shall be completely repaid prior to the time when 90 per cent (90%) of the Accepted Contract Amount less Provisional Sums has been certified for payment.

14.2.6 If the advance payment has not been repaid prior to the issue of the Taking-Over Certificate for the Works or prior to termination under Clause 15 [Termination by Employer], Clause 16 [Suspension and Termination by Contractor] or Clause 19 [Force Majeure] (as the case may be), the whole of the balance then outstanding shall immediately become due and in case of termination under Clause 15 [Termination by Employer] and Sub-Clause 19.6 [Optional Termination, Payment and Release], payable by the Contractor to the Employer.

14.3 Application for Interim Payment Certificates

14.3.1 The Contractor shall submit a Statement in six copies to the Project Manager after the end of each month, in a form approved by the Project Manager, showing in detail the amounts to which the Contractor considers himself to be entitled, together with supporting documents which shall include the report on the progress during this month in accordance with Sub- Clause 4.21 [Progress Reports].

14.3.2 The Statement shall include the following items, as applicable, which shall be expressed in the various currencies in which the Contract Price is payable, in the sequence listed:

- a) the estimated contract value of the Works executed and the Contractor's Documents produced up to the end of the month (including Variations but excluding items described in subparagraphs (b) to (g) below);
- b) any amounts to be added and deducted for changes in legislation and changes in cost, in accordance with Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost];
- c) any amount to be deducted for retention, calculated by applying the percentage of retention stated in the **SCC** to the total of the above amounts, until the amount so retained by the Employer reaches the limit of Retention Money (if any) stated in the **SCC**;
- d) any amounts to be added for the advance payment and (if more than one instalment) and to be deducted for its repayments in accordance with Sub-Clause 14.2 [Advance Payment];
- e) any amounts to be added and deducted for Plant and Materials in accordance with Sub- Clause 14.5 [Plant and Materials intended for the Works];
- f) any other additions or deductions which may have become due under the Contract or otherwise, including those under Clause 20 [Claims, Disputes and Arbitration]; and
- g) (g) the deduction of amounts certified in all previous Payment Certificates.

14.4 Schedule of Payments

14.4.1

If the Contract includes a schedule of payments specifying the instalments in which the Contract Price will be paid, then unless otherwise stated in this schedule:

- (a) the instalments quoted in this schedule of payments shall be the estimated contract values for the purposes of sub-paragraph (a) of Sub- Clause 14.3 [Application for Interim Payment Certificates];
- (b) Sub-Clause 14.5 [Plant and Materials intended for the Works] shall not apply; and
- (c) if these instalments are not defined by reference to the actual progress achieved in executing the Works, and if actual progress is found to be less or more than that on which this schedule of payments was based, then the Project Manager may proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine revised instalments, which shall take account of the extent to which progress is less or more than that on which the instalments were previously based.

14.4.2

If the Contract does not include a schedule of payments, the Contractor shall submit non- binding estimates of the payments which he expects to become due during each quarterly period. The first estimate shall be submitted within 42 days after the Commencement Date. Revised estimates shall be submitted at quarterly intervals, until the Taking-Over Certificate has been issued for the Works.

14.5 Plant and Materials intended for the Works

14.5.1

If this Sub-Clause applies, Interim Payment Certificates shall include, under sub-paragraph(e) of Sub-Clause 14.3, (i) an amount for Plant and Materials which have been sent to the Site for incorporation in the Permanent Works, and (ii) a reduction when the contract value of such Plant and Materials is included as part of the Permanent Works under sub-paragraph (a) of Sub- Clause 14.3 [Application for Interim Payment Certificates].

14.5.2

If the lists referred to in sub-paragraphs (b)(i) or (c)(i) below are not included in the SCC, this Sub-Clause shall not apply. The Project Manager shall determine and certify each addition if the following conditions are satisfied:

- (a) the Contractor has:
 - (i) kept satisfactory records (including the orders, receipts, Costs and use of Plant and Materials) which are available for inspection, and
 - (ii) submitted a statement of the Cost of acquiring and delivering the Plant and Materials to the Site, supported by satisfactory evidence; and either:
- (b) the relevant Plant and Materials:
 - (i) are those listed in the Schedules for payment when shipped,
 - (ii) have been shipped to Tanzania, en route to the Site, in accordance with the Contract; and
 - (iii) are described in a clean shipped bill of lading or other evidence of shipment, which has been submitted to the Project Manager together with evidence of payment of freight and insurance, any other documents reasonably required, and a bank guarantee in a form and issued by an entity approved by the Employer in amounts and currencies equal to the amount due under this Sub- Clause: this guarantee may be in a similar form to the form referred to in Sub-Clause 14.2 [Advance Payment] and shall be valid until the Plant and Materials are properly stored on Site and protected against loss, damage or deterioration; or
- (c) the relevant Plant and Materials: (i) are those listed in the Schedules for payment when delivered to the Site, and have been delivered to and are properly stored on the Site, are protected against loss, damage or deterioration, and appear to be in accordance with the

14.6 Issue of Interim Payment Certificates

- 14.5.3** The additional amount to be certified shall be the equivalent of eighty percent of the Project Manager's determination of the cost of the Plant and Materials (including delivery to Site), taking account of the documents mentioned in this Sub-Clause and of the contract value of the Plant and Materials.
- 14.5.4** The currencies for this additional amount shall be the same as those in which payment will become due when the contract value is included under sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates]. At that time, the Payment Certificate shall include the applicable reduction which shall be equivalent to, and in the same currencies and proportions as, this additional amount for the relevant Plant and Materials.
- 14.6.1** No amount will be certified or paid until the Employer has received and approved the Performance Security. Thereafter, the Project Manager shall, within 28 days after receiving a Statement and supporting documents, deliver to the Employer and to the Contractor an Interim Payment Certificate which shall state the amount which the Project Manager fairly determines to be due, with all supporting particulars for any reduction or withholding made by the Project Manager on the Statement.
- 14.6.2** However, prior to issuing the Taking-Over Certificate for the Works, the Project Manager shall not be bound to issue an Interim Payment Certificate in an amount which would (after retention and other deductions) be less than the minimum amount of Interim Payment Certificates (if any) stated in the SCC. In this event, the Project Manager shall give notice to the Contractor accordingly.
- 14.6.3** An Interim Payment Certificate shall not be withheld for any other reason, although:
- (a) if anything supplied or work done by the Contractor is not in accordance with the Contract, the cost of rectification or replacement may be withheld until rectification or replacement has been completed; and/or
 - (b) if the Contractor was or is failing to perform any work or obligation in accordance with the Contract, and had been so notified by the Project Manager, the value of this work or obligation may be withheld until the work or obligation has been performed.
 - (c) if the Contractor was, or is, failing to perform any ES obligations or work under the Contract, the value of this work or obligation, as determined by the Engineer, may be withheld until the work or obligation has been performed, and/or the cost of rectification or replacement, as determined by the Project Manager, may be withheld until rectification or replacement has been completed.
- Failure to perform includes, but is not limited to the following: (i) failure to comply with any ES obligations or work described in the Works' Requirements which may include: working outside site boundaries, excessive dust, damage to offsite vegetation, pollution of water courses from oils or sedimentation, contamination of land e.g. from oils, human waste, damage to archaeology or cultural heritage features, air pollution as a result of unauthorized and/or

inefficient combustion; (ii) failure to regularly review C-ESMP and/or update it in a timely manner to address emerging ES issues, or anticipated risks or impacts; (iii) failure to implement the C-ESMP e.g. failure to provide required training or sensitization; (iv) failing to have appropriate consents/permits prior to undertaking Works or related activities; (v) failure to submit ES report/s, or failure to submit such reports in a timely manner; (vi) failure to implement remediation as instructed by the Project Manager within the specified timeframe (e.g. remediation addressing non-compliance/s).”

	14.6.4	The Project Manager may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate. A Payment Certificate shall not be deemed to indicate the Project Manager’s acceptance, approval, consent or satisfaction.
14.7 Payment	14.7.1	The Employer shall pay to the Contractor: (a) the first instalment of the advance payment within 42 days after issuing the Letter of Acceptance or within 21 days after receiving the documents in accordance with Sub- Clause 4.2 [Performance Security] and Sub- Clause 14.2 [Advance Payment], whichever is later; (b) the amount certified in each Interim Payment Certificate within 56 days after the Project Manager receives the Statement and supporting documents, and (c) the amount certified in the Final Payment Certificate within 56 days after the Employer receives this Payment Certificate
	14.7.2	Payment of the amount due in each currency shall be made into the bank account, nominated by the Contractor, in the payment country (for this currency) specified in the Contract.
14.8 Delayed Payment	14.8.1	If the Contractor does not receive payment in accordance with Sub-Clause 14.7 [Payment], the Contractor shall be entitled to receive financing charges compounded monthly on the amount unpaid during the period of delay. This period shall be deemed to commence on the date for payment specified in Sub- Clause 14.7 [Payment], irrespective (in the case of its sub- paragraph (b)) of the date on which any Interim Payment Certificate is issued.
	14.8.2	Unless otherwise stated in the SCC, these financing charges shall be calculated at the annual rate of three percentage points above the discount rate of the central bank in the country of the currency of payment, or if not available, the interbank offered rate, and shall be paid in such currency.
	14.8.3	The Contractor shall be entitled to this payment without formal notice or certification, and without prejudice to any other right or remedy.
14.9 Payment of Retention Money	14.9.1	When the Taking-Over Certificate has been issued for the Works, the first half of the Retention Money shall be certified by the Project Manager for payment to the Contractor.

- 14.9.2** If a Taking-Over Certificate is issued for a Section or part of the Works, a proportion of the Retention Money shall be certified and paid. This proportion shall be half (50%) of the proportion calculated by dividing the estimated contract value of the Section or part, by the estimated final Contract Price.
- 14.9.3** Promptly after the latest of the expiry dates of the Defects Notification Periods, the outstanding balance of the Retention Money shall be certified by the Project Manager for payment to the Contractor. If a Taking- Over Certificate was issued for a Section, a proportion of the second half of the Retention Money shall be certified and paid promptly after the expiry date of the Defects Notification Period for the Section. This proportion shall be half (50%) of the proportion calculated by dividing the estimated contract value of the Section by the estimated final Contract Price.
- 14.9.4** However, if any work remains to be executed under Clause 11 [Defects Liability], the Project Manager shall be entitled to withhold certification of the estimated cost of this work until it has been executed.
- 14.9.5** When calculating these proportions, no account shall be taken of any adjustments under Sub- Clause 13.7 [Adjustments for Changes in Legislation] and Sub- Clause 13.8 [Adjustments for Changes in Cost].
- 14.9.6** When the Taking-Over Certificate has been issued for the Works and the first half of the Retention Money has been certified for payment by the Engineer, the Contractor shall be entitled to substitute a guarantee, in the form annexed to the Particular Conditions or in another form approved by the Employer and issued by a reputable bank or financial institution selected by the Contractor, for the second half of the Retention Money. The Contractor shall ensure that the guarantee is in the amounts and currencies of the second half of the Retention Money and is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects, as specified for the Performance Security and, if applicable, an ES Performance Security in Sub-Clause 4.2. On receipt by the Employer of the required guarantee, the Engineer shall certify and the Employer shall pay the second half of the Retention Money. The release of the second half of the Retention Money against a guarantee shall then be in lieu of the release after the latest of the expiry dates of the Defects Notification Periods. The Employer shall return the guarantee to the Contractor within 21 days after receiving a copy of the Performance Certificate.
- 14.9.7** If the Performance Security and, if applicable, an ES Performance Security required under Sub- Clause 4.2 is in the form of a demand guarantee, and the amount guaranteed under them when the Taking-Over Certificate is issued is more than half of the Retention Money, then the Retention Money guarantee will not be required. If the amount guaranteed under the Performance Security and, if applicable, an ES Performance Security, when the Taking-Over Certificate is issued is less than half of the Retention Money, the Retention Money guarantee will only be required for the difference between half of the Retention Money and the amount guaranteed under the Performance Security and, if applicable, an ES Performance Security
- 14.10 Statement at Completion**
- 14.10.1** Within 84 days after receiving the Taking-Over Certificate for the Works, the Contractor shall submit to the Project Manager six copies of a Statement at completion with supporting documents, in accordance with Sub-Clause 14.3 [Application for Interim Payment Certificates], showing:
- (a) the value of all work done in accordance with the Contract up to the date stated in the Taking-Over Certificate for the Works,
 - (b) any further sums which the Contractor considers to be due, and
 - (c) an estimate of any other amounts which the Contractor considers will

become due to him under the Contract. Estimated amounts shall be shown separately in this Statement at completion.

	14.10.2	The Project Manager shall then certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates].
14.11 Application for Final Payment Certificate	14.11.1	Within 56 days after receiving the Performance Certificate, the Contractor shall submit, to the Project Manager, six copies of a draft final statement with supporting documents showing in detail in a form approved by the Project Manager: (a) the value of all work done in accordance with the Contract, and (b) any further sums which the Contractor considers to be due to him under the Contract or otherwise.
	14.11.2	If the Project Manager disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Project Manager may reasonably require within 28 days from receipt of the said draft and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Project Manager the final statement as agreed. This agreed statement is referred to in these Conditions as the “Final Statement”.
	14.11.3	However, if, following discussions between the Project Manager and the Contractor and any changes to the draft final statement which are agreed, it becomes evident that a dispute exists, the Project Manager shall deliver to the Employer (with a copy to the Contractor) an Interim Payment Certificate for the agreed parts of the draft final statement. Thereafter, if the dispute is finally resolved under Sub-Clause 20.4 [Obtaining Dispute Avoidance and Resolution Board’s Decision] or Sub-Clause 20.5 [Amicable Settlement], the Contractor shall then prepare and submit to the Employer (with a copy to the Project Manager) a Final Statement.
14.12 Discharge	14.12.1	When submitting the Final Statement, the Contractor shall submit a discharge which confirms that the total of the Final Statement represents full and final settlement of all moneys due to the Contractor under or in connection with the Contract. This discharge may state that it becomes effective when the Contractor has received the Performance Security and the outstanding balance of this total, in which event the discharge shall be effective on such date.
14.13 Issue of Final Payment Certificate	14.13.1	Within 28 days after receiving the Final Statement and discharge in accordance with Sub- Clause 14.11 [Application for Final Payment Certificate] and Sub- Clause 14.12 [Discharge], the Project Manager shall deliver to the Employer and to the Contractor, the Final Payment Certificate which shall state: (a) the amount which he fairly determines is finally due, and (b) after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled, the balance (if any) due from the Employer to the Contractor or from the Contractor to the Employer, as the case may be.
	14.13.2	If the Contractor has not applied for a Final Payment Certificate in accordance with Sub- Clause 14.11 [Application for Final Payment

14.14 Cessation of Employer's Liability	14.14.1	<p>Certificate] and Sub- Clause 14.12 [Discharge], the Project Manager shall request the Contractor to do so. If the Contractor fails to submit an application within a period of 28 days, the Project Manager shall issue the Final Payment Certificate for such amount as he fairly determines to be due.</p> <p>The Employer shall not be liable to the Contractor for any matter or thing under or in connection with the Contract or execution of the Works, except to the extent that the Contractor shall have included an amount expressly for it:</p> <ul style="list-style-type: none"> (a) in the Final Statement and also (b) (except for matters or things arising after the issue of the Taking-Over Certificate for the Works) in the Statement at completion described in Sub-Clause14.10 [Statement at Completion].
	14.14.2	<p>However, this Sub-Clause shall not limit the Employer's liability under his indemnification obligations, or the Employer's liability in any case of fraud, deliberate default or reckless misconduct by the Employer.</p>
14.15 Currencies of Payment	14.15.1	<p>The Contract Price shall be paid in the currency or currencies named in the Schedule of Payment Currencies. If more than one currency is so named, payments shall be made as follows:</p> <ul style="list-style-type: none"> (a) if the Accepted Contract Amount was expressed in Local Currency only: (i) the proportions or amounts of the Local and Foreign Currencies, and the fixed rates of exchange to be used for calculating the payments, shall be as stated in the Schedule of Payment Currencies, except as otherwise agreed by both Parties; (ii) payments and deductions under Sub- Clause13.5 [Provisional Sums] and Sub-Clause13.7 [Adjustments for Changes in Legislation] shall be made in the applicable currencies and proportions; and (iii) other payments and deductions under sub- paragraphs (a) to (d) of Sub-Clause 14.3 [Application for Interim Payment Certificates] shall be made in the currencies and proportions specified in sub-paragraph (a)(i) above; (b) payment of the damages specified in the SCC, shall be made in the currencies and proportions specified in the Schedule of Payment Currencies; (c) other payments to the Employer by the Contractor shall be made in the currency in which the sum was expended by the Employer, or in such currency as may be agreed by both Parties; (d) if any amount payable by the Contractor to the Employer in a particular currency exceeds the sum payable by the Employer to the Contractor in that currency, the Employer may recover the balance of this amount from the sums otherwise payable to the Contractor in other currencies; and (e) if no rates of exchange are stated in the Schedule of Payment Currencies, they shall be those prevailing on the Base Date and determined by the central bank of Tanzania.

16. Suspension and Termination by Contractor

16.1 Contractor's Entitlement to Suspend Work

- 16.1.1 If the Project Manager fails to certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates] or Sub-Clause 14.7 [Payment], the Contractor may, after giving not less than 21 days' notice to the Employer, suspend work (or reduce the rate of work) unless and until the Contractor has received the Payment Certificate, reasonable evidence or payment, as the case may be and as described in the notice.
- 16.1.2 Notwithstanding the above, if the Government has suspended disbursements, which finances in whole or in part the execution of the Works, and no alternative funds are available, the Contractor may by notice suspend work or reduce the rate of work at any time, but not less than 7 days after the Employer having received the suspension notification from the Government.
- 16.1.3 The Contractor's action shall not prejudice his entitlements to financing charges under Sub- Clause 14.8 [Delayed Payment] and to termination under Sub-Clause 16.2 [Termination by Contractor].
- 16.1.4 If the Contractor subsequently receives such Payment Certificate, evidence or payment (as described in the relevant Sub-Clause and in the above notice) before giving a notice of termination, the Contractor shall resume normal working as soon as is reasonably practicable.

- 16.1.5 If the Contractor suffers delay and/or incurs Cost as a result of suspending work (or reducing the rate of work) in accordance with this Sub-Clause, the Contractor shall give notice to the Project Manager and shall be entitled subject to Sub- Clause 20.1 [Contractor's Claims] to:
- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
 - (b) payment of any such Cost-plus profit, which shall be included in the Contract Price.

- 16.1.6 After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine these matters.

16.2 Termination by Contractor

- 16.2.1 The Contractor shall be entitled to terminate the Contract if:
- (a) the Project Manager fails, within 56 days after receiving a Statement and supporting documents, to issue the relevant Payment Certificate,
 - (b) the Contractor does not receive the amount due under an Interim Payment Certificate within 42 days after the expiry of the time stated in Sub-Clause 14.7 [Payment] within which payment is to be made (except for deductions in accordance with Sub- Clause 2.4 [Employer's Claims]),
 - (c) the Employer substantially fails to perform his obligations under the Contract in such manner as to materially and adversely affect the economic balance of the Contract and/or the ability of the Contractor to perform the Contract,
 - (d) the Employer fails to comply with Sub-Clause 1.7 [Assignment],
 - (e) a prolonged suspension affects the whole of the Works as described in Sub-Clause 8.11 [Prolonged Suspension], or
 - (f) the Employer becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events.
 - (g) In the event the Government suspends the funds from which part of the payments to the Contractor are being made, if the Contractor has

not received the sums due to him upon expiration of the 14 days referred to in Sub-Clause 14.7 for payments under Interim Payment certificates, the Contractor may, without prejudice to the Contractor's entitlement to financing charges under Sub-Clause 14.8 [Delayed Payment], immediately take one or both of the following actions, namely (i) suspend work or reduce the rate of work, and (ii) terminate his employment under the Contract by giving notice to the Employer, with a copy to the Project Manager, such termination to take effect 14 days after the giving of the notice.

(h) the Contractor does not receive the Project Manager's instruction recording the agreement of both Parties on the fulfilment of the conditions for the Commencement of Works under Sub-Clause 8.1 [Commencement of Works].

16.2.2 In any of these events or circumstances, the Contractor may, upon giving 14 days' notice to the Employer, terminate the Contract. However, in the case of sub- paragraph (f) or (g), the Contractor may by notice terminate the Contract immediately.

16.2.3 The Contractor's election to terminate the Contract shall not prejudice any other rights of the Contractor, under the Contract or otherwise.

16.3 Cessation of Work and Removal of Contractor's Equipment

16.3.1 After a notice of termination under Sub-Clause 15.5 [Employer's Entitlement to Termination for Convenience], Sub-Clause 16.2 [Termination by Contractor] or Sub- Clause 19.6 [Optional Termination, Payment and Release] has taken effect, the Contractor shall promptly:

- (a) cease all further work, except for such work as may have been instructed by the Project Manager for the protection of life or property or for the safety of the Works,
- (b) hand over Contractor's Documents, Plant, Materials and other work, for which the Contractor has received payment, and
- (c) remove all other Goods from the Site, except as necessary for safety, and leave the Site.

16.4 Payment on Termination

16.4.1 After a notice of termination under Sub-Clause 16.2 [Termination by Contractor] has taken effect, the Employer shall promptly:

- (a) return the Performance Security to the Contractor,
- (b) pay the Contractor in accordance with Sub- Clause 19.6 [Optional Termination, Payment and Release], and
- (c) pay to the Contractor the amount of any loss or damage sustained by the Contractor as a result of this termination.

17. Risk and Responsibility

- 17.1 Indemnities**
- 17.1.1** The Contractor shall indemnify and hold harmless the Employer, the Employer's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of:
- (a) bodily injury, sickness, disease or death, of any person whatsoever arising out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and
 - (b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss arises out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless and to the extent that any such damage or loss is attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, their respective agents, or anyone directly or indirectly employed by any of them.
- 17.1.2** The Employer shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of (1) bodily injury, sickness, disease or death, which is attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and (2) the matters for which liability may be excluded from insurance cover, as described in sub-paragraphs (d)(i), (ii) and (iii) of Sub-Clause 18.3 [Insurance Against Injury to Persons and Damage to Property].
- 17.2 Contractor's Care of the Works**
- 17.2.1** The Contractor shall take full responsibility for the care of the Works and Goods from the Commencement Date until the Taking-Over Certificate is issued (or is deemed to be issued under Sub-Clause 10.1 [Taking Over of the Works and Sections]) for the Works, when responsibility for the care of the Works shall pass to the Employer. If a Taking-Over Certificate is issued (or is so deemed to be issued) for any Section or part of the Works, responsibility for the care of the Section or part shall then pass to the Employer.
- 17.2.2** After responsibility has accordingly passed to the Employer, the Contractor shall take responsibility for the care of any work which is outstanding on the date stated in a Taking-Over Certificate, until this outstanding work has been completed.
- 17.2.3** If any loss or damage happens to the Works, Goods or Contractor's Documents during the period when the Contractor is responsible for their care, from any cause not listed in Sub-Clause 17.3 [Employer's Risks], the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the Works, Goods and Contractor's Documents conform with the Contract.
- 17.2.4** The Contractor shall be liable for any loss or damage caused by any actions performed by the Contractor after a Taking-Over Certificate has

been issued. The Contractor shall also be liable for any loss or damage which occurs after a Taking-Over Certificate has been issued and which arose from a previous event for which the Contractor was liable.

17.3 Employer's Risks	17.3.1	<p>The risks referred to in Sub-Clause 17.4 below, insofar as they directly affect the execution of the Works in the Country, are:</p> <ul style="list-style-type: none">(a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,(b) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war, within the Country,(c) riot, commotion or disorder within the Country by persons other than the Contractor's Personnel,(d) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, within the Country, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio- activity,(e) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,(f) use or occupation by the Employer of any part of the Permanent Works, except as may be specified in the Contract,(g) design of any part of the Works by the Employer's Personnel or by others for whom the Employer is responsible, and(h) any operation of the forces of nature which is Unforeseeable or against which an experienced contractor could not reasonably have been expected to have taken adequate preventative precautions.
17.4 Consequences of Employer's Risks	17.4.1	<p>If and to the extent that any of the risks listed in Sub- Clause 17.3 above results in loss or damage to the Works, Goods or Contractor's Documents, the Contractor shall promptly give notice to the Project Manager and shall rectify this loss or damage to the extent required by the Employer</p>
	17.4.2	<p>If the Contractor suffers delay and/or incurs Cost from rectifying this loss or damage, the Contractor shall give a further notice to the Project Manager and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:</p> <ul style="list-style-type: none">(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and(b) payment of any such Cost, which shall be included in the Contract Price. In the case of sub-paragraphs (f) and (g) of Sub-Clause 17.3 [Employer's Risks], Cost plus profit shall be payable.
	17.4.3	<p>After receiving this further notice, the Project Manager shall proceed in accordance with Sub- Clause 3.6 [Determinations] to agree or determine these matters.</p>
17.5 Intellectual and Industrial Property Rights	17.5.1	<p>In this Sub-Clause, "infringement" means an infringement (or alleged infringement) of any patent, registered design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works; and "claim" means a claim (or proceedings pursuing a claim) alleging an infringement.</p>
	17.5.2	<p>Whenever a Party does not give notice to the other Party of any claim within 28 days of receiving the claim, the first Party shall be deemed to have waived any right to indemnity under this Sub-Clause.</p>
	17.5.3	<p>The Employer shall indemnify and hold the Contractor harmless against and from any claim alleging an infringement which is or was:</p> <ul style="list-style-type: none">(a) an unavoidable result of the Contractor's compliance with the Contract, or(b) a result of any Works being used by the Employer: (i) for a purpose other than that indicated by, or reasonably to be inferred from, the Contract, or (ii) in conjunction with anything not supplied by the Contractor, unless such use was disclosed to the Contractor prior to

the Base Date or is stated in the Contract.

- 17.5.4** The Contractor shall indemnify and hold the Employer harmless against and from any other claim which arises out of or in relation to (i) the manufacture, use, sale or import of any Goods, or (ii) any design for which the Contractor is responsible.
- 17.5.5** If a Party is entitled to be indemnified under this Sub- Clause, the indemnifying Party may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it. The other Party shall, at the request and cost of the indemnifying Party, assist in contesting the claim. This other Party (and its Personnel) shall not make any admission which might be prejudicial to the indemnifying Party, unless the indemnifying Party failed to take over the conduct of any negotiations, litigation or arbitration upon being requested to do so by such other Party.
- 17.6 Limitation of Liability** **17.6.1** Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than as specifically provided in Sub- Clause 8.7 [Delay Damages]; Sub-Clause 11.2 [Cost of Remedying Defects]; Sub-Clause 15.4 [Payment after Termination]; Sub-Clause 16.4 [Payment on Termination]; Sub-Clause 17.1 [Indemnities]; Sub-Clause 17.4 (b) [Consequences of Employer’s Risks] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights].
- 17.6.2** The total liability of the Contractor to the Employer, under or in connection with the Contract other than under Sub- Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Employer’s Equipment and Free-Issue Material], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights], shall not exceed the sum resulting from the application of a multiplier (less or greater than one) to the Accepted Contract Amount, as stated in the SCC, or (if such multiplier or other sum is not so stated), the Accepted Contract Amount.
- 17.6.3** This Sub-Clause shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.
- 17.7 Use of Employer’s Accommodation/Facilities** **17.7.1** The Contractor shall take full responsibility for the care of the Employer provided accommodation and facilities, if any, as detailed in the Specification, from the respective dates of hand-over to the Contractor until cessation of occupation (where hand-over or cessation of occupation may take place after the date stated in the Taking-Over Certificate for the Works).
- 17.7.2** If any loss or damage happens to any of the above items while the Contractor is responsible for their care arising from any cause whatsoever other than those for which the Employer is liable, the Contractor shall, at his own cost, rectify the loss or damage to the satisfaction of the Project Manager.

18. Insurance

- 18.1 General Requirements for** **18.1.1** In this Clause, “insuring Party” means, for each type of insurance, the Party responsible for effecting and maintaining the insurance specified

Insurances

in the relevant Sub- Clause.

- 18.1.2** Wherever the Contractor is the insuring Party, each insurance shall be effected with insurers and in terms approved by the Employer. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.
- 18.1.3** Wherever the Employer is the insuring Party, each insurance shall be effected with insurers and in terms acceptable to the Contractor. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.
- 18.1.4** If a policy is required to indemnify joint insured, the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured. If a policy indemnifies additional joint insured, namely in addition to the insured specified in this Clause,
(i) the Contractor shall act under the policy on behalf of these additional joint insured except that the Employer shall act for Employer's Personnel, (ii) additional joint insured shall not be entitled to receive payments directly from the insurer or to have any other direct dealings with the insurer, and (iii) the insuring Party shall require all additional joint insured to comply with the conditions stipulated in the policy.
- 18.1.5** Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify the loss or damage. Payments received from insurers shall be used for the rectification of the loss or damage.
- 18.1.6** The relevant insuring Party shall, within the respective periods stated in the SCC (calculated from the Commencement Date), submit to the other Party:
(a) evidence that the insurances described in this Clause have been effected, and
(b) (b) copies of the policies for the insurances described in Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment] and Sub-Clause 18.3 [Insurance against Injury to Persons and Damage to Property].
- 18.1.7** When each premium is paid, the insuring Party shall submit evidence of payment to the other Party. Whenever evidence or policies are submitted, the insuring Party shall also give notice to the Project Manager.
- 18.1.8** Each Party shall comply with the conditions stipulated in each of the insurance policies. The insuring Party shall keep the insurers informed of any relevant changes to the execution of the Works and ensure that insurance is maintained in accordance with this Clause.
- 18.1.9** Neither Party shall make any material alteration to the terms of any insurance without the prior approval of the other Party. If an insurer makes (or attempts to make) any alteration, the Party first notified by the insurer shall promptly give notice to the other Party.
- 18.1.10** If the insuring Party fails to effect and keep in force any of the insurances it is required to effect and maintain under the Contract, or fails to provide satisfactory evidence and copies of policies in accordance with this Sub-Clause, the other Party may (at its option and without prejudice to any other right or remedy) effect insurance for the relevant coverage and pay the premiums due. The insuring Party shall

18.2 Insurance for Works and Contractor's Equipment

- pay the amount of these premiums to the other Party, and the Contract Price shall be adjusted accordingly.
- 18.1.10** Nothing in this Clause limits the obligations, liabilities or responsibilities of the Contractor or the Employer, under the other terms of the Contract or otherwise. Any amounts not insured or not recovered from the insurers shall be borne by the Contractor and/or the Employer in accordance with these obligations, liabilities or responsibilities. However, if the insuring Party fails to effect and keep in force an insurance which is available and which it is required to effect and maintain under the Contract, and the other Party neither approves the omission nor effects insurance for the coverage relevant to this default, any moneys which should have been recoverable under this insurance shall be paid by the insuring Party
- 18.1.11** Payments by one Party to the other Party shall be subject to Sub-Clause 2.4 [Employer's Claims] or Sub-Clause 20.1 [Contractor's Claims], as applicable.
- 18.1.12** The Contractor shall be entitled to place all insurance relating to the Contract (including, but not limited to the insurance referred to Clause 18) with insurers from any eligible source country.
- 18.2.1** The insuring Party shall insure the Works, Plant, Materials and Contractor's Documents for not less than the full reinstatement cost including the costs of demolition, removal of debris and professional fees and profit. This insurance shall be effective from the date by which the evidence is to be submitted under sub-paragraph (a) of Sub-Clause 18.1 [General Requirements for Insurances], until the date of issue of the Taking-Over Certificate for the Works.
- 18.2.2** The insuring Party shall maintain this insurance to provide cover until the date of issue of the Performance Certificate, for loss or damage for which the Contractor is liable arising from a cause occurring prior to the issue of the Taking-Over Certificate, and for loss or damage caused by the Contractor in the course of any other operations (including those under Clause 11 [Defects Liability]).
- 18.2.3** The insuring Party shall insure the Contractor's Equipment for not less than the full replacement value, including delivery to Site. For each item of Contractor's Equipment, the insurance shall be effective while it is being transported to the Site and until it is no longer required as Contractor's Equipment.
- 18.2.4** Unless otherwise stated in the **SCC**, insurances under this Sub-Clause:
- (a) shall be effected and maintained by the Contractor as insuring Party,
 - (b) shall be in the joint names of the Parties, who shall be jointly entitled to receive payments from the insurers, payments being held or allocated to the Party actually bearing the costs of rectifying the loss or damage,
 - (c) shall cover all loss and damage from any cause not listed in Sub-Clause 17.3 [Employer's Risks],
 - (d) shall also cover, to the extent specifically required in the Tendering documents of the Contract, loss or damage to a part of the Works which is attributable to the use or occupation by the Employer of another part of the Works, and loss or damage from the risks listed in sub-paragraphs (c), (g) and (h) of Sub-Clause 17.3 [Employer's Risks], excluding (in each case) risks which are not insurable at commercially reasonable terms, with deductibles per occurrence of not more than the amount stated in the **SCC** (if an amount is not so stated, this sub-paragraph
 - (e) shall not apply), and
 - (f) may however exclude loss of, damage to, and reinstatement of:
 - (g) a part of the Works which is in a defective condition due to a defect in its design, materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in sub-paragraph (ii) below),
 - (h) a part of the Works which is lost or damaged in order to reinstate any

other part of the Works if this other part is in a defective condition due to a defect in its design, materials or workmanship,

- (i) a part of the Works which has been taken over by the Employer, except to the extent that the Contractor is liable for the loss or damage, and
- (j) Goods while they are not in the Country, subject to Sub-Clause 14.5 [Plant and Materials intended for the Works].

18.2.5 If, more than one year after the Base Date, the cover described in subparagraph (d) above ceases to be available at commercially reasonable terms, the Contractor shall (as insuring Party) give notice to the Employer, with supporting particulars. The Employer shall then (i) be entitled subject to Sub-Clause 2.4 [Employer's Claims] to payment of an amount equivalent to such commercially reasonable terms as the Contractor should have expected to have paid for such cover, and (ii) be deemed, unless he obtains the cover at commercially reasonable terms, to have approved the omission under Sub-Clause 18.1 [General Requirements for Insurances].

18.3 Insurance against Injury to Persons and Damage to Property

18.3.1 The insuring Party shall insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment]) or to any person (except persons insured under Sub-Clause 18.4 [Insurance for Contractor's Personnel]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate.

18.3.2 This insurance shall be for a limit per occurrence of not less than the amount stated in the SCC, with no limit on the number of occurrences. If an amount is not stated in the SCC, this Sub-Clause shall not apply.

18.3.3 Unless otherwise stated in the SCC, the insurances specified in this Sub-Clause:

- (a) shall be effected and maintained by the Contractors insuring Party,
- (b) shall be in the joint names of the Parties,
- (c) shall be extended to cover liability for all loss and damage to the Employer's property (except things insured under Sub-Clause 18.2) arising out of the Contractor's performance of the Contract, and
- (d) may however exclude liability to the extent that it arises from: (i) the Employer's right to have the Permanent Works executed on, over, under, in or through any land, and to occupy this land for the Permanent Works, (ii) damage which is an unavoidable result of the Contractor's obligations to execute the Works and remedy any defects, and (iii) a cause listed in Sub-Clause 17.3 [Employer's Risks], except to the extent that cover is available at commercially reasonable terms.

18.4 Insurance for Contractor's Personnel

18.4.1 The Contractor shall effect and maintain insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel.

18.4.2 The insurance shall cover the Employer and the Project Manager against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Employer or of the Employer's Personnel.

18.4.3

The insurance shall be maintained in full force and effect during the whole time that these personnel are assisting in the execution of the Works. For a Subcontractor's employees, the insurance may be effected by the Subcontractor, but the Contractor shall be responsible for compliance with this Clause.

19. Force Majeure

19.1 Definition of Force Majeure	19.1.1	<p>In this Clause, “Force Majeure” means an exceptional event or circumstance:</p> <ul style="list-style-type: none">(a) which is beyond a Party’s control,(b) which such Party could not reasonably have provided against before entering into the Contract,(c) which, having arisen, such Party could not reasonably have avoided or overcome, and(d) which is not substantially attributable to the other Party.
	19.1.2	<p>Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:</p> <ul style="list-style-type: none">(i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies, (ii) rebellion, terrorism, sabotage by persons other than the Contractor’s Personnel, revolution, insurrection, military or usurped power, or civil war, (iii) riot, commotion, disorder, strike or lockout by persons other than the Contractor’s Personnel, (iv) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, except as may be attributable to the Contractor’s use of such munitions, explosives, radiation or radio-activity, and (v) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.
19.2 Notice of Force Majeure	19.2.1	<p>If a Party is or will be prevented from performing its substantial obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, or should have become aware, of the relevant event or circumstance constituting Force Majeure.</p>
	19.2.2	<p>The Party shall, having given notice, be excused performance of its obligations for so long as such Force Majeure prevents it from performing them.</p>
	19.2.3	<p>Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either Party to make payments to the other Party under the Contract.</p>
19.3 Duty to Minimize Delay	19.3.1	<p>Each Party shall at all times use all reasonable endeavours to minimise any delay in the performance of the Contract as a result of Force Majeure.</p>
	19.3.2	<p>A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.</p>
19.4 Consequences of Force Majeure	19.4.1	<p>If the Contractor is prevented from performing its substantial obligations under the Contract by Force Majeure of which notice has been given under Sub- Clause 19.2 [Notice of Force Majeure], and suffers delay and/or incurs Cost by reason of such Force Majeure, the Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor’s Claims] to: (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and (b) if the event or circumstance is of the kind described in sub-paragraphs (i) to (iv) of Sub-Clause 19.1 [Definition of Force Majeure] and, in the case of sub-paragraphs (ii) to (iv), occurs in the Country, payment of any such Cost, including the costs of rectifying or replacing the Works and/or Goods damaged or destroyed by Force Majeure, to the extent they are not indemnified through the insurance policy referred to in Sub-Clause 18.2 [Insurance for Works</p>

		and Contractor's Equipment].
	19.4.2	After receiving this notice, the Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine these matters.
19.5 Force Majeure Affecting Subcontractor	19.5.1	If any Subcontractor is entitled under any contract or agreement relating to the Works to relief from force majeure on terms additional to or broader than those specified in this Clause, such additional or broader force majeure events or circumstances shall not excuse the Contractor's non- performance or entitle him to relief under this Clause.
19.6 Optional Termination, Payment and Release	19.6.1	If the execution of substantially all the Works in progress is prevented for a continuous period of 84 days by reason of Force Majeure of which notice has been given under Sub-Clause 19.2 [Notice of Force Majeure], or for multiple periods which total more than 140 days due to the same notified Force Majeure, then either Party may give to the other Party a notice of termination of the Contract. In this event, the termination shall take effect 7 days after the notice is given, and the Contractor shall proceed in accordance with Sub- Clause 16.3 [Cessation of Work and Removal of Contractor's Equipment].
	19.6.2	Upon such termination, the Project Manager shall determine the value of the work done and issue a Payment Certificate which shall include: <ul style="list-style-type: none"> (a) the amounts payable for any work carried out for which a price is stated in the Contract; (b) the Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery: this Plant and Materials shall become the property of (and be at the risk of) the Employer when paid for by the Employer, and the Contractor shall place the same at the Employer's disposal; (c) other Costs or liabilities which in the circumstances were reasonably and necessarily incurred by the Contractor in the expectation of completing the Works; (d) the Cost of removal of Temporary Works and Contractor's Equipment from the Site and the return of these items to the Contractor's works in his country (or to any other destination at no greater cost); and (e) the Cost of repatriation of the Contractor's staff and labour employed wholly in connection with the Works at the date of termination.
19.7 Release from Performance	19.7.1	Notwithstanding any other provision of this Clause, if any event or circumstance outside the control of the Parties (including, but not limited to, Force Majeure) arises which makes it impossible or unlawful for either or both Parties to fulfil its or their contractual obligations or which, under the law governing the Contract, entitles the Parties to be released from further performance of the Contract, then upon notice by either Party to the other Party of such event or circumstance: <ul style="list-style-type: none"> (a) the Parties shall be discharged from further performance, without prejudice to the rights of either Party in respect of any previous breach of the Contract, and (b) the sum payable by the Employer to the Contractor shall be the same as would have been payable under Sub-Clause 19.6 [Optional Termination, Payment and Release] if the Contract had been terminated under Sub-Clause 19.6.

20. Claims, Disputes and Arbitration

- 20.1 Contractor's Claims**
- 20.1.1 If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give notice to the Project Manager, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Contractor became aware, or should have become aware, of the event or circumstance.
- 20.1.2 If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply.
- 20.1.3 The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.
- 20.1.4 The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Project Manager. Without admitting the Employer's liability, the Project Manager may, after receiving any notice under this Sub-Clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Project Manager to inspect all these records, and shall (if instructed) submit copies to the Project Manager.
- 20.1.5 Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Project Manager, the Contractor shall send to the Project Manager a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:
- (a) this fully detailed claim shall be considered as interim;
 - (b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Project Manager may reasonably require; and
 - (c) the Contractor shall send a final claim within 28 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Project Manager.
- 20.1.6 Within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Project Manager and approved by the Contractor, the Project Manager shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within the above defined time period.
- 20.1.7 Within the above defined period of 42 days, the Project Manager shall proceed in accordance with Sub-Clause 3.6 [Determinations] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with Sub-Clause 8.4 [Extension of Time for Completion], and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.
- 20.1.8 Each Payment Certificate shall include such additional payment for any

claim as have been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.

20.2 Appointment of the Dispute Avoidance and Resolution Board

- 20.1.9 If the Project Manager does not respond within the timeframe defined in this Clause, either Party may consider that the claim is rejected by the Project Manager and any of the Parties may refer it to the Dispute Avoidance and Resolution Board in accordance with Sub- Clause 20.4 [Obtaining Dispute Avoidance and Resolution Board’s Decision].
- 20.1.10 The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause.
- 20.2.1 Disputes shall be referred to a DARB for decision in accordance with Sub-Clause 20.4 [Obtaining Dispute Avoidance and Resolution Board’s Decision]. The Parties shall appoint a DARB by the date stated in the **SCC**.
- 20.2.2 The DARB shall comprise, as stated in the **SCC**, either one or three suitably qualified persons (“the members”), each of whom shall be fluent in the language for communication defined in the Contract and shall be a professional experienced in the type of construction involved in the Works and with the interpretation of contractual documents. If the number is not so stated and the Parties do not agree otherwise, the DARB shall comprise three persons, one of whom shall serve as chairman.
- 20.2.3 If the Parties have not jointly appointed the DARB 21 days before the date stated in the **SCC** and the DARB is to comprise three persons, each Party shall nominate one member for the approval of the other Party. The first two members shall recommend and the Parties shall agree upon the third member, who shall act as chairman.
- 20.2.4 The agreement between the Parties and either the sole member or each of the three members shall incorporate by reference the General Conditions of Dispute Avoidance and Resolution Board Agreement contained in the **Appendix B** to these General Conditions, with such amendments as are agreed between them.
- 20.2.5 The terms of the remuneration of either the sole member or each of the three members, including the remuneration of any expert whom the DARB consults, shall be mutually agreed upon by the Parties when agreeing the terms of appointment of the member or such expert (as the case may be). Each Party shall be responsible for paying one- half of this remuneration.
- 20.2.6 If a member declines to act or is unable to act as a result of death, disability, resignation or termination of appointment, a replacement shall be appointed in the same manner as the replaced person was required to have been nominated or agreed upon, as described in this Sub-Clause.
- 20.2.7 The appointment of any member may be terminated by mutual agreement of both Parties, but not by the Employer or the Contractor acting alone. Unless otherwise agreed by both Parties, the appointment of the DARB (including each member) shall expire when the discharge referred to in Sub-Clause 14.12 [Discharge] shall have become effective.

20.3 Failure to Agree on the Composition of the Dispute Avoidance and Resolution Board	20.3.1	<p>If any of the following conditions apply, namely:</p> <p>(a) the Parties fail to agree upon the appointment of the sole member of the DARB by the date stated in the first paragraph of Sub-Clause 20.2, [Appointment of the Dispute Avoidance and Resolution Board],</p> <p>(b) either Party fails to nominate a member (for approval by the other Party) or fails to approve a member nominated by the other Party, of a DARB of three persons by such date,</p> <p>(c) the Parties fail to agree upon the appointment of the third member (to act as chairman) of the DARB by such date, or</p> <p>(d) the Parties fail to agree upon the appointment of a replacement person within 42 days after the date on which the sole member or one of the three members declines to act or is unable to act as a result of death, disability, resignation or termination of appointment, then the Appointing Entity or official named in the SCC shall, upon the request of either or both of the Parties and after due consultation with both Parties, appoint this member of the DARB. This appointment shall be final and conclusive. Each Party shall be responsible for paying one-half of the remuneration of the appointing entity or official.</p>
20.4 Obtaining Dispute Avoidance and Resolution Board's Decision	20.4.1	<p>If a dispute (of any kind whatsoever) arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Project Manager, either Party may refer the dispute in writing to the DARB for its decision, with copies to the other Party and the Project Manager. Such reference shall state that it is given under this Sub- Clause.</p>
	20.4.2	<p>For a DARB of three persons, the DARB shall be deemed to have received such reference on the date when it is received by the chairman of the DARB.</p>
	20.4.3	<p>Both Parties shall promptly make available to the DARB all such additional information, further access to the Site, and appropriate facilities, as the DARB may require for the purposes of making a decision on such dispute. The DARB shall be deemed to be not acting as arbitrator(s).</p>
	20.4.4	<p>Within 84 days after receiving such reference, or within such other period as may be proposed by the DARB and approved by both Parties, the DARB shall give its decision, which shall be reasoned and shall state that it is given under this Sub-Clause. The decision shall be binding on both Parties, who shall promptly give effect to it unless and until it shall be revised in an amicable settlement or an arbitral award as described below. Unless the Contract has already been abandoned, repudiated or terminated, the Contractor shall continue to proceed with the Works in accordance with the Contract.</p>
	20.4.5	<p>If either Party is dissatisfied with the DARB's decision, then either Party may, within 28 days after receiving the decision, give notice to the other Party of its dissatisfaction and intention to commence arbitration. If the DARB fails to give its decision within the period of 84 days (or as otherwise approved) after receiving such reference, then either Party may, within 28 days after this period has expired, give notice to the other Party of its dissatisfaction and intention to commence arbitration.</p>
	20.4.6	<p>In either event, this notice of dissatisfaction shall state that it is given under this Sub-Clause, and shall set out the matter in dispute and the reason(s) for dissatisfaction. Except as stated in Sub-Clause 20.7 [Failure to Comply with Dispute Avoidance and Resolution Board's Decision] and Sub-Clause 20.8 [Expiry of Dispute Avoidance and Resolution Board's Appointment], neither Party shall be entitled to commence arbitration of a dispute unless a notice of dissatisfaction has been given in accordance with this Sub-Clause.</p>
	20.4.7	<p>If the DARB has given its decision as to a matter in dispute to both</p>

		Parties, and no notice of dissatisfaction has been given by either Party within 28 days after it received the DARB's decision, then the decision shall become final and binding upon both Parties.
20.5 Amicable Settlement	20.5.1	Where notice of dissatisfaction has been given under Sub-Clause 20.4 above, both Parties shall attempt to settle the dispute amicably before the commencement of arbitration. However, unless both Parties agree otherwise, arbitration may be commenced on or after the fifty-sixth day after the day on which a notice of dissatisfaction and intention to commence arbitration was given, even if no attempt at amicable settlement has been made.
20.6 Arbitration	20.6.1	Unless indicated otherwise in the SCC, any dispute not settled amicably and in respect of which the DARB's decision (if any) has not become final and binding shall be finally settled by arbitration with proceedings conducted in accordance with an institution whose rules shall be used.
	20.6.2	The arbitrators shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Project Manager, and any decision of the DARB, relevant to the dispute. Nothing shall disqualify representatives of the Parties and the Project Manager from being called as a witness and giving evidence before the arbitrators on any matter whatsoever relevant to the dispute.
	20.6.3	Neither Party shall be limited in the proceedings before the arbitrators to the evidence or arguments previously put before the DARB to obtain its decision, or to the reasons for dissatisfaction given in its notice of dissatisfaction. Any decision of the DARB shall be admissible in evidence in the arbitration.
	20.6.4	Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, the Project Manager and the DARB shall not be altered by reason of any arbitration being conducted during the progress of the Works.
20.7 Failure to Comply with Dispute Avoidance and Resolution Board's Decision	20.7.1	In the event that a Party fails to comply with a DARB decision which has become final and binding, then the other Party may, without prejudice to any other rights it may have, refer the failure itself to arbitration under Sub- Clause 20.6 [Arbitration]. Sub-Clause 20.4 [Obtaining Dispute Avoidance and Resolution Board's Decision] and Sub-Clause 20.5 [Amicable Settlement] shall not apply to this reference.
20.8 Expiry of Dispute Avoidance and Resolution Board's Appointment	20.8.1	If a dispute arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works and there is no DARB in place, whether by reason of the expiry of the DARB's appointment or otherwise: (a) Sub-Clause 20.4 [Obtaining Dispute Avoidance and Resolution Board's Decision] and Sub- Clause 20.5 [Amicable Settlement] shall not apply, and (b) the dispute may be referred directly to arbitration under Sub-Clause 20.6 [Arbitration].

APPENDIX A

Environmental, Social, Health and Safety (ESHS)

Metrics for Progress Reports

[Note to Employer: the following metrics may be amended to reflect the specifics of the Contract. The Employer shall ensure that the metrics provided are appropriate for the Works and impacts/key issues identified in the environmental and social assessment]

Metrics for regular reporting:

- a) environmental incidents or non-compliances with contract requirements, including contamination, pollution or damage to ground or water supplies;
 - b) health and safety incidents, accidents, injuries that require treatment and all fatalities;
 - c) interactions with regulators: identify agency, dates, subjects, outcomes (report the negative if none);
 - d) status of all permits and agreements:
 - i). work permits: number required, number received, actions taken for those not received;
 - ii). status of permits and consents:
 - list areas/facilities with permits required (quarries, asphalt & batch plants), dates of application, dates issued (actions to follow up if not issued), dates submitted to resident engineer (or equivalent), status of area (waiting for permits, working, abandoned without reclamation, decommissioning plan being implemented, etc.);
 - list areas with landowner agreements required (borrow and spoil areas, camp sites), dates of agreements, dates submitted to resident engineer (or equivalent);
 - identify major activities undertaken in each area in the reporting period and highlights of environmental and social protection (land clearing, boundary marking, topsoil salvage, traffic management, decommissioning planning, decommissioning implementation);
 - for quarries: status of relocation and compensation (completed, or details of activities and current status in their reporting period).
 - e) health and safety supervision:
 - i). safety officer: number days worked, number of full inspections & partial inspections, reports to construction/project management;
 - ii). number of workers, work hours, metric of PPE use (percentage of workers with full personal protection equipment (PPE), partial, etc.), worker violations observed (by type of violation, PPE or otherwise), warnings given, repeat warnings given, follow-up actions taken (if any);
 - f) worker accommodations:
 - i). number of expats housed in accommodations, number of locals;
 - ii). date of last inspection, and highlights of inspection including status of accommodations' compliance with national and local law and good practice, including sanitation, space, etc.;
 - iii). actions taken to recommend/require improved conditions, or to improve conditions.
 - g) Health services: provider of health services, information and/or training, location of clinic, number of non-safety disease or illness treatments and diagnoses (no names to be provided);
 - h) gender (for expats and locals separately): number of female workers, percentage of workforce, gender issues raised and deal with (cross-reference grievances or other sections as needed);
 - i) training:
 - i). number of new workers, number receiving induction training, dates of induction training;
 - ii). number and dates of toolbox talks, number of workers receiving Occupational Health and Safety (OHS), environmental and social training;
 - iii). number and dates of communicable diseases (including STDs) sensitization and/or training, no. workers receiving training (in the reporting period and in the past); same questions for gender sensitization, flag person training.
 - iv). number and date of SEA and SH prevention sensitization and/or training events, including number of workers receiving training on Code of Conduct for Contractor's Personnel (in the reporting period and in the past), etc.
 - j) environmental and social supervision:
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- i) environmentalist: days worked, areas inspected and numbers of inspections of each (road section, work camp, accommodations, quarries, borrow areas, spoil areas, swamps, forest crossings, etc.), highlights of activities/findings (including violations of environmental and/or social best practices, actions taken), reports to environmental and/or social specialist/construction/site management;
 - ii) sociologist: days worked, number of partial and full site inspections (by area: road section, work camp, accommodations, quarries, borrow areas, spoil areas, clinic, HIV/AIDS center, community centers, etc.), highlights of activities (including violations of environmental and/or social requirements observed, actions taken), reports to environmental and/or social specialist/construction/site management; and
 - iii) community liaison person(s): days worked (hours community center open), number of people met, highlights of activities (issues raised, etc.), reports to environmental and/or social specialist /construction/site management.
- k) Grievances: list new grievances (e.g. number of allegations of SEA and SH) received in the reporting period and number of unresolved past grievances by date received, complainant's age and sex, how received, to whom referred to for action, resolution and date (if completed), data resolution reported to complainant, any required follow-up (Cross-reference other sections as needed).
- i. Worker grievances;
 - ii. Community grievances
- l) Traffic, road safety and vehicles/equipment:
- i) traffic and road safety incidents and accidents involving project vehicles & equipment: provide date, location, damage, cause, follow-up;
 - ii) traffic and road safety incidents and accidents involving non-project vehicles or property (also reported under immediate metrics): provide date, location, damage, cause, follow-up;
 - iii) overall condition of vehicles/equipment (subjective judgment by environmentalist); non-routine repairs and maintenance needed to improve safety and/or environmental performance (to control smoke, etc.).
- m) Environmental mitigations and issues (what has been done):
- i) dust: number of working bowsers, number of watering /day, number of complaints, warnings given by environmentalist, actions taken to resolve; highlights of quarry dust control (covers, sprays, operational status); % of rock/spoil lorries with covers, actions taken for uncovered vehicles;
 - ii) erosion control: controls implemented by location, status of water crossings, environmentalist inspections and results, actions taken to resolve issues, emergency repairs needed to control erosion/sedimentation;
 - iii) quarries, borrow areas, spoil areas, asphalt plants, batch plants: identify major activities undertaken in the reporting period at each, and highlights of environmental and social protection: land clearing, boundary marking, topsoil salvage, traffic management, decommissioning planning, decommissioning implementation;
 - iv) blasting: number of blasts (and locations), status of implementation of blasting plan (including notices, evacuations, etc.), incidents of off-site damage or complaints (cross-reference other sections as needed);
 - v) spill cleanups, if any: material spilled, location, amount, actions taken, material disposal (report all spills that result in water or soil contamination);
 - vi) waste management: types and quantities generated and managed, including amount taken offsite (and by whom) or reused/recycled/disposed on-site;
 - vii) details of tree plantings and other mitigations required undertaken in the reporting period;
 - viii) details of water and swamp protection mitigations required undertaken in the reporting period.
- n) compliance:
- i) compliance status for conditions of all relevant consents/permits, for the Work, including quarries, etc.): statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance;
 - ii) compliance status of C-ESMP/ESIP requirements: statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance
 - iii) compliance status of SEA and SH prevention and response action plan: statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance

- iv) compliance status of Health and Safety Management Plan re: statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance
- v) other unresolved issues from previous reporting periods related to environmental and social: continued violations, continued failure of equipment, continued lack of vehicle covers, spills not dealt with, continued compensation or blasting issues, etc. Cross-reference other sections as needed.

APPENDIX B

A General Conditions of Dispute Avoidance and Resolution Board Agreement

<p>1. Definitions</p>	<p>Each “Dispute Avoidance and Resolution Board Agreement” is atripartite agreement by and between:</p> <ul style="list-style-type: none"> (a) the “Employer”; (b) the “Contractor”; and (c) the “Member” who is defined in the Dispute Avoidance andResolution Board Agreement as being <ul style="list-style-type: none"> i). the sole member of “Dispute Avoidance and Resolution Board” and, where this is the case, all references to the “Other Members” do not apply, or ii). one of the three persons who are jointly called the “DARB” (or “Dispute Avoidance and Resolution Board”) and, where this is the case, the other two persons are called the “Other Members.”
	<p>The Employer and the Contractor have entered (or intend to enter) into a contract, which is called the "Contract" and is defined in the Dispute Avoidance and Resolution Board Agreement, which incorporates this Appendix. In the DARB Agreement, words and expressions which are not otherwise defined shall have the meanings assigned to them in the Contract.</p>
<p>2. General Provisions</p>	<p>Unless otherwise stated in the DARB Agreement, it shall takeeffect on the latest of the following dates:</p> <ul style="list-style-type: none"> (a) the Commencement Date defined in the Contract, (b) when the Employer, the Contractor and the Member have each signed the DARB Agreement, or (c) when the Employer, the Contractor and each of the Other Members (if any) have respectively each signed a Dispute Avoidance and Resolution Board agreement. <p>This employment of the Member is a personal appointment. At any time, the Member may give not less than 70 days’ notice of resignation to the Employer and to the Contractor, and the Dispute Agreement shall terminate upon the expiry of this period.</p>
<p>3. Warranties</p>	<p>The Member warrants and agrees that he/she is and shall be impartial and independent of the Employer, the Contractor and the Project Manager. The Member shall promptly disclose, to each of them and to the Other Members (if any), any fact or circumstance which might appear inconsistent with his/her warranty and agreement of impartiality and independence.</p>
	<p>When appointing the Member, the Employer and the Contractorrelied upon the Member’s representations that he/she is:</p> <ul style="list-style-type: none"> (a) experienced in the work which the Contractor is to carry outunder the Contract, (b) experienced in the interpretation of contract documentation, and
	<ul style="list-style-type: none"> (c) fluent in the language for communications defined in theContract.
<p>4. General Obligations of the Member</p>	<p>The Member shall:</p> <ul style="list-style-type: none"> (a) have no interest financial or otherwise in the Employer, the Contractor or Project Manager, nor any financial interest in theContract except for payment under the

	DARB Agreement;
	(b) not previously have been employed as a consultant or otherwise by the Employer, the Contractor or the Project Manager, except in such circumstances as were disclosed in writing to the Employer and the Contractor before they signed the DARB Agreement;
	(c) have disclosed in writing to the Employer, the Contractor and the Other Members (if any), before entering into the DARB Agreement and to his/her best knowledge and recollection, any professional or personal relationships with any director, officer or employee of the Employer, the Contractor or the Project Manager, and any previous involvement in the overall project of which the Contract forms part;
	(d) not, for the duration of the DARB Agreement, be employed as a consultant or otherwise by the Employer, the Contractor or the Project Manager, except as may be agreed in writing by the Employer, the Contractor and the Other Members (if any);
	(e) comply with the annexed procedural rules and with Sub-Clause 20.4 of the Conditions of Contract;
	(f) not give advice to the Employer, the Contractor, the Employer's Personnel or the Contractor's Personnel concerning the conduct of the Contract, other than in accordance with the annexed procedural rules;
	(g) not while a Member enter into discussions or make any agreement with the Employer, the Contractor or the Project Manager regarding employment by any of them, whether as a consultant or otherwise, after ceasing to act under the DARB Agreement;
	(h) ensure his/her availability for all site visits and hearings as are necessary;
	(i) become conversant with the Contract and with the progress of the Works (and of any other parts of the project of which the Contract forms part) by studying all documents received which shall be maintained in a current working file;
	(j) treat the details of the Contract and all the DARB's activities and hearings as private and confidential, and not publish or disclose them without the prior written consent of the Employer, the Contractor and the Other Members (if any); and
	(k) be available to give advice and opinions, on any matter relevant to the Contract when requested by both the Employer and the Contractor, subject to the agreement of the Other Members (if any).

5. General Obligations of the Employer and the Contractor	The Employer, the Contractor, the Employer's Personnel and the Contractor's Personnel shall not request advice from or consultation with the Member regarding the Contract, otherwise than in the normal course of the DARB's activities under the Contract and the DARB Agreement. The Employer and the Contractor shall be responsible for compliance with this provision, by the Employer's Personnel and the Contractor's Personnel respectively.
	The Employer and the Contractor undertake to each other and to the Member that the Member shall not, except as otherwise agreed in writing by the Employer, the Contractor, the Member and the Other Members (if any):

	<p>(a) be appointed as an arbitrator in any arbitration under the Contract;</p> <p>(b) be called as a witness to give evidence concerning any dispute before arbitrator(s) appointed for any arbitration under the Contract; or</p> <p>(c) be liable for any claims for anything done or omitted in the discharge or purported discharge of the Member's functions, unless the act or omission is shown to have been in bad faith.</p>
	<p>The Employer and the Contractor hereby jointly and severally indemnify and hold the Member harmless against and from claims from which he is relieved from liability under the preceding paragraph.</p>
	<p>Whenever the Employer or the Contractor refers a dispute to the DARB under Sub-Clause 20.4 of the Conditions of Contract, which will require the Member to make a site visit and attend a hearing, the Employer or the Contractor shall provide appropriate security for a sum equivalent to the reasonable expenses to be incurred by the Member. No account shall be taken of any other payments due or paid to the Member.</p>
6. Payment	<p>The Member shall be paid as follows, in the currency named in the DARB Agreement:</p> <p>(a) a retainer fee per calendar month, which shall be considered as payment in full for:</p> <ul style="list-style-type: none"> (i) being available on 28 days' notice for all site visits and hearings; (ii) becoming and remaining conversant with all project developments and maintaining relevant files; (iii) all office and overhead expenses including secretarial services, photocopying and office supplies incurred in connection with his duties; and (iv) all services performed hereunder except those referred to in sub-paragraphs (b) and (c) of this Clause.
	<p>The retainer fee shall be paid with effect from the last day of the calendar month in which the Adjudication Panel Board Agreement becomes effective; until the last day of the calendar month in which the Taking-Over Certificate is issued for the whole of the Works.</p>

With effect from the first day of the calendar month following the month in which the Taking-Over Certificate is issued for the whole of the Works, the retainer fee shall be reduced by one third. This reduced fee shall be paid until the first day of the calendar month in which the Member resigns or the DARB Agreement is otherwise terminated.

(b) a daily fee which shall be considered as payment in full for:

- (i) each day or part of a day up to a maximum of two days' travel time in each direction for the journey between the Member's home and the site, or another location of a meeting with the Other Members (if any);
- (ii) each working day on Site visits, hearings or preparing decisions; and
- (iii) each day spent reading submissions in preparation for a hearing.

(c) all reasonable expenses including necessary travel expenses (air fare in less than first class, hotel and subsistence and other direct travel expenses) incurred in connection with the Member's duties, as well as the cost of telephone calls, courier charges, faxes and telexes: a receipt shall be required for each item in excess of five percent of the daily fee referred to in sub-paragraph (b) of this Clause;

(d) any taxes properly levied in the Country on payments made to the Member (unless a national or permanent resident of the Country) under this Clause 6.

<p>The retainer and daily fees shall be as specified in the DARB Agreement. Unless it specifies otherwise, these fees shall remain fixed for the first 24 calendar months, and shall thereafter be adjusted by agreement between the Employer, the Contractor and the Member, at each anniversary of the date on which the DARB Agreement became effective.</p>	
<p>If the parties fail to agree on the retainer fee or the daily fee, the appointing entity or official named in the SCC shall determine the amount of the fees to be used.</p>	
<p>The Member shall submit invoices for payment of the monthly retainer and air fares quarterly in advance. Invoices for other expenses and for daily fees shall be submitted following the conclusion of a site visit or hearing. All invoices shall be accompanied by a brief description of activities performed during the relevant period and shall be addressed to the Contractor.</p>	
<p>The Contractor shall pay each of the Member's invoices in full within 56 calendar days after receiving each invoice and shall apply to the Employer (in the Statements under the Contract) for reimbursement of one-half of the amounts of these invoices. The Employer shall then pay the Contractor in accordance with the Contract.</p>	
<p>If the Contractor fails to pay to the Member the amount to which he/she is entitled under the DARB Agreement, the Employer shall pay the amount due to the Member and any other amount which may be required to maintain the operation of the DARB; and</p>	
	<p>without prejudice to the Employer's rights or remedies. In addition to all other rights arising from this default, the Employer shall be entitled to reimbursement of all sums paid in excess of one-half of these payments, plus all costs of recovering these sums and financing charges calculated at the rate specified in Sub-Clause 14.8 of the Conditions of Contract.</p>
	<p>If the Member does not receive payment of the amount due within 70 days after submitting a valid invoice, the Member may (i) suspend his/her services (without notice) until the payment is received, and/or (ii) resign his/her appointment by giving notice under Clause 7.</p>
7. Termination	<p>At any time: (i) the Employer and the Contractor may jointly terminate the DARB Agreement by giving 42 days' notice to the Member; or (ii) the Member may resign as provided for in Clause 2.</p>
	<p>If the Member fails to comply with the DARB Agreement, the Employer and the Contractor may, without prejudice to their other rights, terminate it by notice to the Member. The notice shall take effect when received by the Member.</p>
	<p>If the Employer or the Contractor fails to comply with the DARB Agreement, the</p>

	Member may, without prejudice to his other rights, terminate it by notice to the Employer and the Contractor. The notice shall take effect when received by them both.
	Any such notice, resignation and termination shall be final and binding on the Employer, the Contractor and the Member. However, a notice by the Employer or the Contractor, but not by both, shall be of no effect.
8. Default of the Member	If the Member fails to comply with any of his obligations under Clause 4 (a) - (d) above, he shall not be entitled to any fees or expenses hereunder and shall, without prejudice to their other rights, reimburse each of the Employer and the Contractor for any fees and expenses received by the Member and the Other Members (if any), for proceedings or decisions (if any) of the DARB which are rendered void or ineffective by the said failure to comply.
	If the Member fails to comply with any of his obligations under Clause 4 (e) - (k) above, he shall not be entitled to any fees or expenses hereunder from the date and to the extent of the non-compliance and shall, without prejudice to their other rights, reimburse each of the Employer and the Contractor for any fees and expenses already received by the Member, for proceedings or decisions (if any) of the DARB which are rendered void or ineffective by the said failure to comply.
9. Disputes	Any dispute or claim arising out of or in connection with this DARB Agreement, or the breach, termination or invalidity thereof, shall be finally settled by Arbitration.

PROCEDURAL RULES

Unless otherwise agreed by the Employer and the Contractor, the DARB shall visit the site at intervals of not more than 140 days, including times of critical construction events, at the request of either the Employer or the Contractor. Unless otherwise agreed by the Employer, the Contractor and the DARB, the period between consecutive visits shall not be less than 70 days, except as required to convene a hearing as described below.

The timing of and agenda for each site visit shall be as agreed jointly by the DARB, the Employer and the Contractor, or in the absence of agreement, shall be decided by the DARB. The purpose of site visits is to enable the DARB to become and remain acquainted with the progress of the Works and of any actual or potential problems or claims, and, as far as reasonable, to endeavour to prevent potential problems or claims from becoming disputes.

Site visits shall be attended by the Employer, the Contractor and the Project Manager and shall be co-ordinated by the Employer in co-operation with the Contractor. The Employer shall ensure the provision of appropriate conference facilities and secretarial and copying services. At the conclusion of each site visit and before leaving the site, the DARB shall prepare a report on its activities during the visit and shall send copies to the Employer and the Contractor.

The Employer and the Contractor shall furnish to the DARB one copy of all documents which the DARB may request, including Contract documents, progress reports, variation instructions, certificates and other documents pertinent to the performance of the Contract. All communications between the DARB and the Employer or the Contractor shall be copied to the other Party. If the DARB comprises three persons, the Employer and the Contractor shall send copies of these requested documents and these communications to each of these persons.

If any dispute is referred to the DARB in accordance with Sub-Clause 20.4 of the Conditions of Contract, the DARB shall proceed in accordance with Sub-Clause 20.4 and these Rules. Subject to the time allowed to give notice of a decision and other relevant factors, the DARB shall:

- (a) act fairly and impartially as between the Employer and the Contractor, giving each of them a reasonable opportunity of putting his case and responding to the other's case, and
- (b) adopt procedures suitable to the dispute, avoiding unnecessary delay or expense.

The DARB may conduct a hearing on the dispute, in which event it will decide on the date and place for the hearing and may request that written documentation and arguments from the Employer and the Contractor be presented to it prior to or at the hearing.

Except as otherwise agreed in writing by the Employer and the Contractor, the DARB shall have power to adopt an inquisitorial procedure, to refuse admission to hearings or audience at hearings to any persons other than representatives of the Employer, the Contractor and the Project Manager, and to proceed in the absence of any party who the DARB is satisfied received notice of the hearing; but shall have discretion to decide whether and to what extent this power may be exercised.

The Employer and the Contractor empower the DARB, among other things, to:

- (a) establish the procedure to be applied in deciding a dispute,
- (b) decide upon the DARB's own jurisdiction, and as to the scope of any dispute referred to it,
- (c) conduct any hearing as it thinks fit, not being bound by any rules or procedures other than those contained in the Contract and these Rules,
- (d) take the initiative in ascertaining the facts and matters required for a decision,
- (e) make use of its own specialist knowledge, if any,
- (f) decide upon the payment of financing charges in accordance with the Contract,
- (g) decide upon any provisional relief such as interim or conservatory measures, and
- (h) open up, review and revise any certificate, decision, determination, instruction, opinion or valuation of the Project Manager, relevant to the dispute.

The DARB shall not express any opinions during any hearing concerning the merits of any arguments advanced by the Parties. Thereafter, the DARB shall make and give its decision in accordance with Sub-Clause 20.4, or as otherwise agreed by the Employer and the Contractor in writing. If the DARB comprises three persons:

- (a) it shall convene in private after a hearing, in order to have discussions and prepare its decision;
- (b) it shall endeavour to reach a unanimous decision: if this proves impossible the applicable decision shall be made by a majority of the Members, who may require the minority Member to prepare a written report for submission to the Employer and the Contractor; and
- (c) if a Member fails to attend a meeting or hearing, or to fulfil any required function, the other two Members may nevertheless proceed to make a decision, unless:
 - (i) either the Employer or the Contractor does not agree that they do so, or
 - (ii) the absent Member is the chairman and he/she instructs the other Members not to make a decision.

SECTION IX: SPECIAL CONDITIONS OF CONTRACT

Special Condition of Contract

The following Special Conditions of Contract (SCC) shall supplement the General Conditions of the Contract(GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

SCC No.	Conditions	GCC Sub-Clause	Data
1.	Employer's name and address	1.1.2	AIR TANZANIA COMPANY LIMITED P.O Box 543
2	Project Manager's name and address	1.1.2	To be known after contract award.
3	Time for Completion	1.1.3	1095 days from commencement date.
4.	Defects NotificationPeriod	1.1.3	7 days.
5.	Sections of the Works and Completion date	1.1.5	Section of the Works: Main Hangar Facilities and Office Building . Section of the Works Completion Date: Eighteen Months.
6.	Governing Law	1.4.1	Laws of Tanzania
7.	Address for Communication	1.3.1	Employer: AIR TANZANIA COMPANY LIMITED P.O Box 543
8.	Ruling language and Language for communication	1.4.2 & 1.4.3	ENGLISH
9.	Other Documents Forming the Contract	1.5.1 (j)	Not Applicable.
10.	Conditions Precedent	1.7.1	i.Submission of Performance Security ii. Submission of Advance payment guarantee iii. Submission of Program of Works...
11.	The date the Contract shall not come into effect	1.7.2	17/03/2025.
12.	Compliance with the	1.14.1	Laws of Tanzania.

Laws

13.	Time for access to the Site	2.1.1	28 days after Commencement Date.
14.	Project Manager's Duties and Authority	3.1.3	The Project Manager shall obtain employers approval to exercise authority on the following: i. Variation ii. Change Order iii. Additional Works
15.	Contractor's General Obligations	4.1.8	The Contractor shall be responsible for his design work as specified in the contract, except for the following: Not Applicable.
16.	Performance Security	4.2.1	Performance Security type will be in the form of a Performance Security - Bank Guarantee of 10.00 percent of the contract price.
17	Other form of Performance Security	4.2.2	Other form of Performance Security Not Applicable.
18.	Subcontractors	4.4.2	Responsibility for the acts of subcontractors shall be borne by the Contractor except for the following acts: Not Applicable. Not Applicable.
19.	Responsibility for Transport of Goods	4.16.1	Not Applicable.
20.	Progress Reports	4.21.1	Not Applicable.
21.	Normal working hours	6.5.1	Day hrs local time.
22.	Schedule of Key Personnel	6.12.1	Project Manager, Site Agent, Health and Safety Officer, Environmental Officer, Social Officer, Site Quantity Surveyor, Site Structural/Civil Engineer, Electrical Engineer, Mechanical

			Engineer, Structural/Civil Technician, Electrical Engineering Technician, iii. One Mechanical (Air Conditioning, Plumbing and Lift) Installation Technician and ICT and Security Installation Technician
23.	Commencement of Works	8.1.1	28 days.
24.	Site possession Date	8.1.1(a)	14.
25.	Delay damages for the Works	8.7.1& 14.15.1(b)	0.1 percent of the Contract Price per day.
26.	Maximum amount of delay damages	8.7.1	1.00 percent of the final Contract Price.
27.	Provisional Sums	13.5.1.(b)(ii)	3 percent.
28.	Adjustments for Changes in Cost	13.8.1	Not Applicable
29.	The Contract Price	14.1.1	Not Applicable.
30.	Total advance payment	14.2.1	Advance Payment shall be 10 percent. Timings of Advance payment are: 1.
31.	Form of Advance Payment Guarantee	14.2.3	Bank Guarantee.
32.	Repayment of advance payment	14.2.5	12 instalments.
33.	Advance payment amortization	14.2.5(b)	0 Percent of the Contract Amount.
34.	Percentage of Retention	14.3.2	10 Percent of Interim Payment Certificate.
35.	Limit of Retention Money	14.3.2	5 Percent of the Accepted Contract Amount.
36.	Plant and Materials	14.5.2(b)(i)	Not Applicable.

37.	Minimum Amount of Interim Payment Certificates	14.6.2	2 percent of the accepted contract amount.
38.	Interest on Delayed Payment	14.8.2	0.1 percent.
39.	Currency of Payment Damages	14.15.1(d)	The Tanzanian Shilling.
40.	Maximum total liability of the Contractor to the Employer	17.6.2	TZS 0.
41.	Periods for submission of insurance:	18.1.6	Periods for submission of evidence of insurance : 28 days.
	a. evidence of insurance.		Periods for submission of insurance relevant policies : 28 days
	b. relevant policies		
42.	Maximum amount of deductibles for insurance of the Employer's risks	18.2.4(d)	TZS 100,000,000.00
43.	Minimum amount of third party Insurance	18.3.2	TZS 50,000,000.00
44.	Amount of third party Insurance exemptions	18.3.3	TZS 20000000
45.	Date by which the DARB shall be appointed	20.2.1	To be Known after Award.
46.	DARB composition	20.2.2	Three DARB
47.	List of proposed members of DARB	20.2.2	Three Members To be Known after Award members.
48.	Appointment (if not agreed) to be made by	20.3.1	To be Known after Award

Appointing

Authority

49. Rules of arbitration 20.6.1 Tanzania International Arbitration Center Rules

SECTION X: CONTRACT FORMS

This Section contains forms which, once completed and submitted, will form part of the Contract. The forms for Performance Security or Securing Declaration shall be completed and submitted by the successful Tenderer before signing of the contract, and when advance payment is required, Advance Payment Security shall be completed and submitted after contract signature. The Section also contains the Letter of Intention to Award the Contract, which shall not form part of the contract

THE UNITED REPUBLIC OF TANZANIA
(PE NAME)

NOTICE OF INTENTION TO AWARD A CONTRACT

Ref: (REFERENCE_NUMBER)

To: (CONTRACTOR'S/SUPPLIER'S NAME AND ADDRESS)

RE: NOTIFICATION OF THE INTENTION TO AWARD CONTRACT FOR (TENDER NUMBER) FOR (TENDER_DESCRIPTION)

Reference is made to the above subject matter.

The submitted tenders were evaluated according to the criteria stated in the tender documents. In accordance with the requirements of Public Procurement Act, Cap 410, we announce our intention to award a contract to M/s (NAME OF TENDERER] for a contract price of (CONTRACT AMOUNT) for a completion period/delivery period of (COMPLETION OR DELIVERY DURATION).

Your tender was not considered for award of the contract due to (REASONS FOR NON RESPONSIVENESS).

Be informed that, you have five (5) calendar days from the date of this letter, within which to submit for administrative review any complaints you may have regarding this award decision and/or circumstances surrounding the non responsiveness of your tender. The complaints must be in writing, clearly identifying the tender in question, detailing ground(s) of the complaint and should be submitted to (TITLE OF ACCOUNTING OFFICER) through NeST.

We appreciate your interest in doing business with us and encourage you to participate in our future tenders.

(AUTHORIZED SIGNATURE)
(NAME OF SIGNATORY)
(TITLE OF ACCOUNTING OFFICER)

FORM OF AGREEMENT

THIS AGREEMENT (hereinafter called the "Contract") is made this [day of month] day of [insert a month],[insert a year] between [insert name and address of Employer (hereinafter called the "Employer") and [insert name and address of Contractor](hereinafter called the "Contractor") of the other part.

[Note: In the text below, text in brackets is optional; all notes should be deleted in final text. If the Contractor consists of more than one Entity, the above should be partially amended to read as follows:]

"[insert the name of "PE"] (hereinafter called "the Employer") and, on the other hand, a joint venture/consortium/association consisting of the following entities namely, [insert of name of entity] and [insert name of entity] and [etc.] (hereinafter called "the Contractor") each of which shall be jointly and severally liable to the Employer for all the Contractor's obligations under this Contract.

WHEREAS,

- a) the Employer desires that the Works known as *[name of the Contract]*. should be executed by the Contractor, and has accepted a Tender by the Contractor for the execution and completion of these Works and the remedying of any defects therein,
- b) the Contractor having represented to the Employer that they have the required professional skills, and personnel and technical resources, have agreed to construct the works on the terms and conditions set forth in this Contract at a contract price of [insert the figures and words and the currency];
- c) the Employer has set aside committed funds towards the cost of the works and intends to apply a portion of the proceeds of these funds to eligible payments under this Contract, it being understood that such payments will be subject, in all respects, to the terms and conditions of the Contract providing for the funds and that no party other than the Contractor shall derive any rights from the Contract providing for the funds or have any claim to the funds proceeds;
- d) the Employer invited Tenders for the works, viz., [insert brief description of works] and has accepted a Tender by the Contractor for execution of the works in the sum of [insert currency, contract price in words and figures] (hereinafter called "the Contract Price").

NOWHEREFORE, the parties hereto hereby agree as follows

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.

- (i) Letter of Acceptance;
- (ii) Form of Tender;
- (iii) Addenda (if any);
- (iv) Special Conditions of Contract;
- (v) General Conditions of Contract;
- (vi) Specification;
- (vii) Drawings;
- (viii) Bills of Quantities;
- (ix) Contractor's Tender; *[Qualification information such as documents such as: evidence of compliance with statutory requirements (TIN,VAT, Business licences, BRELA); financial capability; current commitments; information on average annual construction turnover; information on General construction experience; Information on Specific Construction & Contract Management Experience; Information on Construction Experience in key activities; Information on Specific Experience in managing ES aspects; Information on Proposed Key Personnel; and Information Equipment proposed for the works];*
- (x) The following Appendices: [Note: If any of these Appendices are not used, the words "Not Used" should be inserted below next to the title of the Appendix and on the sheet attached hereto carrying the title of that Appendix.]

Appendix A: Description of Works and Services

Appendix B: Schedule of Payments

Appendix C: Key Personnel and Subcontractors

Appendix D: Breakdown of Contract Price in Foreign Currency

Appendix E: Breakdown of Contract Price in Local Currency

Appendix F: ES Management Strategies and Implementation Plans

Appendix G: Code of Conduct for Contractor’s Personnel(ES)

Appendix H:Services and Facilities Provided by the Contractor; and

(xii) Other relevant document(s): [List if any].

3. Inconsideration of the payments to be made by the Employer to the Contractor as specified in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS WHEREOF the Employer and the Contractor have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

SIGNED, SEALED AND DELIVERED FOR AND ON BEHALF OF:

THE PROCURING ENTITY

THE CONTRACTOR

Name:

Name:.....

(Authorized Representative) (Authorized Representative)

Designation:

Designation:

Signature:

Signature:

Date:.....

Date:.....

WITNESS

WITNESS

Name:

Name:

Designation:

Designation:

Signature:..... **Signature:**

PERFORMANCE BANKGUARANTEE [UNCONDITIONAL]

[The **bank/successful Tenderer** providing the Guarantee shall fill in this form in accordance with the instructions indicated in brackets, if the Employer requires this type of security.]

[insert bank's name, and address of issuing branch or office]

Beneficiary: *[insert name and address of Employer]*

Date: *[insert date]*

PERFORMANCE GUARANTEE No.: *[insert Performance Guarantee number]*

We have been informed that *[insert name of Contractor]* (hereinafter called "the Contractor") has been awarded Contract No. *[insert reference number of the Contract]* dated *[insert date]* with you, for the execution of *[insert name of Contract and brief description of Works]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Contractor, we *[insert name of Bank]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *[insert amount in figures]* (*[insert amount in words]*), such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire no later than twenty-eight days from the date of issuance of the Taking-Over Certificate, calculated based on a copy of such Certificate which shall be provided to us, or on the *[insert number]* day of *[insert month]*, *[insert year]*, whichever occurs first. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

[signature(s) of an authorized representative(s) of the Bank]

[seal of the Bank]

Note: *All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.*

PERFORMANCE BOND

[The Surety/successful Tenderer providing the Bond shall fill in this form in accordance with the instructions indicated in brackets, if the Employer requires this type of security]

By this Bond, *[insert name and address of Contractor]* as Principal (hereinafter called "the Contractor") and *[insert name, legal title, and address of surety, bonding company, or insurance company]* as Surety (hereinafter called "the Surety"), are held and firmly bound unto *[insert name and address of Employer]* as Obligee (hereinafter called "the Employer") in the amount of *[insert amount of Bond]* *[insert amount of Bond in words]*, for the payment of which sum well and truly to be made in the types and proportions of currencies in which the Contract Price is payable, the Contractor and the Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

Whereas the Contractor has entered into a Contract with the Employer dated the *[insert number]* day of *[insert month]*, *[insert year]* for *[insert name of Contract]* in accordance with the documents, plans, specifications, and amendments thereto, which to the extent herein provided for, are by reference made part hereof and are hereinafter referred to as the Contract.

Now, therefore, the Condition of this Obligation is such that, if the Contractor shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Contractor shall be, and declared by the Employer to be, in default under the Contract, the Employer having performed the Employer's obligations there under, the Surety may promptly remedy the default, or shall promptly:

- (1) complete the Contract in accordance with its terms and conditions; or
- (2) obtain a Tender or Tenders from qualified Tenderers for submission to the Employer for completing the Contract in accordance with its terms and conditions, and upon determination by the Employer and the Surety of the lowest responsive Tenderer, arrange for a Contract between such Tenderer and Employer and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "Balance of the Contract Price," as used in this paragraph, shall mean the total amount payable by the Employer to the Contractor under the Contract, less the amount properly paid by the Employer to the Contractor; or
- (3) pay the Employer the amount required by the Employer to complete the Contract in accordance with its terms and conditions up to a total not exceeding the amount of this Bond.

The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

Any suit under this Bond must be instituted before the expiration of one year from the date of issuance of the Certificate of Completion.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Employer named herein or the heirs, executors, administrators, successors, and assigns of the Employer.

In testimony whereof, the Contractor has hereunto set its hand and affixed its seal, and the Surety has caused these presents to be sealed with its corporate seal duly attested by the signature of its legal representative, this *[insert day]* day of *[insert month]*, *[insert year]*.

Signed by *[insert signature(s) of authorized representative(s)]*
on behalf of *[name of Contractor]* in the capacity of *[insert title(s)]*
In the presence of *[insert name and signature of witness]*

Date *[insert date]*

Signed by *[insert signature(s) of authorized representative(s) of Surety]*
on behalf of *[name of Surety]* in the capacity of *[insert title(s)]*
In the presence of *[insert name and signature of witness]*

Date *[insert date]*

ENVIRONMENTAL AND SOCIAL (ES) PERFORMANCE SECURITY

ES Demand Guarantee

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[insert name and Address of Employer]*

Date: *_[Insert date of issue]*

ES PERFORMANCE GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that _____ (hereinafter called "the Applicant") has entered into Contract No. _____ dated _____ with the Beneficiary, for the execution of _____ (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (1), such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its Environmental and/or Social, (ES) obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the Day of, 2... 2, and any demand for payment under it must be received by us at this office indicated above on or before that date.

Yours truly,

Signature and seal:

Name of Bank/Financial Institution:

Address:

Date:

1 The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, less provisional sums, if any, and denominated either in the currency (ies) of the Contract or a freely convertible currency acceptable to the Beneficiary.

2 Insert the date twenty-eight days after the expected completion date as described in CC Clause 11.9. The Employer should note that in the event of an extension of this date for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

BANK GUARANTEE FOR ADVANCE PAYMENT

[Bank's Name, and Address of Issuing Branch or Office]

Beneficiary: _____ *[Name and Address of Employer]*

Date: _____

ADVANCE PAYMENT GUARANTEE No.: _____

We have been informed that *[name of Contractor]* (hereinafter called "the Contractor") has been awarded Contract No. *[reference number of the contract]* dated _____ with you, for the execution of *[name of contract and brief description of Works]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum *[amount in figures]* () *[amount in words]* is to be made against an advance payment guarantee.

At the request of the Contractor, we *[name of Bank]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *[amount in figures]* () *[amount in words]* upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor used the advance payment for purposes other than the costs of mobilization in respect of the Works.

It is a condition for any claim and payment under this guarantee to be made that the advance payment referred to above must have been received by the Contractor on its account number _____ at _____ *[name and address of Bank]*.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as indicated in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that eighty (80) percent of the Contract Price has been certified for payment, or on the ___ day of ____, 2___, whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

Yours truly,

Signature and seal:

Name of Bank/Financial Institution:

Address:

Date:

RETENTION MONEY SECURITY

Demand Guarantee

_____ [Guarantor letterhead or SWIFT identifier code]

Beneficiary: _____ [Insert name and Address of Employer]

Date: _____ [Insert date of issue]

RETENTION MONEY GUARANTEE No.: [Insert guarantee reference number]

Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

We have been informed that _____ [insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture] (hereinafter called "the Applicant") has entered into Contract No. _____ [insert reference number of the contract] dated _____ with the Beneficiary, for the execution of _____ [insert name of contract and brief description of Works] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, the Beneficiary retains moneys up to the limit set forth in the Contract ("the Retention Money"), and that when the Taking-Over Certificate has been issued under the Contract and the first half of the Retention Money has been certified for payment, payment of [insert] the second half of the Retention Money or if the amount guaranteed under the Performance Guarantee when the Taking-Over Certificate is issued is less than half of the Retention Money, the difference between half of the Retention Money and the amount guaranteed under the Performance Security and, if required, the ES Performance Security is to be made against a Retention Money guarantee.

At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ [insert amount in figures] () [amount in words] 1 upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without your needing to prove or show grounds for your demand or the sum specified therein.

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the second half of the Retention Money as referred to above has been credited to the Applicant on its account number _____ at _____ [insert name and address of Applicant's bank].

This guarantee shall expire no later than the day of, 2... 2, and any demand for payment under it must be received by us at the office indicated above on or before that date.

Yours truly,

Signature and seal:

Name of Bank/Financial Institution:

Address:

Date:

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

1 The Guarantor shall insert an amount representing the amount of the second half of the Retention Money or if the amount guaranteed under the Performance Guarantee when the Taking-Over Certificate is issued is less than half of the Retention Money, the difference between half of the Retention Money and the amount guaranteed under the Performance Security and denominated either in the currency(ies) of the second half of the Retention Money as specified in the Contract, or in a freely convertible currency acceptable to the Beneficiary.

2 Insert the same expiry date as set forth in the performance security, representing the date twenty-eight days after the completion date described in CC Clause 11.9. The Employer should note that in the event of an extension of this date for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."