THE UNITED REPUBLIC OF TANZANIA

MTWARA - MIKINDANI MUNICIPAL COUNCIL

REQUEST FOR BID

TENDER No.: LGA/085/TACTIC/P171189/2024/2025/W/01

FOR

Mtwara Mikindani Package 1: Upgrading of Chuno, Samia City Access Roads & Kiyangu Storm – water Drainage System and Construction of Skoya Small Scale Industry & Chipuputa Main Bus Terminal in Mtwara Mikindani Municipality

10/02/2025

LIST OF ABBREVIATIONS

Cap	Chapter
ES	Environmental and Social
FY	Financial Year
GCC	General Conditions of Contract
IFB	Invitation for Bidders
ITB	Instruction to Bidders
JV	Joint Venture
JVCA	Joint Venture, Consortium, or Association
NCB	National Competitive Bidding
NeST	National e-Procurement System of Tanzania
OAG	Office of Attorney General
PE	Procuring Entity/Employer
PPA	Public Procurement Act, Cap 410
PPAA	Public Procurement Appeals Authority
PPRA	Public Procurement Regulatory Authority
SCC	Special Condition of Contract
SEA	Sexual Exploitation and Abuse
SH	Sexual Harassment
SBD	Standard Bidding Document

INVITATION FOR BIDS

THE UNITED REPUBLIC OF TANZANIA

MTWARA - MIKINDANI MUNICIPAL COUNCIL

Name of Project: Tanzania Cities Transforming Infrastructure and Competitiveness (TACTIC) Project(TACTIC)
Contract Title: Mtwara Mikindani Package 1: Upgrading of Chuno, Samia City Access Roads & Kiyangu Storm – water Drainage System and Construction of Skoya Small Scale Industry & Chipuputa Main Bus Terminal in Mtwara Mikindani Municipality
Loan No./Credit No./Grant No.: 7151-TZ
Project Reference No.: P171189
STEP Reference No.: 474477
RFB Reference No.: LGA/085/TACTIC/P171189/2024/2025/W/01

10/02/2025

1. This Invitation for Bids follows the General Procurement Notice (GPN) for this Project which appeared in United Nations Development Business (UNDB) Issue No. OP00215554 dated February 21, 2023 and the National e-Procurement System of Tanzania (NeST) dated 12/07/2024.

2. The MTWARA - MIKINDANI MUNICIPAL COUNCIL has received CREDIT financing from the World Bank towards the cost of the Tanzania Cities Transforming Infrastructure and Competitiveness (TACTIC) Project, and it intends to apply part of the proceeds toward payments under the contract for Mtwara Mikindani Package 1: Upgrading of Chuno, Samia City Access Roads & Kiyangu Storm – water Drainage System and Construction of Skoya Small Scale Industry & Chipuputa Main Bus Terminal in Mtwara Mikindani Municipality. “For this contract, the Borrower shall process the payments using the Direct Payment disbursement method, as defined in the World Bank’s Disbursement Guidelines for Investment Project Financing.”

3. The MTWARA - MIKINDANI MUNICIPAL COUNCIL now invites sealed Bids from eligible Bidders for Mtwara Mikindani Package 1: Upgrading of Chuno, Samia City Access Roads & Kiyangu Storm – water Drainage System and Construction of Skoya Small Scale Industry & Chipuputa Main Bus Terminal in Mtwara Mikindani Municipality for:

S/N.	Description	Location	Quantity	Construction Period	Margin of Preference
1.	Mtwara Mikindani Package 1: Upgrading of Chuno, Samia City Access Roads & Kiyangu Storm – water Drainage System and Construction of Skoya Small Scale Industry & Chipuputa Main Bus Terminal in Mtwara Mikindani Municipality	Mtwara Mikindani Municipality	Upgrading of Chuno, Samia City Access Roads & Kiyangu Storm Water Drainage System and Construction of Skoya Small Scale Industry & Chipuputa Main Bus Terminal Note: The procurement of works under this Bid, will be executed concurrently with	455	NOT_APPLICABLE

	other Packages, hence requirements for award of multiple contracts shall be applicable. Refer to ITB 34.5 and PCC 7	

Qualifications Information is shown in the section of Qualifications and Evaluation Criteria.

4. Bidding will be conducted through the International Competitive Tendering as specified in the World Bank's "Procurement Regulations for IPF Borrowers" fourth edition, November 2020 as well as the Public Procurement Act, CAP 410, and is open to all Bidders as defined in the Procurement Regulations.

5. Interested eligible Bidders may obtain further information from MTWARA - MIKINDANI MUNICIPAL COUNCIL, Head of Procurement Management Unit (PMU), Mtwara-Mikindani Municipal Council, P.O. Box 92: Mtwara-Mikindani, Tanzania and inspect the bidding document through NeST.

6. A complete set of bidding document(s) in English may be accessed through NeST freely.

7. Bidders are required to register through NeST and pay the bid participation fees indicated in the NeST (https://nest.go.tz/nest-tenderer/wallet/tender-charges) to be able to participate in this Bidding process. NeST payment user guide is made available in the NeST dashboard.

8. Bids must be submitted electronically through NeST on or before 10:00 AM hours local time on 28/03/2025. Bid(s) will be opened promptly thereafter through NeST. Bid opening details will be available to the through NeST.

9. All bids must be accompanied by a Bid Security in the form of Tender Security - Bank Guarantee in the currency of The Tanzanian Shilling or freely convertible currencies in case of foreign Bidders worth 460,000,000.00.

10. Bids not received or opened through NeST shall not be accepted for evaluation irrespective of the circumstances.

Municipal Director
PO. BOX 92 MTWARA

THE UNITED REPUBLIC OF TANZANIA

MTWARA - MIKINDANI MUNICIPAL COUNCIL

REQUEST FOR BIDS
for
Mtwara Mikindani Package 1: Upgrading of Chuno, Samia City Access Roads & Kiyangu Storm – water Drainage System and Construction of Skoya Small Scale Industry & Chipuputa Main Bus Terminal in Mtwara Mikindani Municipality

RFB No: LGA/085/TACTIC/P171189/2024/2025/W/01
Project: Tanzania Cities Transforming Infrastructure and Competitiveness (TACTIC) Project(TACTIC
Employer: MTWARA - MIKINDANI MUNICIPAL COUNCIL
Issued on: 10/02/2025

PART 1 – BIDDING PROCEDURES

SECTION I: INSTRUCTIONS TO BIDDERS (ITB)

A. General

BDS Clause Number & Required Information/Data	ITB Clause Number	Amendments of, and Supplements to, Clauses in the Instruction to Bidders
1. **Scope of Bid**	1.1	In connection with the Specific Procurement Notice - Request for Bids (RFB), specified in the Bid Data Sheet (BDS), the Employer, as specified in the BDS, issues this bidding document for the provision of Works as specified in Section VII, Works' Requirements. The name, identification and number of lots (contracts) of this RFB are specified in the BDS.
	1.2	Throughout this bidding document: a) the term "**in writing**" means communicated in written form (e.g., by mail, e-mail, and fax, including if specified in the **BDS**, distributed or received through the electronic-procurement system used by the Employer) with proof of receipt; b) if the context so requires, "**singular**" means "**plural**" and vice versa; c) "Day" means calendar day, unless otherwise specified as "**Business Day"**. A Business Day is any day that is an official working day of the Borrower. It excludes the Borrower's official public holidays; d) "**ES**" means environmental and social (including Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH)); e) "**Sexual Exploitation and Abuse**" "(SEA)" means 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; f) **"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; g) **"Contractor's Personnel"** is as defined in Sub- Clause 1 (ii) of the General Conditions of Contract; and h) "**Employer's personnel"** is as defined in GCC Sub-Clause 1 (nn) of the General Conditions of Contract. A non-exhaustive list of (i) behaviors which constitute SEA and (ii) behaviors which constitute SH is attached to the Code of Conduct form in Section IV
2. **Source of Funds**	2.1	The Borrower or Recipient (hereinafter called "Borrower") specified in the BDS has received or has applied for financing (hereinafter called "funds") from the International Bank for Reconstruction and Development or the International Development Association (hereinafter called "the Bank") in an amount specified in the BDS, toward the project named in the BDS. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which this bidding document is issued.
	2.2	Payment by the Bank will be made only at the request of the Borrower and upon approval by the Bank, and will be subject, in all respects, to the terms and conditions of the Loan (or other financing) Agreement. The Loan (or other financing) Agreement prohibits a withdrawal from the loan account for the purpose of any payment to persons or entities, or for any import of goods, equipment, plant, or materials, if such payment or import is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall

		derive any rights from the Loan (or other financing) Agreement or have any claim to the proceeds of the Loan (or other financing).
3. **Fraud and Corruption**	3.1	The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in Section VI.
	3.2	In further pursuance of this policy, bidders shall permit and shall cause their agents (where declared or not), subcontractors, subconsultants, service providers, suppliers, and personnel, to permit the Bank to inspect all accounts, records and other documents relating to any initial selection process, prequalification process, bid submission, proposal submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.
4. **Eligible Bidders**	4.1	A Bidder may be a firm that is a private entity, or a state-owned enterprise or institution, subject to ITB 4.6, or any combination of them in the form of a joint venture (JV), under an existing agreement, or with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the Bidding process and, in the event the JV is awarded the Contract, during contract execution. Unless specified in the BDS, there is no limit on the number of members in a JV.
	4.2	A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this Bidding process, if the Bidder: a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or b) receives or has received any direct or indirect subsidy from another Bidder; or c) has the same legal representative as another Bidder; or d) has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the Bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or e) or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the Bid; or f) or any of its affiliates has been hired (or is proposed to be hired) by the Employer or Borrower as Project Manager for the Contract implementation; g) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; h) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding document or specifications of the contract, and/or the Bid evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the procurement process and execution of the contract.
	4.3	A firm that is a Bidder (either individually or as a JV member) shall not participate in more than one Bid, except for permitted alternative

		Bids. This includes participation as a Subcontractor in other Bids. Such participation shall result in the disqualification of all Bids in which the firm is involved. A firm that is not a Bidder or a JV member may participate as a subcontractor in more than one Bid.
	4.4	A Bidder may have the nationality of any country, subject to the restrictions pursuant to ITB 4.8. A Bidder shall be deemed to have the nationality of a country if the Bidder is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or subconsultants for any part of the Contract including related Services.
	4.5	A Bidder that has been sanctioned by the Bank, pursuant to the Bank's Anti-Corruption Guidelines, in accordance with its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework as described in Section VI paragraph 2.2 d., shall be ineligible to be prequalified for, initially selected for, bid for, propose for, or be awarded a Bank-financed contract or benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall have determined. The list of debarred firms and individuals is available at the electronic address specified in the BDS.
	4.6	Bidders that are state-owned enterprises or institutions in the Employer's Country may be eligible to compete and be awarded a Contract(s) only if they can establish, in a manner acceptable to the Bank, that they (i) are legally and financially autonomous (ii) operate under commercial law, and (iii) are not under supervision of the Employer.
	4.7	A Bidder shall not be under suspension from Bidding by the Employer as the result of the operation of a Bid–Securing or Proposal-Securing Declaration.
	4.8	Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or the contracting of works or 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 Borrower's country prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country. When the Works are implemented across jurisdictional boundaries (and more than one country is a Borrower, and is involved in the procurement), then exclusion of a firm or individual on the basis of ITB 4.8 (a) above by any country may be applied to that procurement across other countries involved, if the Bank and the Borrowers involved in the procurement agree.
	4.9	A Bidder shall provide such documentary evidence of eligibility satisfactory to the Employer, as the Employer shall reasonably request.
	4.10	A firm that is under a sanction of debarment by the Borrower from being awarded a contract is eligible to participate in this procurement, unless the Bank, at the Borrower's request, is satisfied that the debarment; a) relates to fraud or corruption, and b) followed a judicial or administrative proceeding that afforded the firm adequate due process.
5. **Eligible Materials, Equipment and Services**	5.1	The materials, equipment and services to be supplied under the Contract and financed by the Bank may have their origin in any country subject to the restrictions specified in Section V, Eligible

		Countries, and all expenditures under the Contract will not contravene such restrictions. At the Employer's request, Bidders may be required to provide evidence of the origin of materials, equipment and services.

B. CONTENTS OF BIDDING DOCUMENTS

6. **Sections of Bidding Documents**	6.1	The bidding document consists of Parts 1, 2, and 3, which include all the sections specified below, and which should be read in conjunction with any Addenda issued in accordance with ITB 8. **PART 1 Bidding Procedures** · Section I - Instructions to Bidders (ITB) · Section II - Bid Data Sheet (BDS) · Section III - Evaluation and Qualification Criteria · Section IV - Bidding Forms · Section V - Eligible Countries · Section VI - Fraud and Corruption **PART 2 Works' Requirements** · Section VII - Works' Requirements **PART 3 Conditions of Contract and Contract Forms** · Section VIII - General Conditions of Contract (GCC) · Section IX - Particular Conditions of Contract (PCC) · Section X - Contract Forms
	6.2	The Specific Procurement Notice - Request for Bids (RFB) issued by the Employer is part of this bidding document.
	6.3	Unless obtained directly from the Employer, the Employer is not responsible for the completeness of the bidding document, responses to requests for clarification, the minutes of the pre-bid meeting (if any), or Addenda to the bidding document in accordance with ITB 8. In case of any contradiction, documents obtained directly from the Employer shall prevail.
	6.4	The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding document and to furnish through the system with its Bid all information and documentation as is required by the bidding document.
7. **Clarification of Bidding Document, Site Visit, Pre-Bid Meeting**	7.1	A prospective Bidder requiring any clarification of the Bidding Documents may notify the Employer through NeST at least seven (7) days for open competitive methods and three (3) days in the case of other biddiing methods prior to bid submission deadline; a) The Employer will respond in writing to any request for clarification through NeST, provided that such request is received prior to the deadline for submission of Bids. Should the clarification result in changes to the essential elements of the bidding document, the Employer shall amend the bidding document following the procedure under ITB 8 and ITB 22.2. b) 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. c) PE's response shall include a description of the inquiry without identifying its source.
	7.2	The Bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.
	7.3	The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer 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.
	7.4	If so specified in the BDS, the Bidder's designated representative is invited to attend a pre-Bid meeting and/or a Site of Works visit. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
	7.5	The Bidder is requested, to submit any questions in writing, to reach the

		Employer not later than one week before the meeting.
	7.6	Minutes of the pre-Bid meeting, if applicable, including the text of the questions asked by Bidders, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the bidding document in accordance with ITB 6.3 Any modification to the bidding document that may become necessary as a result of the pre-Bid meeting shall be made by the Employer exclusively through the issue of an addendum pursuant to ITB 8 and not through the minutes of the pre-Bid meeting. Nonattendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.
8. **Amendment of Bidding Document**	8.1	At any time prior to the deadline for submission of bids, the Employer may amend the bidding document by issuing addenda.
	8.2	Any addendum issued shall be part of the bidding document and shall be communicated in writing to all who have obtained the bidding document from the Employer in accordance with ITB 6. The Employer shall also promptly publish the addendum on the Employer's web page in accordance with ITB 7.1.
	8.3	To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Employer may, at its discretion, extend the deadline for the submission of Bids, pursuant to ITB 22.2.

C. PREPARATION OF BIDS

9. **Cost of Bidding**	9.1	The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process.
10. **Language of Bid**	10.1	The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Employer, shall be written in the language specified in the BDS. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified in the BDS, in which case, for purposes of interpretation of the Bid, such translation shall govern.
11. **Documents Comprising the Bid**	11.1	The Bid shall comprise the following: a) **Letter of Bid** prepared in accordance with ITB 12; b) **Bill of Quantities or Activity Schedule**: completed in accordance with ITB 12 and ITB 14, as specified **in the BDS**; c) Bid Security **or Bid-Securing Declaration**, in accordance with ITB 19.1; d) Alternative **Bid**, if permissible, in accordance with ITB 13; e) Authorization**:** written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.3; f) Bidder's **Eligibility:** documentary evidence in accordance with ITB 17 establishing the Bidder's eligibility to Bid; g) Qualifications: documentary evidence in accordance with ITB 17 establishing the Bidder's qualifications to perform the contract if its Bid is accepted; h) Conformity: a technical proposal in accordance with ITB 16; i) Code of Conduct for Contractor's Personnel (ES) j) Management Strategy and Implementation Plans (MSIP) to manage the (ES) risks. k) any other document required **in the BDS**.
	11.2	In addition to the requirements under ITB 11.1, Bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all members and submitted with the Bid, together with a copy of the proposed Agreement.
	11.3	The Bidder shall furnish in the Letter of Bid information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.
12. **Letter of Bid and Schedules**	12.1	The Letter of Bid and Schedules shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 20.3. All blank spaces shall be filled in with the information requested.
13. **Alternative Bids**	13.1	Unless otherwise specified in the BDS, alternative Bids shall not be considered.
	13.2	When alternative times for completion are explicitly invited, a statement to that effect will be included in the BDS and the method of evaluating different alternative times for completion will be described in Section III, Evaluation and Qualification Criteria.
	13.3	Except as provided under ITB 13.4 below, Bidders wishing to offer technical alternatives to the requirements of the bidding document must first price the Employer's design as described in the bidding

		document and shall further provide all information necessary for a complete evaluation of the alternative by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the Bidder with the Most Advantageous Bid conforming to the basic technical requirements shall be considered by the Employer.
	13.4	When specified in the BDS, Bidders are permitted to submit alternative technical solutions for specified parts of the Works. Such parts will be identified in the BDS and described in Section VII, Works' Requirements. The method for their evaluation will be stipulated in BDS.
14. **Bid Prices and Discounts**	14.1	The prices and discounts quoted by the Bidder in the Letter of Bid and in the Activity Schedule or Bill of Quantities shall conform to the requirements specified below.
	14.2	The Bidder shall submit a Bid for the whole of the Works described in ITB 1.1 by filling in prices through the system for all items of the Works, as identified in Section IV. Bidding Forms. In case of admeasurement contracts, the Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bill of Quantities.
	14.3	The price to be quoted in the Letter of Bid, in accordance with ITB 12.1, shall be the total price of the Bid, excluding any discounts offered.
	14.4	The Bidder shall quote any discounts and indicate the methodology for their application in the Letter of Bid in accordance with ITB 12.1.
	14.5	Unless otherwise specified in the BDS and the Conditions of Contract, the prices quoted by the Bidder shall be fixed. If the prices quoted by the Bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, the Bidder shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data in Section IV- Bidding Forms and the Employer may require the Bidder to justify its proposed indices and weightings.
	14.6	If so specified in ITB 1.1, Bids are invited for individual lots (contracts) or for any combination of lots (packages). Bidders wishing to offer discounts for the award of more than one Contract shall specify in their Bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITB 14.4, provided the Bids for all lots (contracts) are opened at the same time.
	14.7	All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of Bids, shall be included in the rates and prices and the total Bid price submitted by the Bidder. **In the Lump Sum contracts:** All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of Bids, shall be included in the total Bid price submitted by the Bidder.
15. **Currencies of Bid and Payment**	15.1	The currency(ies) of the Bid and the currency(ies) of payments shall be the same and shall be as specified in the BDS.
	15.2	Bidders may be required by the Employer to justify, to the Employer's satisfaction, their local and foreign currency requirements, and to substantiate that the amounts included in the unit rates and prices and shown in the Schedule of Adjustment Data are reasonable, in which case a detailed breakdown of the foreign currency requirements shall be provided by Bidders.

		In Lump Sum contracts: Bidders may be required by the Employer to justify, to the Employer's satisfaction, their local and foreign currency requirements, and to substantiate that the amounts included in the Lump-Sum, in which case a detailed breakdown of the foreign currency requirements shall be provided by Bidders.
16. **Documents Comprising the Technical Proposal**	16.1	The Bidder shall furnish a technical proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section IV, Bidding Forms, in sufficient detail to demonstrate the adequacy of the Bidders' proposal to meet the work's requirements and the completion time.
17. **Documents Establishing the Eligibility and Qualifications of the Bidder**	17.1	To establish Bidder's eligibility in accordance with ITB 4, Bidders shall complete the Letter of Bid, included in Section IV, Bidding Forms.
	17.2	In accordance with Section III, Evaluation and Qualification Criteria, to establish its qualifications to perform the Contract, the Bidder shall provide the information requested in the corresponding information sheets included in Section IV, Bidding Forms.
	17.3	If a margin of preference applies as specified in accordance with ITB 33.1, domestic Bidders, individually or in joint ventures, applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITB 33.1.
18. **Period of Validity of Bids**	18.1	Bids shall remain valid until the date specified in the BDS or any extended date if amended by the Employer in accordance with ITB 8. A Bid that is not valid until the date specified in the BDS, or any extended date if amended by the Employer in accordance with ITB 8, shall be rejected by the Employer as nonresponsive.
	18.2	In exceptional circumstances, prior to the date of expiration of the Bid validity, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB 19, it shall also be extended for twenty-eight (28) days beyond the extended date for Bid validity. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid, except as provided in ITB 18.3.
	18.3	If the award is delayed by a period exceeding fifty-six (56) days beyond the date of expiry of the Bid validity specified in accordance with ITB 18.1, the Contract price shall be determined as follows: a) in the case of fixed price contracts, the Contract price shall be the Bid price adjusted by the factor specified in the BDS; Note: The local currency portion of the Contract price shall be adjusted by a factor reflecting local inflation during the period of extension, and the foreign currency portion of the Contract price shall be adjusted by a factor reflecting the international inflation (in the country of the foreign currency) during the period of extension. b) in the case of adjustable price contracts, no adjustment shall be made; or c) in any case, Bid evaluation shall be based on the Bid price.
19. Bid Security	19.1	The Bidder shall furnish as part of its Bid, either a Bid-Securing Declaration or a Bid Security as specified in the BDS, in original form and, in the case of a Bid Security, in the amount and currency specified in the BDS.
	19.2	A Bid Securing Declaration shall use the form included in Section IV Bidding Forms. This form is available in the system during bid submission.
	19.3	If a Bid Security is specified pursuant to ITB 19.1, the Bid Security shall be a demand guarantee in any of the following forms at the Bidder's

		option: (a) an **unconditional** guarantee issued by a bank or non-bank financial institution (such as an insurance, bonding or surety company); (b) an **irrevocable** letter of credit; (c) a **cashier's** or certified check; or (d) another **security** specified **in the BDS**, from a reputable source from an eligible country. If an unconditional guarantee is issued by a non-bank financial institution located outside the Employer's Country, the issuing non-bank financial institution shall have a correspondent financial institution located in the Employer's Country to make it enforceable, unless the Employer has agreed in writing, prior to Bid submission, that a correspondent financial institution is not required. In the case of a bank guarantee, the Bid Security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms, or in another substantially similar format approved by the Employer prior to Bid submission. The Bid Security shall be valid for twenty-eight (28) days beyond the original date of expiry of the Bid validity, or beyond any extended date if requested under ITB 18.2.
	19.4	If a Bid Security or Bid Securing Declaration is specified pursuant to ITB 19.1, any Bid not accompanied by a substantially responsive Bid Security or Bid-Securing Declaration shall be rejected by the Employer as non-responsive.
	19.5	If a Bid Security is specified pursuant to ITB 19.1, the Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the Contract and furnishing the Performance Security and if required in the BDS, the Environmental and Social (ES) Performance Security pursuant to ITB 48.
	19.6	The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required Performance Security. and if required in the BDS, the Environmental and Social (ES) Performance Security.
	19.7	The Bid Security may be forfeited: (a) if a Bidder withdraws its Bid prior to the expiry date of the Bid validity specified by the Bidder on the Letter of Bid, or any extension thereto provided by the Bidder; or (b) if the successful Bidder fails to: i. sign the Contract in accordance with ITB 47; or ii. (ii) furnish a Performance Security and if required in the BDS, the Environmental and Social (ES) Performance Security in accordance with ITB 48.
	19.8	The Bid Security or the Bid-Securing Declaration of a JV shall be in the name of the JV that submits the Bid. If the JV has not been constituted into a legally enforceable JV, at the time of Bidding, the Bid Security or the Bid-Securing Declaration shall be in the names of all future members as named in the letter of intent mentioned in ITB 4.1 and ITB 11.2.
	19.9	If a Bid Security is not required in the BDS, pursuant to ITB 19.1, and; (a) if a Bidder withdraws its Bid prior to the expiry date of the Bid validity specified by the Bidder on the Letter of Bid or any extended date provided by the Bidder; or (b) if the successful Bidder fails to: i. sign the Contract in accordance with ITB 47; or ii. furnish a Performance Security and if required in the BDS, the Environmental and Social (ES) Performance Security in accordance withITB 48, the Borrower may, if provided for in the BDS, declare the Bidder ineligible to be awarded a contract by the Employer for

		a period oftime stated in the BDS.
20. **Format and Signing of Bid**	20.1	The Bidder shall prepare documents comprising the Bid as described in ITB 11.
	20.2	Bidders shall mark as "CONFIDENTIAL" information in their Bids which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.
	20.3	Bids shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be submitted through the system. The name and position held by each person signing the authorization must be typed or printed below the signature.
	20.4	In case the Bidder is a JV, the Bid shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.
	20.5	Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

D. SUBMISSION AND OPENING OF BIDS

21. Bid Submission	21.1	Bids submitted through NeST shall be considered to be a true and legal version, duly authorized and duly executed by the Bidder, and intended to have binding legal effect. The Bidder shall properly name his soft copies of documents before submission through NeST.
	21.2	The bid shall bear e-signature or digital signatures for identity and authentication purposes and the identity of the Bidder may be verified with a follow-up due diligence process.
	21.3	Bids submitted through NeST shall be received in full prior to the closing time as specified in ITB 22.1, and the Bidders shall receive an acknowledgment of receipt of bid or amendment through the system.
	21.4	Bidders must ensure the integrity, completeness, and authenticity of their submission; and in case of electronic records entered online and files containing the bid being unreadable for any reason, the bid submitted shall not be considered.
22. **Deadline for Submission of Bids**	22.1	Bids shall be received by the Employer through NeST in a manner specified under ITT 21.2 not later than the date and time specified in the NeST.
	22.2	The Employer may, at its discretion, extend the deadline for the submission of Bids by amending the bidding document by ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.
23. **Late Bids**	23.1	NeST does not allow Bidder to submit its bid after the deadline for submission of bids in accordance with ITT 22 [Deadline for Submission of Bids]
24. **Withdrawal, Substitution, and Modification of Bids**	24.1	A Bidder may modify or substitute or withdraw its Bid after it has been submitted to the Employer through NeST. Such modification or substitution or withdrawal should be made prior to the deadline for submission of Bids. Bidder shall receive an acknowledgment of receipt of any amendment of its submitted bid through the system.
	24.2	No bid may be withdrawn, replaced or modified in the interval between the deadline for submission of Bids and the expiration of the period of bid validity specified by the Bidder on the Bid Form. Withdrawal of a bid during this interval shall result in execution of Bid Securing Declaration, pursuant to the ITT 18.1 [Bid Security or Bid Securing Declaration].
	24.3	Withdrawal of a bid between the deadline for submission of Bids and the expiration of the period of Bid validity or as extended pursuant to ITT 17.2 shall result in forfeiture of bid security or execution of Bid Securing Declaration pursuant to ITT 18.9 and ITT 18.10.
	24.4	Bidders may only offer discounts to, or otherwise modify the prices of their bids by submitting Bid modifications in accordance with this Clause, or included in the original Bid submission.
25. **Bid Opening**	25.1	The Opening shall be done automatically by the system after the deadline date and time, readout prices shall be displayed

		automatically in the respective portal. Automated opening reports shall be sent to all involved parties including the Employer and Bidders.
	25.2	A Bidder or any other person with interest in the bid process can access bid opening records on NeST dashboard (Opened Bids).
	25.3	Only Bids, alternative Bids, and discounts that are opened at Bid opening shall be considered further for evaluation.
	25.4	The system neither allow employer (or any other person) to discuss the merits of any Bid nor reject any Bid at bid opening.
	25.5	The system shall prepare a record of the Bid opening that shall include, as a minimum: a. the name of the Bidder; b. the Bid Price, per lot (contract) if applicable, including any discounts; c. the presence or absence of a Bid Security or Bid-Securing Declaration, if one was required; and d. any alternative Bids.

E: EVALUATION AND COMPARISON OF BIDS

26. **Confidentiality**	26.1	Information relating to the evaluation of Bids and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with the Bidding process until information on the Intention to Award the Contract is transmitted to all Bidders in accordance with ITB 43.
	26.2	Any effort by a Bidder to influence the Employer in the evaluation of the Bids or Contract award decisions may result in the rejection of its Bid.
	26.3	Notwithstanding ITB 26.2, from the time of Bid opening to the time of Contract award, if a Bidder wishes to contact the Employer on any matter related to the Bidding process, it shall do so in writing.
27. **Clarification of Bids**	27.1	To assist in the examination, evaluation, and comparison of the Bids, and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its Bid given a reasonable time for a response. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease in the prices or substance of the Bid shall be sought, offered, or permitted.
	27.2	If a Bidder does not provide clarifications of its Bid by the date and time set in the Employer's request for clarification, its Bid may be rejected.
28. **Deviations, Reservations, and Omissions**	28.1	During the evaluation of Bids, the following definitions apply: a) "Deviation" is a departure from the requirements specified in the bidding document; b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the bidding document; and c) "Omission" is the failure to submit part or all of the information or documentation required in the bidding document.
29. **Determination of Responsiveness**	29.1	The Employer's determination of a Bid's responsiveness is to be based on the contents of the Bid itself, as defined in ITB 11.
	29.2	A substantially responsive Bid is one that meets the requirements of the bidding document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that: a) if accepted, would: i. affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or ii. limit in any substantial way, inconsistent with the bidding document, the Employer's rights or the Bidder's obligations under the proposed Contract; or b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.
	29.3	The Employer shall examine the technical aspects of the Bid submitted in accordance with ITB 16, in particular, to confirm that all requirements of Section VII, Works' Requirements have been met without any material deviation, reservation or omission.
	29.4	If a Bid is not substantially responsive to the requirements of the bidding document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.
30. **Nonmaterial Nonconformities**	30.1	Provided that a Bid is substantially responsive, the Employer may waive any nonconformities in the Bid.
	30.2	Provided that a Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify

		nonmaterial nonconformities in the Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
	30.3	Provided that a Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
31. **Conversion to Single Currency**	31.1	For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted into a single currency as specified in the BDS.
32. **Margin of Preference**	32.1	Unless otherwise specified in the BDS, a margin of preference for domestic Bidders shall not apply.
33. **Subcontractors**	33.1	Unless otherwise stated in the BDS, the Employer does not intend to execute any specific elements of the Works by subcontractors selected in advance by the Employer, Financial Parts
	33.2	The subcontractor's qualifications shall not be used by the Bidder to qualify for the Works unless their specialized parts of the Works were previously designated by the Employer in the BDS as can be met by subcontractors referred to hereafter as 'Specialized Subcontractors', in which case, the qualifications of the Specialized Subcontractors proposed by the Bidder may be added to the qualifications.
	33.3	Bidders may propose subcontracting up to the percentage of total value of contracts or the volume of works as specified in the BDS. Subcontractors proposed by the Bidder shall be fully qualified for their parts of the Works.
34. **Evaluation of Bids**	34.1	The Employer shall use the criteria and methodologies listed in this ITB and Section III, Evaluation and Qualification criteria. No other evaluation criteria or methodologies shall be permitted. By applying the criteria and methodologies the Employer shall determine the Most Advantageous Bid. This is the Bid of the Bidder that meets the Qualification Criteria and whose Bid has been determined to be: a) substantially responsive to the bidding document; and b) the lowest evaluated cost.
	34.2	To evaluate a Bid, the Employer shall consider the following: a) the Bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities for admeasurement contracts, but including Daywork items, where priced competitively; For Lump Sum contracts, To evaluate a Bid, the Employer shall consider the following, the Bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Summary Activity Schedule for admeasurement contracts, but including Daywork items, where priced competitively. b) price adjustment for correction of arithmetic errors in accordance with ITB 31.1; c) price adjustment due to discounts offered in accordance with ITB 14.4; d) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 32; e) price adjustment for nonconformities in accordance with ITB 30.3; and f) the additional evaluation factors are specified in Section III,

		Evaluation and Qualification Criteria.
	34.3	The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.
	34.4	If this bidding document allows Bidders to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated cost of the contract combinations, including any discounts offered in the Letter of Bid, is specified in ITB 34.5.
	34.5	**Multiple Contracts** **Pursuant to ITB 34.4 of the Instructions to Bidders, if Works are groupedin multiple contracts, evaluation will be asfollows:** (a) Award Criteria for Multiple Contracts [ITB 34.4]: **Lots** Bidders have the option to Bid for any one or more lots.Bids will be evaluated lot-wise, taking into account discounts offered, if any,after considering all possible combination of lots. The contract(s) will be awardedto the Bidder or Bidders offering the lowest evaluated cost to the Employer forcombined lots, subject to the selected Bidder(s) meeting the requiredqualification criteria for lot or combination of lots as the case may be. **Packages** Bidders have the option to Bid for anyone or more packages and for any one or more lots within a package. Bids willbe evaluated package-wise, taking into account discounts offered, if any, forcombined packages and/or lots within a package. The contract(s) will be awardedto the Bidder or Bidders offering the lowest evaluated cost to the Employer forcombined packages, subject to the selected Bidder(s) meeting the requiredqualification criteria for combination of packages and or lots as the case maybe. (b) Qualification Criteria for Multiple Contracts: Section III describes criteria for qualification for eachlot (contract) for multiple lots (contracts). The criteria for qualification isaggregate minimum requirement for respective lots as specified under items 3.1,3.2, 4.2(a) and 4.2(b). However, with respect to the specific experience underitem 4.2 (a) of Section III, the Employer will select any one or more of theoptions as identified below: N is the minimum number of contracts V is the minimum value of a single contract **(a) For one Contract**: **Option 1:** (i) N contracts, each of minimum value V; Or **Option2:** (i) N contracts, each of minimum value V; or (ii) Less than or equal to N contracts, each of minimumvalue V, but with total value of all

contracts equal or more than N x V.

(b) For multiple Contracts

Option1:

(i) Minimumrequirements for combined contract(s) shall be the aggregate requirements foreach contract for which the Bidder has submitted Bids as follows, and N1, N2,N3, etc. shall be different contracts:

Lot 1: N1 contracts, each of minimum value V1;

Lot 2: N2 contracts, each of minimum value V2;

Lot 3: N3 contracts, each of minimum value V3;

----etc.

or

Option 2:

(i) Minimumrequirements for combined contract(s) shall be the aggregate requirements foreach contract for which the Bidder has submitted Bids as follows, and N1, N2,N3,etc. shall be different contracts:

Lot 1: N1 contracts, each of minimum value V1;

Lot 2: N2 contracts, each of minimum value V2;

Lot 3: N3 contracts, each of minimum value V3;

----etc., **or**

(ii) Lot 1: N1 contracts, each of minimum value V1; ornumber of contracts less than or equal to N1, each of minimum value V1, butwith total value of all contracts equal or more than N1 x V1.

Lot 2: N2 contracts, each of minimum value V2; or number of contracts less thanor equal to N2, each of minimum value V2, but with total value of all contractsequal or more than N2 x V2.

Lot 3: N3contracts, each of minimum value V3; or number of contracts less than or equalto N3, each of minimum value V3, but with total value of all contracts equal ormore than N3 x V3.

----etc.

Or

Option3:

(i) Minimum requirements for combined contract(s) shallbe the aggregate requirements for each contract

		for which the Bidder has bidfor as follows, and N1, N2, N3, etc. shall be different contracts: Lot 1: N1 contracts, each of minimum value V1; Lot 2: N2 contracts, each of minimum value V2; Lot 3: N3 contracts, each of minimum value V3; ----etc., **or** (ii) Lot 1: N1contracts, each of minimum value V1; or number of contracts less than or equal to N1, each of minimum value V1, but with total value of all contracts equal ormore than N1 x V1. Lot 2: N2contracts, each of minimum value V2; or number of contracts less than or equal to N2, each of minimum value V2, but with total value of all contracts equal ormore than N2 x V2. Lot 3: N3contracts, each of minimum value V3; or number of contracts less than or equal to N3, each of minimum value V3, but with total value of all contracts equal ormore than N3 x V3. ----etc., or (iii) Subject to compliance as per (ii) above withrespect to minimum value of single contract for each lot, total number ofcontracts is equal or less than N1 + N2 + N3 +--but the total value of all suchcontracts is equal or more than N1 x V1 + N2 x V2 + N3 x V3 +---.
35. **Comparison of Bids**	35.1	The Employer shall compare the evaluated costs of all substantially responsive Bids established in accordance with ITB 34.2 to determine the Bid that has the lowest evaluated cost.
36. **Abnormally Low Bids**	36.1	An Abnormally Low Bid is one where the Bid price, in combination with other constituent elements of the Bid, appears unreasonably low to the extent that the Bid price raises material concerns as to the capability of the Bidder to perform the Contract for the offered Bid price.
	36.2	In the event of identification of a potentially Abnormally Low Bid, the Employer shall seek written clarifications from the Bidder, including detailed price analyses of its Bid price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the bidding document.
	36.3	After evaluation of the price analyses, in the event that the Employer determines that the Bidder has failed to demonstrate its capability to perform the Contract for the offered Bid Price, the Employer shall reject the Bid.
37. **Unbalanced or Front-Loaded Bids**	37.1	If the Bid for an admeasurement contract, which results in the lowest evaluated cost is, in the Employer's opinion, seriously unbalanced or, front loaded, the Employer may require the Bidder to provide written clarifications. Clarifications may include detailed price analyses to demonstrate the consistency of the Bid priceas with the scope of works, proposed methodology, schedule and any other requirements of the bidding document.
	37.2	After the evaluation of the information and detailed price analyses presented by the Bidder, the Employer may as appropriate:

		a) accept the Bid; or b) require that the amount of the Performance Security be increased at the expense of the Bidder to a level not exceeding 20% of the Contract Price; or c) reject the Bid.
38. **Qualification of the Bidder**	38.1	The Employer shall determine to its satisfaction whether the eligible Bidder that is selected as having submitted the lowest evaluated cost and substantially responsive Bid meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.
	38.2	The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17. The determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Subcontractors if permitted in the bidding document), or any other firm(s) different from the Bidder.
	38.3	Prior to Contract award, the Employer will verify that the successful Bidder (including each member of a JV) is not disqualified by the Bank due to noncompliance with contractual SEA/SH prevention and response obligations. The Employer will conduct the same verification for each subcontractor proposed by the successful Bidder. If any proposed subcontractor does not meet the requirement, the Employer will require the Bidder to propose a replacement subcontractor.
	38.4	An affirmative determination of qualification shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the Bid, in which event the Employer shall proceed to the substantially responsive Bid which offers the next lowest evaluated cost to make a similar determination of that Bidder's qualifications to perform satisfactorily.
39. **Most Advantageous Bid**	39.1	Having compared the evaluated costs of Bids, the Employer shall determine the Most Advantageous Bid. The Most Advantageous Bid is the Bid of the Bidder that meets the Qualification Criteria and whose Bid has been determined to be: a) substantially responsive to the bidding document; and b) the lowest evaluated cost.
40. **Employer's Right to Accept Any Bid, and to Reject Any or All Bids**	40.1	The Employer reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to Contract Award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, Bid securities, shall be promptly returned to the Bidders.
41. **Standstill Period**	41.1	The Contract shall not be awarded earlier than the expiry of the Standstill Period. The Standstill Period shall be ten (10) Business Days unless extended in accordance with ITB 45. The Standstill Period commences the day after the date the Employer has transmitted to each Bidder the Notification of Intention to Award the Contract. Where only one Bid is submitted, or if this contract is in response to an emergency situation recognized by the Bank, the Standstill Period shall not apply.
42. **Notification of Intention to Award**	42.1	The Employer shall send to each Bidder the Notification of Intention to Award the Contract to the successful Bidder. The Notification of Intention to Award shall contain, at a minimum, the following information: a) the name and address of the Bidder submitting the successful Bid; b) the Contract price of the successful Bid; c) the names of all Bidders who submitted Bids, and their Bid prices as readout, and as evaluated; d) a statement of the reason(s) the Bid (of the unsuccessful Bidder to whom the notification is addressed) was unsuccessful, unless the price information in c) above already reveals the reason; e) the expiry date of the Standstill Period;

		f) instructions on how to request a debriefing and/or submit a complaint during the standstill period.

F. AWARD OF CONTRACT

43. **Award Criteria**	43.1	Subject to ITB 40, the Employer shall award the Contract to the successful Bidder. This is the Bidder whose Bid has been determined to be the Most Advantageous Bid as specified in ITB 39.
44. **Notification of Award**	44.1	Prior to the expiration of the Bid validity, and upon expiry of the Standstill Period specified in ITB 41.1 or any extension thereof, and, upon satisfactorily addressing any complaint that has been filed within the Standstill Period, the Employer shall notify the successful Bidder, in writing, that its Bid has been accepted. The notification of award (hereinafter and in the Conditions of Contract and Contract Forms called the "Letter of Acceptance") shall specify the sum that the Employer will pay the Contractor in consideration of the execution of the contract (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price").
	44.2	Within ten (10) Business Days after the date of transmission of the Letter of Acceptance, the Employer shall publish the Contract Award Notice which shall contain, at a minimum, the following information: a) name and address of the Employer; b) name and reference number of the contract being awarded, and the selection method used; c) names of all Bidders that submitted Bids, and their Bid prices as read out at Bid opening, and as evaluated; d) names of all Bidders whose Bids were rejected either as nonresponsive or as not meeting qualification criteria, or were not evaluated, with the reasons therefore; and e) the name of the successful Bidder, the final total contract price, the contract duration, and a summary of its scope.
	44.3	The Contract Award Notice shall be published through NeST, or in at least one newspaper of national circulation in the Employer's Country, or in the official gazette. The Employer shall also publish the contract award notice in UNDB online.
	44.4	Until a formal contract is prepared and executed, the Letter of Acceptance shall constitute a binding Contract.
45. **Debriefing by the Employer**	45.1	On receipt of the Employer's Notification of Intention to Award referred to in ITB 42.1, an unsuccessful Bidder has three (3) Business Days to make a written request to the Employer for a debriefing. The Employer shall provide a debriefing to all unsuccessful Bidders whose request is received within this deadline.
	45.2	Where a request for debriefing is received within the deadline, the Employer shall provide a debriefing within five (5) Business Days, unless the Employer decides, for justifiable reasons, to provide the debriefing outside this timeframe. In that case, the standstill period shall automatically be extended until five (5) Business Days after such debriefing is provided. If more than one debriefing is so delayed, the standstill period shall not end earlier than five (5) Business Days after the last debriefing takes place. The Employer shall promptly inform, by the quickest means available, all Bidders of the extended standstill period.
	45.3	Where a request for debriefing is received by the Employer later than the three (3)-Business Day deadline, the Employer should provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of Public Notice of Award of contract. Requests for debriefing received outside the three (3)-day deadline shall not lead to extension of the standstill period.
	45.4	Debriefings of unsuccessful Bidders may be done in writing or verbally. The Bidder shall bear their own costs of attending such a debriefing meeting.
46. **Signing of Contract**	46.1	The Employer shall send to the successful Bidder the Letter of Acceptance including the Contract Agreement.

	46.2	The successful Bidder shall sign, date and return to the Employer, the Contract Agreement within twenty-eight (28) days of its receipt.
47. **Performance Security**	47.1	Within twenty-eight (28) days of the receipt of the Letter of Acceptance from the Employer, the successful Bidder shall furnish the Performance Security and, if required in the BDS, the Environmental and Social (ES) Performance Security in accordance with the General Conditions of Contract, subject to ITB 37.2 (b), using for that purpose the Performance Security and ES Performance Security Forms included in Section X, Contract Forms, or another form acceptable to the Employer. If the Performance Security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country, unless the Employer has agreed in writing that a correspondent financial institution is not required.
	47.2	Failure of the successful Bidder to submit the above-mentioned Performance Security and, if required in the BDS, the Environmental and Social (ES) Performance Security, or to sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Employer may award the Contract to the Bidder offering the next Most Advantageous Bid.
48. **Adjudicator**	48.1	The Employer proposes the person named in the BDS to be appointed as Adjudicator under the Contract, at the hourly fee specified in the BDS, plus reimbursable expenses. If the Bidder disagrees with this proposal, the Bidder should so state in his Bid. If, in the Letter of Acceptance, the Employer does not agree on the appointment of the Adjudicator, the Employer will request the Appointing Authority designated in the Particular Conditions of Contract (PCC) pursuant to Clause 23.1 of the General Conditions of Contract (GCC), to appoint the Adjudicator.

G. REVIEW OF PROCUREMENT DECISIONS

49. Procurement Related Complaint	49.1	If a Bidder wishes to make a Procurement-related Complaint, the Bidder shall submit its complaint through the system, to the Employer. In summary, a Procurement-related Complaint may challenge any of the following: 1. the terms of the Bidding Documents; and 2. the employer's decision to award the contract.
50. Right to Review	50.1	A Bidder who claims to have suffered or may suffer any loss or injury as a result of a breach of a duty imposed on the Employer or an approving authority in the course of these procurement proceedings may seek a review in accordance with the procedure set out hereunder.
51. Time Limit on Review	51.1	The Bidder shall submit an application for review within Seven (7) working days of the Bidder becoming or should have become aware of the circumstances giving rise to the complaint or dispute.
52. Submission of Applications for Review	52.1	Any application for administrative review shall be submitted through NeST to the Accounting Officer of the Employer and a copy shall be electronically served to the Public Procurement Regulatory Authority (PPRA).
	52.2	For Employers with delegated procurement functions, applications for administrative review for bids floated by the delegated Accounting Officer shall be submitted through NeST to the Accounting Officer with a copy electronically served to the delegated Accounting Officer and PPRA.
	52.3	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 have 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 f) any other information relevant to the complaint.
	52.4	Upon receipt of a complaint, the Accounting Officer of a PE shall suspend the procurement proceedings.
	52.5	The Accounting Officer of a PE shall not entertain a complaint or dispute or continue to do so after the procurement contract has entered into force.
53. Decision by the Accounting Officer of PE	53.1	The Accounting Officer of a PE shall, within three (3) calendar days after receipt of the complaint or dispute, deliver a written decision which 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.
	53.2	Where the Accounting Officer of a PE does not issue a decision within the time specified in ITT 53.1, the Bidder submitting the complaint or dispute or the PE shall be entitled to institute proceedings under ITT 54.1 [Review by the

		Public Procurement Appeals Authority (PPAA)] within three (3) calendar days after such specified time and upon instituting such proceedings, the competence of the Accounting Officer of a PE to entertain the complaint or dispute shall cease.
54. Review by the Public Procurement Appeals Authority (PPAA)	54.1	Complaints or disputes which, (a) are not settled within the specified period under ITT 53.1 [Decision by the Accounting Officer]; (b) the Bidder is not satisfied with the decision of the accounting officer; or (c) arise after the procurement contract has entered into force pursuant to ITT46 [Signing of Contract], shall be referred to the Appeals Authority within seven (7) working days from the date when the Bidder received the decision of the accounting officer or, in case no decision is issued after the expiry of the time stipulated under ITT54.1 or when the Bidder become aware or ought to have become aware of the circumstances giving rise to the complaint or dispute pursuant to ITT51.1 [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.
	54.2	PPAA may be contacted at the address shown in the **BDS.**

SECTION II: BID DATA SHEET (BDS)

The following specific data for the Works to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

A. Introduction

TDS. No	Required Information/Data	ITB Clause	Information/Data to be filled by the PE
1.	Scope of Bid	1.1	**The number of invitations for Bids is:** LGA/085/TACTIC/P171189/2024/2025/W/01 **The Employer is:** MTWARA - MIKINDANI MUNICIPAL COUNCIL **The reference number of the Request for Bids (RFB) is:** LGA/085/TACTIC/P171189/2024/2025/W/01 **The name of the RFB is:** Mtwara Mikindani Package 1: Upgrading of Chuno, Samia City Access Roads & Kiyangu Storm – water Drainage System and Construction of Skoya Small Scale Industry & Chipuputa Main Bus Terminal in Mtwara Mikindani Municipality **The number and identification of lots (contracts) comprising this RFB are** Not Applicable. Loan or Financing Agreement Amount: The United States dollarUSD 278,000,000 **The name of the Project is:** Tanzania Cities Transforming Infrastructure and Competitiveness (TACTIC) Project.
2.	Members of JVCA	4.1	The maximum number of members of JVCA shall be: 3.
3.	Debarred firms or individuals	4.5	A list of debarred firms and individuals is available on the Bank's external website: http://www.worldbank.org/debarr.

B. Contents of Bidding Documents

4.	Pre- Bid Meeting	7.4	Pre- bid Meeting will be held at 4th Floor, Millennium Tower I - Kijitonyama, New Bagamoyo Road - Dar es Salaam on 28/02/2025 at 10:00 hours local time.
5.	Site Visit	7.4	Site Visit will be held at Mtwara Mikindani Municipality on 26/02/2025 at 09:00 hours local time.

C. Preparation of Bids

6.	Language of the Bid	10.1	Language of Bid and all correspondence shall be English including Language for translation of supporting documents and printed literature.
7.	Activity Schedule	11.1 (b)	The following schedules shall be submitted with the Bid: priced Bill of Quantities for admeasurement contracts.
8.	Additional Bidding Documents	11.1(k)	The Tenderer shall submit the following additional documents in its Tender: In compliance with ITB 11 and Section IV of the Bidding Document (Bidding Forms), the Bidder shall also submit the following Documents; 1. Schedule of Payment Currencies 2. Historical Contract Non-Performance, Pending Litigations and Litigation History 3. Environmental and Social Performance Declaration 4. SEA and/or SH Declaration 5. Financial Situation and Performance 6. Average Annual Construction Turnover 7. Financial Resources 8. General Construction Experience 9. Specific Construction and Contract Management Experience 10. Construction Experience in Key Activities 11. Specific Experience in Managing ES aspects 12. List of Key Personnel for this Tender (Note: in compliance with ITB 34.5 (Multiple Contracts), list of Key Personnel must consist of separate teams in case you are applying more than one Tender (different from this one) 13. List of Equipment for this Tender (Note: in compliance with ITB 34.5 (Multiple Contracts), list of Equipment must consist of separate Set-in case you are applying more than one Tender (different from this one)
9.	Alternative Bid	13.1	Not Applicable
10.	Alternative Times for Completion	13.2	Not Applicable.
11.	Alternative Technical Solutions	13.4	Not Applicable.
12.	Price Adjustment	14.5	The price shall be FIXED during the performance of the contract.
13.	Currency of the Bid	15.1	The currency in which the prices shall be quoted shall be: The Tanzanian Shilling. A Bidder expecting to incur expenditures in other currencies for inputs to the Works supplied from outside theEmployer's Country (referred to as the "foreign currency requirements") and wishing to be paid accordingly, shall indicate up to three foreign currencies of their choice expressed as a percentage of the Bid price, together with the exchange rates used in the calculations in the appropriate form(s) included in Section IV, Bidding Forms.
14.	Bid Validity Period	18.1	The bid shall be valid until 120 days.
15.	Bid Price Adjustment Factor	18.3(a)	Not Applicable.
16.	Bid Security type	19.1	The Bid Security shall be in the form of:

			Bid Security type shall be Tender Security - Bank Guarantee. The amount of Bid security is: 460,000,000.00. The currency of Bid security is:The Tanzanian Shilling.
17.	Other Form of Security	19.3(d)	Not Applicable.
18.	Bidder's ineligibility period	19.9	Not Applicable
19.	Written Confirmation of Authorization	20.3	The written confirmation of authorization to sign on behalf of the Bidder shall consist of Power of Attorney.

D: Submission of Bids

20.	The deadline for Bid submission	22.1 & 25.1	Bidders shall submit their Bids electronically. The deadline for Bid submission is: Date: 28/03/2025 Time: 10:00 AM hours local time. Bid opening shall be online through the system.

E. Evaluation and Comparison of Bids

21.	Currency for Converting Tender Prices	31.1	The currency that shall be used for Bid evaluation and comparison purposes to convert at the selling exchange rate all Bid prices expressed in various currencies into a single currency is: The Tanzanian Shilling. The source of the exchange rate shall be the Bank of Tanzania. The date for the exchange rate shall be the date of the bid invitation.
22.	Margin of Preference	32.1	A margin of domestic preference shall be Not Applicable.
23.	Subcontracting percentage	33.1	Not Applicable
24.	Subcontracting works	33.2	The parts of the Works for which the Employer permits Bidders to propose Specialized Subcontractors are designated as follows: Solar street light For the above-designated parts of the Works that may require Specialized Subcontractors, the relevant qualifications of the proposed Specialized Subcontractors will be added to the qualifications of the Bidder for the purpose of evaluation.
25.	Maximum Subcontracting Percent	33.3	Not Applicable

F. Award of contract

26.	Environmental and Social Performance Security	47.1 & 47.2	Environmental and Social Performance Security type will be ES Performance Security Bank Guarantee of 2 percent of the contract price.
27.	Adjudicator	48.1	The Adjudicator proposed by the Employer is: Prof. Ninatubu Lema. The hourly fee for this proposed Adjudicator shall be The Tanzanian Shilling TZS. 200000. The biographical data of the proposed Adjudicator is as follows: Download

G. Right to review

28.	Address to Submit an Appeal to PPAA	54.2	The address for the 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

SECTION III: EVALUATION AND QUALIFICATION CRITERIA

EVALUATION AND QUALIFICATION 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	2023-12-31

History of Non-performing Contracts (SCORE: N/A)
Non-performance, as decided by the Employer, shall include all contracts where (a) nonperformance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Nonperformance shall not include contracts where Employers decision was overruled by the dispute resolution mechanism. Nonperformance must be based on all information on fully settled disputes or litigation, i.e., dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted. This requirement also applies to contracts executed by the Bidder as JV member.

Non-Performing Contracts Desription	Non-performance of a contract did not occur as a result of contractor default since 1st January, 2019 to date
Non-Performing Contracts Start Month and Year	January 1st, 2019
Non-Performing Contracts End Month and Year	December 31st, 2023
Non-Performing Contracts Reasons	Non-performance, as decided by the Employer, shall include all contracts where (a) nonperformance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Nonperformance shall not include contracts where Employers decision was overruled by the dispute resolution mechanism. Nonperformance must be based on all information on fully settled disputes or litigation, i.e., dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted.

Completion Period (SCORE: N/A)
Bidders are required to comply with the completion period as proposed by the procuring entity unless alternative completion period is allowed.

Completion Time (Days)	455

Sexual Harassment Performance Declaration (SCORE: N/A)
Contractors are required to fill and submit the Sexual Exploitation and Abuse (SEA)/Sexual Harassment Performance Declaration.

2. Standard Tender Forms

Tender Validity Period (SCORE: N/A)
Bidders are required to confirm the bid validity period specified by the Procuring Entity.

Tender Validity Period (Days)	120

Notarized Special Power of Attorney (SCORE: N/A)
Bidder must fill in Standard Power of Attorney as per the required format and upload it into the system.

Tender Security (SCORE: N/A)
The bidder should submit bid security as per instructions to bidders.

3. Financial Situation and Performance

Pending Litigation (SCORE: N/A)
Bidder’s financial position and prospective long-term profitability sound according to criteria established and assuming that all pending litigation will be resolved against the Bidder

Pending Litigation Records	Bidder’s financial position and prospective long term profitability sound according to criteria established in financial capability and assuming that all pending litigation will be resolved against the Bidder
Pending Litigation Start Month and Year	January 1st, 2019
Pending Litigation End Month and Year	December 31st, 2023

Financial Statement (SCORE: N/A)
The audited balance sheets or, if not required by the laws of the Bidder’s country, other financial statements acceptable to the Employer, for the period stated shall be submitted and must demonstrate the current soundness of the Bidder’s financial position and indicate its prospective long-term profitability.

Financial Statement Start Date	2019-01-01
Financial Statement End Date	2023-12-31
Minimum Current Ratio [Current Assets(CA)/Current Liabilities(CL)]	1.1
Minimum Cash Ratio [Cash and Bank(C&B)/Current Liabilities(CL)]	N/A
Minimum Working Capital [Current Assets(CA)-Current Liabilities(CL)]	1.1
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)
Minimum average annual construction turnover stated, calculated as total certified payments received for contracts in progress and/or completed within the period stated (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	27282960000
Turnover Start Date	2019-01-01
Turnover End Date	2023-12-31

Access to Financial Resources (Sources of Fund) (SCORE: N/A)
The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated stated for the subject contract(s) net of the Bidder's other commitments.

Average fund amount from all sources (any freely convertible currency proposed by bidder)	4547160000

Technical Evaluation

1. Experience

Current Contract Commitment (SCORE: N/A)
Bidder 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 the case of a Joint Venture, compliance requirements are: All Parties Combined – Must Meet requirements).

Current Commitment Start Year	2020-01-01
Current Commitment End Year	2024-12-31

General Experience in Construction Activities (SCORE: N/A)
Experience under construction contracts in the role of prime contractor, JV member, subcontractor, or management contractor for period stated.

Key Construction Activities	For any other contracts [substantially completed and under implementation] as prime contractor, joint venture member, or sub-contractor between 1st January 2019 and application submission deadline, a minimum construction experience in the following key activities successfully completed in any one year: construction involving. i)15,000 m3 Cement Stabilized sub base course per year ii)10,000 m3 crushed aggregate base course per year iii)3,000 m3 Asphalt concrete per year iv)5,000 m3 concrete works per year

Specific Experience (SCORE: N/A)
Bidder is required to provide details of their previous and ongoing contracts to evidence their specific experience in construction assignments.

Specific Experience	A minimum number of similar contracts specified below that have been satisfactorily and substantially completed as a prime contractor, joint venture member
Specific Experience Start Year	2019-01-01
Specific Experience End Year	2023-12-31

Number of Specific Experience Contracts	2
Value of each specific experience contract in the specified tender currency	17051850000

General Experience (SCORE: N/A)
Bidder should provide details of their previous and ongoing contracts to evidence their general experience in construction.

General experience start date	2019-01-01
General experience end date	2024-12-31
Number of contract	2
Contract value in the specified currency	17051850000

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	Insert Employer’s Name and Contact
Project Description	Insert Project Description
Project Amount	Insert Project Amount
Project Start Date	2019-01-01
Project End Date	2023-12-31
Key Activities	Insert key activities
Roles in Contract	Insert roles of contract
Key Personnel	Key personnel involved

2. Technical Specifications

Risk Management Plan (SCORE: N/A)
Bidders 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.

3. Key Personnel

Key Personnel (SCORE: N/A)
The Bidder must demonstrate that it will have suitably qualified (and in adequate numbers) Key Personnel, as described in the Specification. The Bidder shall provide details of the Key Personnel and such other Key Personnel that the Bidder considers appropriate to perform the Contract, together with their academic qualifications and work experience in the

Qualification Information in the system.

Categories of Key Personnel	Education Level	Experience of Key Personnel	Number of Required Key Personnel
Electrical Technician	Certificate in Electrical Engineering or equivalent	5	1
Materials / Highway Engineer	Degree in Civil Engineering	8	1
Quantity Surveyor	Degree in Quantity Surveying or equivalent	8	1
Structural Engineer	Degree in Civil/Structure Engineering or equivalent	8	1
Project Manager/Site Agent	Degree in Civil Engineering, Quantity Surveying or Architecture or equivalent	10	1
Health and Safety Officer	Degree/Diploma in Health/Social/Environmental Sciences and Certification by OSHA or similar Bodies/Authorities.	5	1
Architect	Degree in Architecture or equivalent	8	1
Land Surveyor	Degree or Advanced Diploma in Land Surveying	8	1
Civil Technician	Certificate in Civil Engineering or equivalent	5	1
Environmental Expert	Degree in Environmental Science/Engineering or equivalent	8	1
Social Expert	Degree in Social Science/Sociology or equivalent	8	1
Mechanical/Services Engineer	Degree in Mechanical Engineering or equivalent	8	1
Electrical Engineer	Degree in Electrical Engineering or equivalent	8	1
ICT Engineer	Degree in ICT Engineering or equivalent	5	1
Mechanical Technician	Certificate in Mechanical Engineering or equivalent	5	1

4. Technical Submission

Site Organization (SCORE: N/A)
Bidder shall include an organizational diagram indicating his proposed project organization, including Head Office management and possible sub-contractors.

Equipment (SCORE: N/A)
The Bidder must demonstrate that it will have access to the key Contractor’s equipment listed. The Bidder shall provide further details of the proposed equipment in the Qualification Information.

Type of Key Equipment Required	Equipment Capacity	Start Year of Equipment Manufacture	End Year of Equipment Manufacture	Number of Equipment
Back Hoe Excavator	0.5m3	N/A	N/A	4
Excavator	130kW/1.5m3	N/A	N/A	2
Concrete Truck Mixer	8.0m3	N/A	N/A	2
Wheel Loader	3.0m3	N/A	N/A	2

Tipping Truck	15.0m3	N/A	N/A	5
Bull dozers Tracked	240 hp	N/A	N/A	1
Concrete Batching Plant	10.0t/hr	N/A	N/A	1
Smooth Drum Vibrating Roller	260kN/m/ 25Hz	N/A	N/A	2
Concrete Pump	60 m3/h	N/A	N/A	1
Steel Wheel Roller	10t	N/A	N/A	2
Concrete Vibrator (Poker)	3 kw	N/A	N/A	5
Mobile Crane	25 tonne	N/A	N/A	1
Truck Mounted Crane	(5-10t)	N/A	N/A	1
Tamping Roller	5 tonne	N/A	N/A	3
Reinforcement Bending Machine	Set	N/A	N/A	1
Diesel Generator	500kW	N/A	N/A	1
Diesel Tank	10,000 lts	N/A	N/A	1
Pedestrian Roller	3 tons	N/A	N/A	2
Water Pumps	50mm	N/A	N/A	2
Reinforcement Cutting Machine	Set	N/A	N/A	1
Motor Grader	150kW	N/A	N/A	2
Pneumatic Tyred roller	15 ton	N/A	N/A	1
Asphalt Concrete and CRR Paving Machine	150 hp	N/A	N/A	1
Paver Mixer	120kW	N/A	N/A	1

Mobilization Schedule (SCORE: N/A)

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

Mobilization Schedule	Submit the mobilization schedule for the project and the following documents; Schedule of Payment Currencies 2. Historical Contract Non-Performance, Pending Litigations and Litigation History 3. Environmental and Social Performance Declaration 4. SEA and/or SH Declaration 5. Financial Situation and Performance 6. Average Annual Construction Turnover 7. Financial Resources 8. General Construction Experience 9. Specific Construction and Contract Management Experience 10. Construction Experience in Key Activities 11. Specific Experience in Managing ES aspects 12. List of Key Personnel for this Tender (Note: in compliance with ITB 34.5 (Multiple Contracts), list of Key Personnel must consist of separate teams in case you are applying more than one Tender (different from this one) 13. List of Equipment for this Tender (Note: in compliance with ITB 34.5 (Multiple Contracts), list of Equipment must consist of separate Set-in case you are applying more than one Tender (different from this one) 14.Bid Security

Method Statement (SCORE: N/A)

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

Environmental and Social Management Strategies and Implementation Plans (ES-MSIP) (SCORE: N/A)
Bidder shall provide comprehensive and concise environmental and Social Management Strategies and Implementation Plans as per requirements.

Environmental and Social Management Strategies and Implementation Plans (ES-MSIP)	Provide comprehensive and concise Environmental and Social Management Strategies and implementation Plans as per requirements

Financial Evaluation

1. Priced Bills of Quantities

Priced Bill of Quantities (SCORE: N/A)
Bidders are required to quote each item in the Bills of Quantities as per the procuring entity's requirements.

Section IV - BIDDING FORMS

Letter of Bid

(Form is available in the system during bid submission)

Bills of Quantities and Activity Schedule

(Format for BoQ, Schedule of Payment Currencies*, and* Schedule(s) of Adjustment Data *submission is available in the system during bid submission)*

Forms of Bid Security

(Form is available in the system during bid submission)

Form of Bid Security - Bank Guarantee

[Guarantor letterhead or SWIFT identifier code]

Beneficiary:

***[Insert name and address of the* Employer]**

Request for Bids No: _[Insert reference number for the Request for Bids]

Date: [Insert date of issue]

BID 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 the Bidder, which in the case of a joint venture shall be the name of the joint venture (whether legally constituted or prospective) or the names of all members thereof] (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its Bid (hereinafter called "the Bid") for the execution of *[insert description ofcontract]* under Request for Bids No. [*insertnumber*] ("the RFB").

Furthermore, we understand that, according to the Beneficiary's conditions, Bids must be supported by a Bid 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 *[insertamount in letters]* (*insert amount in numbers*) upon receipt by us of the Beneficiary's complying supported by theBeneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating either that the Applicant:

(a) has withdrawn its Bid prior to the Bid validity expiry date specified by the Applicant in the Letter of Bid, or any extended date provided by the Applicant; or

(b) having been notified of the acceptance of its Bid by the Beneficiary prior to the expiry date of the Bid validity or any extension thereto provided by the Applicant, (i)fails to execute the contract agreement or (ii) fails to furnish the performance security and, if required, the Environmental and Social (ES) Performance Security, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee will expire: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the contract agreement signed by the Applicant and the performance security and, if required, the Environmental and Social (ES) Performance Security, issued to the Beneficiary in relation tosuch contract agreement; and (b) if the Applicant is not the successful Bidder,upon the earlier of (i) our receipt of a copy of the Beneficiary's notificationto the Applicant of the results of the Bidding process; or (ii) twenty-eight days after the expiry date of the Bid validity.

Consequently, any demand for payment underthis guarantee must be received by us at the office indicated above on orbefore that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758.

_____

[signature(s)]

Note: Allitalicized text is for use in preparing this form and shall be deleted from thefinal product.

Form of Bid Security – Bid Bond

[The Surety shall fill in this Bid Bond Form in accordance with the instructions indicated.]

BOND NO. _____

BY THIS BOND [name of Bidder] as Principal(hereinafter called "the Principal"), and *[name,legal title, and address of surety],* authorized to transact business in [name of country of Employer], as Surety(hereinafter called "the Surety"), are held and firmly bound unto [name of Employer] as Obligee (hereinafter called "the Employer") in the sum of *[amount of Bond] [amount in words],* for the payment ofwhich sum, well and truly to be made, we, the said Principal and Surety, bindourselves, our successors and assigns, jointly and severally, firmly by thesepresents.

WHEREAS the Principal has submitted a written Bid to the Employer dated the ___ day of_____, 20__, for the execution of *[nameof Contract]* (hereinafter called the "Bid").

NOW, THEREFORE, THECONDITION OF THIS OBLIGATION is such that if the Principal:

(a) has withdrawn its Bid prior to the Bid validity expiry date set forth in thePrincipal's Letter of Bid, or any extended date provided by the Principal; or

(b) having been notified of theacceptance of its Bid by the Employer prior to theexpiry date of the Bid validity or any extension thereto provided by the Principal:(i) failed to execute the contract agreement; or (ii) has failed to furnish thePerformance Security and, if required, the Environmental and Social (ES) Performance Security, in accordance with theInstructions to Bidders ("ITB") of the Employer's bidding document.

then the Suretyundertakes to immediately pay to the Employer up to the above amount uponreceipt of the Employer's first written demand, without the Employer having tosubstantiate its demand, provided that in its demand the Employer shall statethat the demand arises from the occurrence of any of the above events,specifying which event(s) has occurred.

The Surety herebyagrees that its obligation will remain in full force and effect up to andincluding the date 28 days after the date of expiration Bid validity set forthin the Principal's Letter of Bid or any extension thereto provided by thePrincipal.

IN TESTIMONY WHEREOF, the Principal and the Surety have caused these presents to be executedin their respective names this ____ day of _____ 20__.

Principal:_____ **Surety:**_____
Corporate Seal (where appropriate)

_____ _____
(Signature) (Signature)
(Printed name and title) (Printedname and title)

Note: The amount of the Bond shall be denominated in the currency of the Employer's country or the equivalent amount in a freely convertible currency.

Form of Bid-Securing Declaration

Date: *[insert date (as day, month and year)]*
RFB No.: *[insert number of Bidding process]*
Alternative No.: *[insert identification No if this is a Bid for analternative]*

To: *[insert complete name of Employer]*

We, the undersigned, declare that:

We understand that,according to your conditions, bids must be supported by a Bid-SecuringDeclaration.

We accept that we willautomatically be suspended from being eligible for bidding or submitting proposals in anycontract with the Employer for the period of time specified in Section II – Bid Data Sheet if we arein breach of our obligation(s) under the bid conditions, because we:

(a) havewithdrawn our Bid prior to the expiry date of the Bidvalidity specified in the Letter of Bid or any extendeddate provided by us; or

(b) havingbeen notified of the acceptance of our Bid by the Employer prior to the expiry date of the Bid validity in the Letter of Bid or anyextended date provided by us, (i) fail or refuse to executethe Contract, if required, or (ii) fail or refuse to furnish the Performance Security and, if required, the Environmentaland Social (ES) Performance Security, in accordance with theITB.

We understand thisBid-Securing Declaration shall expire if we are not the successful Bidder, uponthe earlier of (i) our receipt of your notification to us of the name of thesuccessful Bidder; or (ii) twenty-eight days after the expiry date of the Bidvalidity.

Name of the Bidder***** *[insertcomplete name the Bidder]*

Name of the person dulyauthorized to sign the Bid on behalf of the Bidder****** *[insert complete name of person dulyauthorized to sign the Bid]*

Title of the person signing theBid *[insert complete title of the person signing the Bid]*

Signature of the person namedabove *[insert signature of person whose name and capacity are shown above]*

Date signed _*[insert date ofsigning]* day of [*insertmonth], [insert year]*

*****: In the case of the Bid submitted by jointventure specify the name of the Joint Venture as Bidder

**:Person signing the Bid shall have the power of attorney given by the Bidder tobe attached with the Bid *[Note: In case of a Joint Venture, the Bid-Securing Declarationmust be in the name of all members to the Joint Venture that submits the Bid.]*

Special Power of Attorney

(Form is available in the system during bid submission)

[Bidder's Header]

STANDARD POWER OF ATTORNEY

[This form shall be used by firms]

TO ALL IT MAY CONCERN

THAT BYTHIS POWER OF ATTORNEY given on the *[insertdate, month and year*],
WE the undersigned [*insert name of the Company/Donor*]of *[insert address of the Company/Donor*],by virtue of authority conferred to us by the Board Resolution No *[insertBoard Resolution Number]* of *[insert day]* day of *[insert BoardResolution month and year],* do hereby ordain, nominate authorize, empower and appoint *[insert name of Donee]*of *[insert address of the Donee]*to be our true lawful Attorney and Agent, with full power and authority, for us and in our names, and for our accounts and benefits, to do any, or all of the following acts, in the execution of tender No. *[insert tender number*] for *[insertdescription of procurement]* that is to say;
To act for the company and do any other thing or things incidental for [insert tender Number] for [insert description of procurement] for the [*insert name of the procuring entity*];
AND provided always that this Power of Attorney shall not revoke or in any manner affect any future Power of Attorney given to any other person or persons for such other power or powers shall remain and be of the same force and affect as if this deed has not been executed.
AND we hereby undertake to ratify everything, which our Attorney or any substitute or substitutes or agent or agents appointed by him under this power on his behalf herein before contained shall do or purport to do in virtue of this Power of Attorney.
SEALED with the common seal of the said*[insert name of the company]* and delivered in the presence of us this [insert date] day of *[insert month] [insert year]*.
IN WITNESS whereof we have signed this deed on this *[insert date]* day of *[insert month] [insert year]* at *[insertregion]* for and on behalf of *[insertname of the company]* ……

SEALED and **DELIVERED**by the
Common Sealof [*insert name of the Donor/coy]*
This [insert date, month and year]

DONOR

BEFORE ME:
COMMISSIONERFOR OATHS

ACKNOWLEDGEMENT

I [insert name of Donee] doth herebyacknowledge and accept to be Attorney of the said [*insert name of the company/donor*] under the terms and conditionscontained in this POWER OF ATTORNEY and I promise to perform and discharge myduties as the lawfully appointed Attorney faithfully and honestly.
SIGNED ANDDELIVERED by the said
[Insert name of Donee] Identified to me
by *[insert name]*
The latterknown to me personally
This [insert date, month and year],

DONEE

BEFORE ME
COMMISSIONERFOR OATHS

TECHNICAL PROPOSALS FORMS

1	Key Personnel Schedule	The bidders should provide the names and details of the suitably qualified Key Personnel to perform the Contract. Data on their experience should be updated in the tenderer profile i.e. Qualifications Information through the system for each candidate to allow submission of the same during bid application.
2	Equipment	The bidder shall provide adequate information to demonstrate clearly that it can meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria).
3	Site Organization	The bidder shall submit through the system an organizational diagram indicating his proposed project organization, including Head Office management and possible sub-contractors. The chart shall be sufficiently detailed to enable an assessment of the number of supervisory staff and foremen available on-site to the extent that CVs requested under Personnel, such candidate shall be identifiable on the attached organization diagram.
4	Method Statement	The bidder is required to submit through the system the expected hereunder and to detail clearly how he intends to execute the works and complete the entire work in accordance with the proposed programme.
5	Mobilization Schedule	The bidder is required to submit a mobilization schedule as per the requirements of the employer.
6	Construction Schedule	The bidder is required to submit a construction schedule as per the requirements of the employer.
7	ES Management Strategies and Implementation Plans (ES-MSIP)	The Bidder shall submit comprehensive and concise Environmental and Social Management Strategies and Implementation Plans (ES-MSIP) as required by ITB 11.1 (i) ofthe Bid Data Sheet. These strategies and plans shall describe in detail the actions, materials, equipment, management processes etc. that will be implemented by the Contractor, and its subcontractors. In developing these strategies and plans, the Bidder shall have regard to the ES provisions of the contract including those as may be more fully described in the Works Requirements in Section VII.

Note to the Bidder:

The minimum content of the Code of Conduct form as set out by the Employer shall not be substantially modified. However, the Bidder may add requirements as appropriate, including taking into account Contract-specific issues/risks.

The Bidder shall initial and submit the Code of Conduct form as part of its bid.

CODE OF CONDUCT FOR CONTRACTOR'S PERSONNEL

We are the Contractor, [*enter name of Contractor*]. We have signed a contract with [*entername of Employer*] for [*enter description of the Works*]. These Works will be carried out at [enter the Site and other locations where the Works will be carried out]. Our contract requires us to implement measures to address environmental and social risks related to the Works, including the risks of sexual exploitation, sexual abuse, and sexual harassment.

This Code of Conduct is part of our measures to deal with environmental and social risks related to the Works. It applies to all our staff, laborers, and other employees at the Works Site or other places where the Works are being carried out. It also applies to the personnel of each subcontractor and any other personnel assisting us in the execution of the Works. All such persons are referred to as "**Contractor's Personnel"** and are subject to this Code of Conduct.

This Code of Conduct identifies the behavior that we require from all Contractor's Personnel.

Our workplace is an environment where unsafe, offensive, abusive, or violent behavior will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

REQUIRED CONDUCT

Contractor's Personnel shall:

1. carry out his/her duties competently and diligently;
2. comply with this Code of Conduct and all applicable laws, regulations, and other requirements, including requirements to protect the health, safety, and well-being of other Contractor's Personnel and any other person;
3. maintain a safe working environment including by:
    a. ensuring that workplaces, machinery, equipment, and processes under each person's control are safe and without risk to health;
    b. wearing required personal protective equipment;
    c. usingappropriate measures relating to chemical, physical and biological substancesand agents; and
    d. followingapplicable emergency operating procedures.
4. reportwork situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;
5. treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;
6. not engage in Sexual Harassment, which means unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature with other Contractor's or Employer's Personnel;
7. not engage in Sexual Exploitation, which means any actual or attempted abuse ofposition 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;
8. not engage in Sexual Abuse, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;
9. not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage;
10. complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, and Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH);
11. report violations of this Code of Conduct; and
12. not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the grievance mechanism for Contractor's Personnel or the project's Grievance Redress Mechanism.

RAISING CONCERNS

If any person observes behavior that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

1. Contact [*enter name of the Contractor's Social Expert with relevant experience in handling gender-based violence, or if*

such person is not required under the Contract, another individual designated by the Contractor to handle these matters] inwriting at this address [ ] or by telephone at [ ] or in person at [ ]; or

2. Call [ ] to reach the Contractor'shotline *(if any)* and leave a message.

The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.
There will be no retaliation against any person who raises a concern in good faith about any behavior prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT

Any violation of this Code of Conduct by Contractor's Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

FOR CONTRACTOR'S PERSONNEL:

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [*entername of Contractor's contact person with relevant experience*] requesting anexplanation.

Name of Contractor's Personnel:[insert name]

Signature:_____

Date: (day month year): _____

Counter signature of authorized representative of the Contractor:

Signature:_____

Date: (day month year):_____

ATTACHMENT 1: Behaviors constituting Sexual Exploitation and Abuse (SEA) and behaviors constituting Sexual Harassment (SH)

ATTACHMENT 1 TO THE CODE OF CONDUCT FORM

BEHAVIORS CONSTITUTING SEXUAL EXPLOITATION AND ABUSE (SEA) AND BEHAVIORS CONSTITUTING SEXUAL HARASSMENT (SH)

The following non-exhaustive list is intended to illustrate types of prohibited behaviors:
(1) Examples of sexual exploitation and abuse include, but are not limited to:

a. A Contractor's Personnel tells a member of the community that he/she can get them jobs related to the work site (e.g. cooking and cleaning) in exchange for sex.
b. A Contractor's Personnel that is connecting electricity input to households says that he can connect women headed households to the grid in exchange for sex.
c. A Contractor's Personnel rapes, or otherwise sexually assaults a member of the community.
d. A Contractor's Personnel denies a person access to the Site unless he/she performs a sexual favor.
e. A Contractor's Personnel tells a person applying for employment under the Contract that he/she will only hire him/her if he/she has sex with him/her.

(2) Examples of sexual harassment in a work context
a. Contractor's Personnel comment on the appearance of another Contractor's Personnel (either positive or negative) and sexual desirability.
b. When a Contractor's Personnel complains about comments made by another Contractor's Personnel on his/her appearance, the other Contractor's Personnel comment thathe/she is "asking for it" because of how he/she dresses.
c. Unwelcome touching of a Contractor's or Employer's Personnel by another Contractor'sPersonnel.
d. A Contractor's Personnel tells another Contractor's Personnel that he/she will get him/her a salary raise, or promotion if he/she sends him/her naked photographs of himself/herself.

Bidders Qualification

Bidder's name
In the case of a Joint Venture (JV), the name of each member:
Bidder's actual or intended country of registration: *[indicate country of Constitution]*
Bidder's actual or intended year of incorporation:
Bidder's legal address [in country of registration]:
Bidder's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of the original documents of ¨ Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITB 4.4. ¨ In the case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1. ¨ In the case of state-owned enterprise or institution, in accordance with ITB 4.6 documents establishing: • Legal and financial autonomy • Operation under commercial law • Establishing that the Bidder is not under the supervision of the Employer 2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. *[If required under BDS ITB 47.1, the successful Bidder shall provide additional information on beneficial ownership, using the Beneficial Ownership Disclosure Form.]*

Information Form for JV Bidders

(to be completed for each member of the Joint Venture)

Bidder's Joint Venture name:

JV member's name:

JV member's country of registration:

JV member's year of constitution:

JV member's legal address in the country of the constitution:

JV member's authorized representative information

Name: _____

Address: _____

Telephone/Fax numbers: _____

E-mail address: _____

1. Attached are copies of the original documents of

¨ Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITB 4.4.

¨ In the case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and is not under the supervision of the Employer, in accordance with ITB 4.6.

2. Included are the organizational chart, a list of the Board of Directors, and the beneficial ownership. *[If required under BDS ITB 47.1, the successful Bidder shall provide additional information on beneficial ownership for each JV member using the Beneficial Ownership Disclosure Form.]*

Historical Contract Non-Performance, Pending Litigation, and Litigation History

Non-Performed Contracts in accordance with Section III, Evaluation and Qualification Criteria			
¨ Contract non-performance did not occur since 1st January *[insert year]* ¨ Contract(s) not performed since 1st January *[insert year]*			
Year	**Non-performed portion of the contract**	**Contract Identification**	**T (c ex**
[insert year]	*[insert amount and percentage]*	Contract Identification: *[indicate complete contract name/ number, and any other identification]* Name of Employer: *[insert full name]* Address of Employer: *[insert street/city/country]* Reason(s) for nonperformance: *[indicate main reason(s)]*	*[in*

Pending Litigation, in accordance with Section III, Evaluation and Qualification Criteria			
¨ No pending litigation			
¨ Pending litigation.			
Year of dispute	**Amount in dispute (currency)**	**Contract Identification**	**Total Contrac (currency), USD (exchange**
		Contract Identification: _____ Name of Employer: _____ Address of Employer: _____ Matter in dispute: _____ Party who initiated the dispute: ____ Status of dispute: _____	
		Contract Identification: Name of Employer: Address of Employer: Matter in dispute: Party who	

		initiated the dispute: Status of dispute:	

Litigation History in accordance with Section III, Evaluation and Qualification Criteria			
¨ No Litigation History ¨ Litigation History			
Year of award	**Outcome as percentage of Net Worth**	**Contract Identification**	**Total Contrac (currency), USD (exchange**
[insert year]	*[insert percentage]*	Contract Identification: [indicate complete contract name, number, and any other identification] Name of Employer: *[insert full name]* Address of Employer: *[insert street/city/country]* Matter in dispute: *[indicate main issues in dispute]* Party who initiated the dispute: *[indicate "Employer" or "Contractor"]* Reason(s) for Litigation and award decision *[indicate main reason(s)]*	*[insert amount]*

Environmental and Social Performance Declaration

[The following table shall be filled in for the Bidder, each member of a Joint Venture, and each Specialized Subcontractor]

Environmental and Social Performance Declaration

in accordance with Section III, Qualification Criteria, and Requirements

¨ **No suspension or termination of contract**: An employer has not suspended or terminated a contract and/or called the performance security for a contract for reasons related to Environmental, or Social (ES) performance since the date specified in Section III, Evaluation and Qualification Criteria, Sub-Factor 2.5.

¨ **Declaration of suspension or termination of contract**: The following contract(s) has/have been suspended or terminated and/or Performance Security called by an employer(s) for reasons related to Environmental, or Social (ES)performance since the date specified in Section III, Evaluation and Qualification Criteria, Sub-Factor 2.5. Details are described below:

Year	**Suspended or terminated portion of contract**	**Contract Identification**	**Total Contract Amount (current value, currency, exchange rate and US$ equivalent)**
[insert year]	*[insert amount and percentage]*	Contract Identification: *[indicate complete contract name/ number, and any other identification]* Name of Employer: *[insert full name]* Address of Employer: *[insert street/city/country]* Reason(s) for suspension or termination: *[indicate main reason(s) e.g. for gender-based violence; sexual exploitation or sexual abuse breaches]*	*[insert amount]*
[insert year]	*[insert amount and percentage]*	Contract Identification: *[indicate complete contract name/ number, and any other identification]* Name of Employer: *[insert full name]* Address of Employer: *[insert street/city/country]* Reason(s) for suspension or termination: *[indicate main reason(s)]*	*[insert amount]*
…	…	*[list all applicable contracts]*	…

Performance Security called by an employer(s) for reasons related to ES performance

Year	Contract Identification	Total Contract Amount (current value, currency, exchange rate and US$ equivalent)
[insert year]	Contract Identification: *[indicate complete contract name/ number, and any other identification]* Name of Employer: *[insert full name]* Address of Employer: *[insert street/city/country]* Reason(s) for calling of performance security: *[indicate main reason(s) e.g. for gender-based violence; sexual exploitation, or sexual abuse breaches]*	*[insert amount]*

Sexual Exploitation and Abuse (SEA) and/or Sexual Harassment Performance Declaration

SEA and/or SH Declaration

in accordance with Section III, Evaluation and Qualification Criteria

We:

¨ (a) have not been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations

¨ (b) are subject to disqualification by the Bank for non-compliance with SEA/ SH obligations

¨ (c) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations. An arbitral award on the disqualification case has been made in our favor.

¨ (d) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have subsequently demonstrated that we have adequate capacity and commitment to comply with SEA/ SH obligations.

¨ (e) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have attached evidence demonstrating that we have adequate capacity and commitment to comply with SEA/ SH obligations.

[*If (c) above is applicable, attach evidence of an arbitral award reversing the findings on the issues underlying the disqualification.]*

[If (d) or (e) above are applicable, provide the following information:]

Period of disqualification: From: _____ To: _____

If previously provided on another Bank financed works contract, details of evidence that demonstrated adequate capacity and commitment to comply with SEA/ SH obligations (**as per (d) above)**

Name of Employer: _____

Name of Project: _____

Contract description: _____

Brief summary of evidence provided: _____

_____

Contact Information: (Tel, email, name of contact person): _____

_____

As an alternative to the evidence under (d), other evidence demonstrating adequate capacity and commitment to comply with SEA/ SH obligations (**as per (e) above)** *[attach details as appropriate].*

Current Contract Commitments / Works in Progress

Bidders and each member of a JV should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

Name of contract	**Employer, contact address/tel/fax**	**Value of outstanding work (current US$ equivalent)**	**Estimated completion date**	**Average monthly invoicing over the last six months (US$/month)**
1.				
2.				
3.				
4.				
5.				
etc.				

Financial Situation and Performance

1. Financial data

Type of Financial information in (currency)	**Historic information for previous _____*years*, _____ (amount in currency, currency, exchange rate, USD equivalent)**				
	Year 1	Year 2	Year 3	Year4	Year 5
Statement of Financial Position (Information from Balance Sheet)					
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

2. Sources of Finance

Specify sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.

No.	**Source of finance**	**Amount (US$ equivalent)**
1		
2		
3		

3. Financial documents

The Bidder and its parties shall provide copies of financial statementsfor number of years requested by employer pursuant Section III, Evaluation and Qualifications Criteria, Sub-factor3.2. The financial statements shall:

(a) reflect the financial situation of the Bidderor in case of JV member, and not an affiliated entity (such as parent companyor group member).

(b) be independentlyaudited or certified in accordance with local legislation.

(c) be complete,including all notes to the financial statements.

(d) correspond to accounting periods alreadycompleted and audited.

Attached are copies offinancial statements for the number of years requested by employer; and complying with the requirements. Note: If the most recent set of financialstatements is for a period earlier than 12 months from the date of bid, thereason for this should be justified.

Average Annual Construction Turnover

	Annual turnover data (construction only)		
Year	**Amount** **Currency**	**Exchange rate**	**USD equivalent**
[indicate year]	[insert amount and indicate currency]		
Average Annual Construction Turnover *			

Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as specified in Section III, Evaluation and QualificationCriteria.

S/N	Source of financing	Amount (US$ equivalent)
1.		
2.		
3.		
4.		

General Construction Experience

Starting Year	Ending Year	Contract Identification	Role of Bidder
		Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of Employer: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of Employer: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of Employer: _____ Address: _____	

Specific Construction and Contract Management Experience

Similar Contract No.	**Information**			
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ¨	Member in JV ¨	Management Contractor ¨	Sub-contractor ¨
Total Contract Amount			US$ *	
If member in a JV or subcontractor, specify participation in total Contract amount			*	
Employer's Name:				
Address: Telephone/fax number E-mail:				
Description of the similarity in accordance with Sub-Factor 4.2(a) of Section III:				
1. Amount				
2. Physical size of required works items				
3. Complexity				
4. Methods/Technology				
5. Construction rate for key activities				
6. Other Characteristics				

Construction Experience in Key Activities

All subcontractors for key activities must complete the information through the system as per ITB 34.2 and 34.3 and Section III, Qualification Criteria and Requirements, Sub-Factor 4.2.

1. Key Activity No One: _____

	Information			
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ¨	Member in JV ¨	Management Contractor ¨	Sub-contractor ¨
Total Contract Amount			US$	
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year	Total quantity in the contract (i)	Percentage participation (ii)		Actual Quantity Performed (i) x (ii)
Year 1				
Year 2				
Year 3				
Year 4				
Employer's Name:				
Address: Telephone/fax number E-mail:				
Description of the key activities in accordance with Sub-Factor 4.2(b) of Section III:				

Specific Experience in Managing ES aspects

1. Key Requirement No. 1 in accordance with 4.2 (c): _____

Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ¨	Member in JV ¨	Management Contractor ¨	Subcontractor ¨
Total Contract Amount			US$	
Details of relevant experience				

2. Key Requirement No. 2 in accordance with 4.2 (c): _____

3. Key Requirement No. 3 in accordance with 4.2 (c): _____

4. …

Eligibility for the Provision of Goods, Works, and Services in Bank-Financed Procurement

In reference to ITB 4.8, and 5.1, for the information of the Bidders, at the present time firms, goods, and services from the following countries are excluded from this Bidding process:
Under ITB 4.8(a) and 5.1 and Under ITB 4.8(b) and 5.1

Non-eligible countries are: Not applicable

Section VI - Fraud and Corruption

(Section VI shall not be modified)

1. Purpose

1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants/proposers), consultants, contractors, and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection, and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

2.2 To this end, the Bank:

a. Defines, for the purposes of this provision, the terms set forth below as follows:

i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;

ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;

iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;

iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;

v. "obstructive practice" is:

(a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

(b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.

b. Rejects a proposal for award if the Bank determines that the firmor individual recommended for award, any of its personnel, or its agents, orits sub-consultants, sub-contractors, service providers, suppliers and/ ortheir employees, has, directly or indirectly, engaged in corrupt, fraudulent,collusive, coercive, or obstructive practices in competing for the contract inquestion;

c. In addition to the legal remedies set out in the relevant LegalAgreement, may take other appropriate actions, including declaringmisprocurement, if the Bank determines at any time that representatives of theBorrower or of a recipient of any part of the proceeds of the loan engaged incorrupt, fraudulent, collusive, coercive, or obstructive practices during theprocurement process, selection and/or execution of the contract inquestion, without the Borrower havingtaken timely and appropriate action satisfactory to the Bank to address suchpractices when they occur, including by failing to inform the Bank in a timelymanner at the time they knew of thepractices;

d. Pursuant to the Bank's Anti- Corruption Guidelines and inaccordance with the Bank's prevailing sanctions policies and procedures, maysanction a firm or individual, either indefinitely or for a stated period oftime, including by publicly declaring such firm or individual ineligible (i) tobe awarded or otherwise benefit from a Bank-financed contract, financially orin any other manner;[1] (ii) to be a nominated[2] sub-contractor,consultant, manufacturer or supplier, or service provider of an otherwiseeligible firm being awarded a Bank-financed contract; and (iii) to receive theproceeds of any loan made by the Bank or otherwise to participate further inthe preparation or implementation of any Bank-financed project;

e. Requires that a clause be included in bidding/request forproposals documents and in contracts financed by a Bank loan, requiring (i)bidders (applicants/proposers), consultants, contractors, and suppliers, andtheir sub-contractors, sub-consultants, service providers, suppliers, agentspersonnel, permit the Bank to inspect[3] all accounts,

recordsand other documents relating to the procurement process, selection and/orcontract execution, and to have them audited by auditors appointed by the Bank.

[1] For the avoidance of doubt, a sanctioned party’sineligibility to be awarded a contract shall include, without limitation, (i)applying for pre-qualification, expressing interest in a consultancy, andbidding, either directly or as a nominated sub-contractor, nominatedconsultant, nominated manufacturer or supplier, or nominated service provider,in respect of such contract, and (ii) entering into an addendum or amendmentintroducing a material modification to any existing contract.

[2] Anominated sub-contractor, nominated consultant, nominated manufacturer orsupplier, or nominated service provider (different names are used depending onthe particular bidding document) is one which has been: (i) included by thebidder in its pre-qualification application or bid because it brings specificand critical experience and know-how that allow the bidder to meet thequalification requirements for the particular bid; or (ii) appointed by theBorrower.

[3] Inspectionsin this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activitiesundertaken by the Bank or persons appointed by the Bank to address specificmatters related to investigations/audits, such as evaluating the veracity of anallegation of possible Fraud and Corruption, through the appropriatemechanisms. Such activity includes butis not limited to: accessing and examining a firm's or individual's financialrecords and information, and making copies thereof as relevant; accessing andexamining any other documents, data and information (whether in hard copy orelectronic format) deemed relevant for the investigation/audit, and makingcopies thereof as relevant; interviewing staff and other relevant individuals;performing physical inspections and site visits; and obtaining third partyverification of information.

PART 2: WORKS REQUIREMENTS

SPECIFICATIONS

Tender Number: LGA/085/TACTIC/P171189/2024/2025/W/01
List of related files, including specifications, drawings, etc.

LOT NO. LGA/085/TACTIC/P171189/2024/2025/W/01
Upgrading of Access Roads & Drainage System and Construction of Small-Scale Industry & Bus Terminal by June 2025

S/N	Description	File Name	Attachment Type	Download Link
1	Samia City Access Road	Part 6 - Samia City Access Road.pdf	Drawings	Download
2	Final Geotechnical Investigation Report - SMALL SCALE INDUSTRY	2. Final Geotechnical Investigation Report-SMALL SCALE INDUSTRY-MTWARA.pdf	Reports	Download
3	Special Specifications	2. Volume 2B.pdf	Specifications	Download
4	ES Requirements	3. Volume 2C.pdf	Specifications	Download
5	Office Building	Part 5 - Office Block - drawings.pdf	Drawings	Download
6	BoQ Preamble	Vol 4 - BoQ Preamble.pdf	Other	Download
7	Material Investigation report - MTWARA	1. Material Investigations Report-MTWARA.pdf	Reports	Download
8	Upgrading the Drainage system- Kiyangu Storm water channel	Part 4-Upgrading the Drainage system- Kiyangu Storm water channel.pdf	Drawings	Download
9	Chipuputa Main Bus stand And Associated roads	Part 2-Chipuputa Main Bus Terminal and Associated Roads.pdf	Drawings	Download
10	Scope of works and Specifications for building works	4. Volume 2D.pdf	Specifications	Download
11	Standard Specifications	1. Volume 2A..pdf	Specifications	Download
12	Skoya Small Scale Industry and General Workshop	Part 3-Skoya Small Scale Industry and General Workshop.pdf	Drawings	Download
13	Final Geotechnical Investigation Report - BUS STAND	3. Final Geotechnical Investigation Report-CHIPUPUTA BUS TERMINAL-MTWARA.pdf	Reports	Download
14	Chuno Market Roads	Part 1 - Chuno Market Roads.pdf	Drawings	Download

DRAWINGS

Tender Number: LGA/085/TACTIC/P171189/2024/2025/W/01
List of related files, including specifications, drawings, etc.

LOT NO. LGA/085/TACTIC/P171189/2024/2025/W/01
Upgrading of Access Roads & Drainage System and Construction of Small-Scale Industry & Bus Terminal by June 2025

S/N	Description	File Name	Attachment Type	Download Link
1	Samia City Access Road	Part 6 - Samia City Access Road.pdf	Drawings	Download
2	Final Geotechnical Investigation Report - SMALL SCALE INDUSTRY	2. Final Geotechnical Investigation Report-SMALL SCALE INDUSTRY-MTWARA.pdf	Reports	Download
3	Special Specifications	2. Volume 2B.pdf	Specifications	Download
4	ES Requirements	3. Volume 2C.pdf	Specifications	Download
5	Office Building	Part 5 - Office Block - drawings.pdf	Drawings	Download
6	BoQ Preamble	Vol 4 - BoQ Preamble.pdf	Other	Download
7	Material Investigation report - MTWARA	1. Material Investigations Report-MTWARA.pdf	Reports	Download
8	Upgrading the Drainage system- Kiyangu Storm water channel	Part 4-Upgrading the Drainage system- Kiyangu Storm water channel.pdf	Drawings	Download
9	Chipuputa Main Bus stand And Associated roads	Part 2-Chipuputa Main Bus Terminal and Associated Roads.pdf	Drawings	Download
10	Scope of works and Specifications for building works	4. Volume 2D.pdf	Specifications	Download
11	Standard Specifications	1. Volume 2A..pdf	Specifications	Download
12	Skoya Small Scale Industry and General Workshop	Part 3-Skoya Small Scale Industry and General Workshop.pdf	Drawings	Download
13	Final Geotechnical Investigation Report - BUS STAND	3. Final Geotechnical Investigation Report-CHIPUPUTA BUS TERMINAL-MTWARA.pdf	Reports	Download
14	Chuno Market Roads	Part 1 - Chuno Market Roads.pdf	Drawings	Download

ENVIRONMENTAL, SOCIAL, HEALTH AND SAFETY REQUIREMENTS

The Employer should include a suitably qualified Environmental and Social specialist/s.

The Employer should attach or refer to the Employer's environmental and social, policies that will apply to the project. If these are not available, the Employer should use the following guidance in drafting an appropriate policy for the Works.]

Suggested content for Environmental and Social Policy (Statement)

The Works' policy goal, as a minimum, should be stated to integrate environmental protection, occupational and community health and safety, gender, equality, child protection, vulnerable people (including those with disabilities), sexual harassment, gender-based violence, Sexual Exploitation and Abuse (SEA), HIV/AIDS awareness and prevention and wide stakeholder engagement in the planning processes, programs, and activities of the parties involved in the execution of the Works. The policy should set the frame for monitoring, continuously improving processes and activities and for reporting on the compliance with the policy.

The policy shall include a statement that, for the purpose ofthe policy and/or code of conduct, the term "child" / "children" means anyperson(s) under the age of 18 years.

The policy should, as far as possible, be brief but specificand explicit, and measurable, to enable reporting of compliance with the policyin accordance with the General Conditions of Contract.

As a minimum, the policy is set out to the commitments to:

1. *apply good international industry practice to protect and conserve the natural environment and to minimize unavoidable impacts;*

2. *provide and maintain a healthy and safe work environment and safe systems of work;*

3. *protect the health and safety of local communities and users, with particular concern for those who are disabled, elderly, or otherwise vulnerable;*

4. *be intolerant of, and enforce disciplinary measures for illegal activities. To be intolerant of, and enforce disciplinary measures for gender-based violence, inhumane treatment, sexual exploitation, rape, sexual abuse, sexual activity with children, and sexual harassment;*

5. *incorporate a gender perspective and provide an enabling environment where women and men have equal opportunity to participate in, and benefit from, planning and development of the Works;*

6. *work co-operatively, including with end users of the Works, relevant authorities, contractors and local communities;*

7. *engage with and listen to affected persons and organizations and be responsive to their concerns, with special regard for vulnerable, disabled, and elderly people;*

8. *provide an environment that fosters the exchange of information, views, and ideas that is free of any fear of retaliation, and protects whistleblowers;*

9. *minimize the risk of communicable diseases and to mitigate the effects of communicable diseases associated with the execution of the Works;*

The policy should besigned by the senior manager of the Employer. This is to signal the intent thatit will be applied rigorously.

MinimumContent of ES requirements

In preparing detailed specifications for ES requirements, thespecialists should refer to and consider:

project reports e.g. ESIA/ESMP

consent/permit conditions

required standards including Guidelines

relevant international conventions or treaties etc., national legal and/or regulatory requirements and standards (eg NEMC and OSHA Guidelines)

relevant international standards e.g. TDFA Guidlines

relevant sector standards

grievance redress mechanism including types of grievances to be recorded and how to protect confidentiality e.g. of those reporting allegations of SEA.

SEA prevention and management.

The detail specification for ES should, to the extent possible, describe the intended outcome rather than the method of working. The ES requirements should be prepared in manner that does not conflict with the relevant General Conditions of Contract and Particular Conditions of Contract.

Payment for ES Requirements

The Employer's ES and procurement specialists should consider how the Contractor will cost the delivery of the ES requirements. In the majority of cases, the payment for the delivery of ES requirements shall be a subsidiary obligation of the Contractor covered under the prices quoted for other Bill of Quantity items or activities. For example, normally the cost of implementing work place safe systems of work, including the measures necessary for ensuring traffic safety, shall be covered by the Tenderer's rates for the relevant works. Alternatively, provisional sums could be set aside for discrete activities for example for HIV counselling service, and, and, GBV/SEA awareness and sensitization awareness and sensitization or to encourage the contractor to deliver additional ES outcomes beyond the requirement of the Contract.

BILLS OF QUANTITIES

Lot Description: Upgrading of Access Roads & Drainage System and Construction of Small-Scale Industry & Bus Terminal by June 2025

Code/SN	Description
	PART B: BUS STAND – MAIN BUILDING
BILL No 3	**MEASURED WORKS**
ELEMENT No.1	**SUBSTRUCTURE (ALL PROVISIONAL)**
1	**Excavation and Earthworks;**
A	Clear site of small bushes, shrubs, undergrowth, and the like and grub up their roots
B	Excavate over site to remove vegetable soil commencing at ground level average depth 150mm; deposit in spoi heaps and cart away from site
C	Earthwork in excavation using manpower/machine in all kind of soil for foundation trenches of pit, raft etc. inc the cost of dressing of sides, ramming of bottom as per drawing, specification & approval of engineer.
D	Extra over excavating in hard rock
E	Earth back filling well rammed and consolidated around the foundation
F	Load, wheel and cart away surplus excavated material from site.
G	Imported Granular fill materials Selected approved backilling well rammed and consolideted layers to make up levels under floors
H	Ditto; Sand filling works to make up levels under floors
2	**Disposal of water:**
A	Allow for keeping all excavation free from water (except spring or running water) by pumping, baling or by oth means necessary
3	**Planking and strutting.**
A	Allow for provision and subsequent removal of planking and strutting to uphold and maintain all faces of excavations.
4	**Hardcore**
B	150mm thick; stone hardcore bed; leveled; compacted and sand blinded to receive damp proof membrane; mea separately.
5	**Soil sterilization:**
A	Gammalin 20 solution or equal and approved; applied at a rate of 450ml per square metre over hardcore surface beds and top of foundation walls.
B	Ditto; at a rate of 450ml per linear metre of 300mm. width to 235x 600mm. deep backfilling to one external sid foundations.
6	**Damp Proof Membrane**
A	500 Gauge polythene damp proof membranes; laid in two layers on sand blinded hardcore bed surfaces
7	**CONCRETE WORK:**
	Plain insitu concrete grade '15'
A	Concrete Blinding
	Plain insitu concrete grade '20'
A	150 mm thick Concrete bed
	Reinforced insitu concrete grade '25'; vibrated; including vibrating around reinforcements:
A	Reinforced In-situ Concrete; Grade "25" including vibrating around reinforcement
8	**REINFORCEMENTS:**
I	**High tensile steel bar reinforcements with a strength of 500N/mm2 to BS 4449:1969: including bends, ho**

A	Various Sizes
9	**Formwork:**
	Vertical or battering surfaces
A	To columns
B	To Beam
C	To Slab, Raft, Stairs, Rcc walls, Sill/lintel etc
11	**FINISHINGS**
	Sealing of expansion joint by using CORESEAL PS 215 (GG) heavy duty sealant
A Wax Based Concrete Curing Compound	Application of membrane forming wax based curing compound for RCC vertical structure (column, share walls to sprayed over the concrete surfaces to retard the loss of water during the concrete curing process
	Render; cement and sand (1:3); trowelled
A	12mm thick; to plinth; to concrete or block work base
12	**DAMP PROOFING**
A	230mm wide; Hessians based damp proof course; laid on blockwork with 150mm end laps
14	**Expansion Joints:**
A	Expansion Joint for Horizontal slab (top of the roof & floors) area with minimum 3 mm th. Aluminum plate wi joint gap up to 800 mm, as per drawing, specification and instructions all complete
B	Supplying and fixing of 16 gauge Aluminum Sheet for the expansion joint gap of beam/slab bottom and interna column gap up to 450 mm as per drawing, specification and instructions all complete .
C	Supplying and applying low viscous epoxy grouting works injectofil for beam and column junction as per specifications and approval of engineer all complete
D	Supplying and applying non shrink chemicals (EXPA G 101) for normal grouting works for RCC works as per specifications and approval of engineer all complete
12	**Prepare and apply three coats of black bituminous paint on:**
A	Rendered surfaces to plinth
ELEMENT No.3	**STAIRS AND RAMPS**
2	**REINFORCEMENTS**
	High tensile reinforcement steel bars to B.S 4461:1969 including bends, hooks, tying wire, spacers and di
A	METAL WORKS Supplying, fabricating and fixing in position of metal related works by connecting plate, ang iron, MS plate, and making metal stair case, MS gate, gratings, grill etc. including necessary hole cutting , grin welding/bolting red oxide paint with all necessary fixtures as per drawing specification and instruction of engi complete.
B	50mm Diameter, 2mm thick satin finished stainless steel handrail welded on top of steel balusters, open ends cl with flat metal plate
C	Supplying, fabrication and fixing in position 1000 to 1200mm high 16 gauge stainless steel railing for staircase verandah with 50 mm dia for King/newel post, 38 mm dia for intermediate/balusters @ 1 to 1.5 m c/c spacing a one no. 50 mm dia for hand rail on top, and 6 layer of 12.5 mm dia solid rod horizontal/inclined members with necessary fixtures and fitting such as brass caps, necessary hole cutting, metal grip, welding, jointing all compl per drawing , specification & approval of Engineer.
ELEMENT NO.4	**WALLING.**
1	**BLOCKWORK:**
I	**Solid concrete blocks to BS 6073 Type 'A' dense aggregate, average compressive strength 7N/sq mm; in c**
B	230mm. Walls.
3	**PARTITIONING**
	COMPOSITE UNITS

A	FIBERGLASS MESH WORKS Providing & fixing Fiberglass mesh at junction of RCC & Brick/block/cement walls before plaster works including fixing in position wirh steel nails of 25mm in length approved at required distance with scaffolding all complete in the direction of Engineer-in-charge.
ELEMENT No.5	**ROOFING**
1	**ROOF COVERINGS**
IV	**24 Gauge resin coated roofing accessories as supplied by Aluminium Africa or any other equal and appr as per manufacturer's instruction**
A	Roof covering sloping not exceeding 30 degrees from the horizontal.
V	**Kryton water treatment membrane or any other equal and approved type laid on screeded bed (m.s) to r**
A	Providing & application of two or more coat of elastromeric waterproofing works by using fiber glass reinforce meeting the standard ASTM D4404-01 for the shear wall, basement, toilet, bathroom,terrace etc.Including the c the cleaning the surface all complete elastromeric waterproofing work as per drawing, specification and instruc
3	**Unframed Structural Hollow section steel pipe**
3.2	**The following are in 1nr roof truss spanning over 15.00 but not exceeding 18.00m (Truss type STB)**
A	The following in 19 nos Trusses T1 using Weldable mild steel to BS.4360 grade S 275 with fabrications and bo site connections: Supplying, fabricating and fixing in position of metal truss related works for roof by connecti plate, angle iron, MS Plate includinf all necessary hole cutting, grinding, welding, bolting, red oxide paint with necessary fixtures as per drawing specification and instruction of engineer all complete Metal trusses installatio works
6	**FLAT ROOF TREATMENTS**
	BEDS or BACKINGS; MORTAR; cement and sand (1:3); screeded; to roofs; level or to falls; to concrete
A	Providing, mixing, laying and compacting screeding on floor in true line and level including the cost of curing drawing, specification and instruction of engineer. 38 mm thick with (1:2:4 concrete) screeding
ELEMENT No.6	**DOORS:**
1	**HEAVY DUTY ALUMINIUM DOORS**
	"Design, Engineering, Fabrication, installation, Testing and Commissioning of hinged doors with 100 mm approved aluminium fabricator.50 x 42mm Profile for panels. All extruded aluminium provided shall be Powder Coating should be of 50 Micron minimum thickness applied in accordance with either BS6496 or the doors to the openings. All assembly screws and fixings shall be grade A2 or A4 austenitic stainless ste shall be EPDM. Infill Glass to be 10mm Laminated Clear Glass. Full set of shop drawings and structural production."
A	Supply, fabrication and fixing in position of Aluminium door, window and ventilations made of bronze anodise section including all necessary accessories such as rolers, weather brush, hook locks, slide lock and pull SS han tower bolt, dual locks, gaskets, floor springs, water drainages, silicon , glass of 6 mm thick for door & 5 mm th window & 16 gauge GI fly screens on all openable windows & 9mm th. laminated particle board for doors 0n t and balocny etc for following sections all complete as per drawing, specification and approval of engineer. Doo Single/Double panel Swing/Sliding/Casement Section size (102*45*1.5mm) fitted with 5mm clear glass or 9m thick laminated board or ACP board all complete.
B	Ditto; Providing and fixing Double glazed 2 or 3 panel Sliding Window of aluminum section in naturally anodized/powder coated colour. Section size (87*56*1.5mm) fitted with 5mm clear glass with fly mesh shutter complete.
C	Ditto; Ventilations
D	Providing and fixing Swing Glass Door of 12mm thick Clear Toughened glass with Stainless steel patches or Aluminum frame all complete D1 entrance (1500x3200)m
ELEMENT No.8	**PLUMBING AND ENGINEERING INSTALLATIONS**
1	**SANITARY APPLIANCES**
i	**Supply and fix the following sanitary appliances including all connections and fixing to FLOORS or WA by services Engineers.**
A	Supply, install, test and commission, Sanitary Appliance as per specifications and schedule of sanitary fitting, (ARROW BRAND) However units of other manufacturers approved equal will be accepted. "RAK" WC pan o Equally approved comprising of 9 litres capacity cistern for side supply internal Fleeflo plastic syphon fitting a

	12mm Microvalve HP\LP side supply ballvalve, internal overflow, plastic flush bend, simpla inlet connector ar supports, chrome plated lever , Gemini seat and cover , domex screws and S-trap or P-trap pans.
B	Ditto; Twyford white vitreous china DOC.M Value Pack disabled WC pan Cat No. PK8154WH comprising of bowl with horizontal outlet, hand rinse non overflow, no chainstay, DOC.M support rails (4No), DOC.M hinge support rail and toilet holder, wall hangers (pair), grid waste, DOC.M Value cistern and fittings, DOC.M seat ri stainless steel hinge
C	Ditto; Providing and fixing in position 580 mm size Orissa Pan Hind ware Special or Parry ware Special or equivalent Chinaware Flat Pan with 10 liters capacity white glazed flushing cistern including CP flushing bend angle valve, CP connector, flushing valve, seat cover connection to water and soil lines all complete with testin ready for operation as per drawings, specifications and instruction
D	Ditto; "RAK"or Equally approved,; 42.2cm X 60 cm white glazed porcelain clay Under Counter Hand washbas single central taphole, Complete with overflow, Tubular Type Siphon Waste (A874901), Stop Angel Valve (B7883AA) 0.5" monoblock basin mixer with non return valves and 1.25" pop up waste,1.25" plastic bottle trap 75mm seal.
E	Ditto; Bronze Clean out (floor trap) including rodding eyes, necessary fittings and accessories, complete,press method, depth 24 mm and slip-in to50 mm PVC piping, overall size to be Square type 150mmx150mm, bright The drain will be complete with cover while the cover in clean out to be screwed via two star type screws.
F	Ditto; Porcelain clay white glaze Large flat back urinal size 61x41x38cm with 32mm CP bottle trap all complet with testing and ready for operation.
G	Ditto; 80cm X 36.5cm X 14cm thick white glazed earthenware urinal partition all complete .
H	Ditto; Supply and installation of 37" long and 8" deep Stainless steel Single bowl kitchen sink with drain board mm nylon Connector with both ends couplings, 32 mm CP bottle trap, waste Coupling, Swivel Cock with testi ready for operation.
I	Ditto; 15mm C.P. water spray with 1.2m long flexible pipe.
J	Ditto; Chrome plated Sava Towel Rod 24"x½" model (FFAS6588-908500BF0)
K	Ditto; 15mm diameter angle valve with wall flange.
L	Ditto; Supply and installation of Bib cock
M	Ditto; Mirror, special quality plate glass size 450 x 600 x 6mm thick with alkali resistant coating one side, fixin with domex screws to background requiring plugging
N	Ditto; Hand drier 0302004 guardian push button operation plastic cassete unit, snap in mechanism high output, 275 x 290 x 185mm
O	Ditto; Soap dispenser;glass wall mounted as to RAK 21033 or equal approved fixing with brass screws to backgrounds plugging
2	**COLD WATER INSTALLATIONS DISTRIBUTION PIPES**
	IPS PIPE PN 20''Class C'' painted with special paint; including joints in running length.Fixing in accord
A	Supply, install, test and commission PPR pipe (DIZAYN GROUP) and tubing class "6" with PN10 to BS 4554 screwed and socketed joints to BS 143 and 126 of approved manufacture. Pressure pipe work, installed, jointed tested complete as per BS standards with pipe fittings, bends, accessories, supports, hangers using clamps with rubber inlay, threaded rods, galvanized steel channels, sleeves, pipe marking, expansion joints, including earthw backfill, concrete encasement, all as specified and shown on drawings, ∅20mm Pipe
B	Ditto; ∅25mm Pipe
C	Ditto; ∅32mm Pipe
D	Ditto; ∅40mm Pipe
E	Ditto; ∅50mm Pipe
F	Supply and installation of forged brass lever operator/gate valve of full flow with forged brass ball (Machine ar mirror smooth finish with hard chrome plated) and spindle with setting and gland of superior quality having minimum working pressure of 10 kg all complete. ∅20mm Pipe
G	Ditto; ∅25mm Pipe
H	Ditto; ∅32mm Pipe

I	Ditto; ∅40mm Pipe
J	Ditto; ∅50mm Pipe
K	Supply and install 2,000 litres capacity ELEVATED water tanks (Simtanks), including fixing inlet supply pipe, overflow pipe, wash out pipe, ball valve box with standard top acess and connection to water supply pipe as pe drawing.
5	**WASTE AND VENT PIPES:**
	UPVC pipes;Class 'B'; including fittings in running length.
A	Supply and instal uPVC pipes of class 'B' to BS Standards and fittings in running length as follows uPVC pipe installed, jointed and tested complete, to BS 8301, BS 4541, BS 5255 , BS 4660 and BS 5481 as applicable incl supports, pipe fittings, bends, Accessories, hangers, fixing at high level,insulation of the Exposed Pipes over th ceiling,Concrete encasement, Earthwork, backfilling,cleanouts,roding eyes, all as specified And shown on draw ∅50mm Pipe
B	Ditto; ∅75mm Pipe
C	Ditto; ∅110mm Pipe
D	Ditto; ∅160mm Pipe
E	Supply and installation of HDPE -Double wall Corrugated pipe (DWC) (SN8) with all necessary fitting includi excavation for laying the pipe in the trench, 100mm thick sand bedding, testing of joints and backfilling of soil complete as per drawings, specifications and acceptance of engineer-in-charge. ∅110mm Pipe
F	Ditto; ∅160mm Pipe
G	Ditto; ∅200mm Pipe
H	Ditto; ∅300mm Pipe
6	**FOUL WATER DRAINAGE**
iii	**MANHOLE**
A	Construct standard manhole size 600 x 600mm average depth 1500mm deep; in 150mm. thick solid concrete bl walls; 150mm. thick plain in-situ concrete grade '15' bed; complete with benching and all necessary pipe fittin 1No. cast iron manholes covers and frames; finished to wall sides and top of slab with water proof cement and render; including excavation back filling and removal of surplus material; all as per and shown in the drawings
B	Ditto; Size (450x450x1000)mm
C	Rain water Chambers Size (450x450 x1200)mm
iv	**SEPTIC TANK**
A	Construct septic tank overall internal dimensions; size 14600x 3400x 1150+450mm. deep in 230mm. thick soli concrete blocks walls; 230mm. thick plain in-situ concrete grade '15' bed; 100mm. thick reinforced in-situ con grade '20' suspended slab reinforced with 10mm diameter x 100 x 100mm BRC square mesh; 80mm. thick baf wall; complete with necessary pipe fittings; 4No. cast iron manholes covers and frames; vent pipe; finished to v sides and top of slab with 15mm thick, water proof cement and sand render; including excavation back filling a removal of surplus material; all as per and shown in the drawings.
B	Ditto; Size (10600x2700x1150+450)mm
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 gr '15' foundation at the bottom; 100mm. Thick suspended slab in reinforced insitu concrete grade '20' reinforced 10mm diameter x 100 x 100mm BRC square mesh; 1No. Cast iron manhole cover and frames; vent pipe; top o finished with cement and sand (1:3) screed; including excavations; backfilling and removal of surplus material; per and shown in the drawing.
ELEMENT No.9	**ELECTRICAL INSTALLATIONS**
i	**Supply and install the following:**
a)	**DISTRIBUTION SYSTEM**

A	PANEL & DISTRIBUTION BOARDS: "LT Panels suitable for 415 V, 3 phase, 4 wire, 50 Hz power distributi system. The PCC panel shall be fabricated using CRCA sheet steel of 14/16 SWG thickness, with a durable pov coated finish to ensure corrosion resistance and longevity. The design will include precise cut-outs for instrume and switches, ensuring easy installation and accessibility. Adequate provision for earthing will be made, with th inclusion of suitable lugs and terminals to ensure safety and compliance. All design and components will adher IEC 61439 standards for low-voltage switchgear, ensuring reliability and performance. Additionally, the compo ratings and quantities will be customized based on the specific power requirements of the site to meet project demands effectively. Panel Board F-Panel-1 with Followings: 1 No. 125 A 4 Pole MCCB , 25 kA Incomer 1 Se 200 A TPN CU BUSBAR 1 no of Earth Bus bars Outgoing: 6 Nos. of 32 Amp FP MCB, 10 kA 9 Nos. of 32 A DP MCB, 10 kA R-Y-B indicator lamps and fuse including Cable shoes, glands for incoming and outgoing cab
B	Panel Board "GF-Panel-1 with Followings: 1 No. 125 A 4 Pole MCCB , 25 kA Incomer 1 Set of 200 A TPN C BUSBAR 1 no of Earth Bus bars Outgoing: 6 Nos.of 32 Amp FP MCB, 10 kA 9 Nos.of 32 Amp DP MCB, 10 Y-B indicator lamps and fuse including Cable shoes,glands for incoming and outgoing cables"
C	"GF-Panel-2 with Followings: 1 No. 125 A 4 Pole MCCB , 25 kA Incomer 1 Set of 200 A TPN CU BUSBAR of Earth Bus bars Outgoing: 2 Nos.of 50 Amp FP MCB, 10 kA 4 Nos.of 32 Amp FP MCB, 10 kA 9 Nos.of 32 DP MCB, 10 kA R-Y-B indicator lamps and fuse including Cable shoes, glands for incoming and outgoing cab
D	"GF-Panel-3 with Followings: 1 No. 100 A 4 Pole MCCB , 25 kA Incomer 1 Set of 150 A TPN CU BUSBAR of Earth Bus bars Outgoing: 3 Nos.of 50 Amp FP MCB, 10 kA 3 Nos.of 32 Amp FP MCB, 10 kA 9 Nos.of 32 DP MCB, 10 kA R-Y-B indicator lamps and fuse including Cable shoesglands for incoming and outgoing cabl
E	"FF-Panel-1 with Followings: 1 No. 100 A 4 Pole MCCB , 25 kA Incomer 1 Set of 150 A TPN CU BUSBAR 1 of Earth Bus bars Outgoing: 3 Nos.of 50 Amp FP MCB, 10 kA 3 Nos.of 32 Amp FP MCB, 10 kA 9 Nos.of 32 DP MCB, 10 kA R-Y-B indicator lamps and fuse including Cable shoesglands for incoming and outgoing cabl
F	"FF-Panel-2 with Followings: 1 No. 63 A 4 Pole MCCB , 25 kA Incomer 1 Set of 100 A TPN CU BUSBAR 1 Earth Bus bars Outgoing: 4 Nos.of 32 Amp FP MCB, 10 kA 9 Nos.of 32 Amp DP MCB, 10 kA R-Y-B indicat lamps and fuse including Cable shoesglands for incoming and outgoing cables"
G	"Solar MDB with Followings: 1 No. 63 A 4 Pole MCCB , 25 kA Incomer 1 Set of 100 A TPN CU BUSBAR 1 Earth Bus bars Outgoing: 8 Nos.of 25 Amp FP MCCB, 10 kA R-Y-B indicator lamps and fuse icluding Cable s for incoming and outgoing cables"
H	"Solar GF-DB-1, Solar GF-DB-1 with Followings: 1 No. 25 A 4 Pole MCB , 25 kA Incomer 1 Set of 50 A TPN BUSBAR 1 no of Earth Bus bars Outgoing: 9 Nos.of 10 Amp DP MCB, 10 kA R-Y-B indicator lamps and fus icluding Cable shoes for incoming and outgoing cables"
I	"Solar GF-DB-3, Solar FF-DB-1, Solar FF-DB-2 with Followings: 1 No. 25 A 4 Pole MCB , 25 kA Incomer 1 50 A TPN CU BUSBAR 1 no of Earth Bus bars Outgoing: 6 Nos.of 16 Amp DP MCB, 10 kA R-Y-B indicator lamps and fuse icluding Cable shoes for incoming and outgoing cables"
J	SUB DISTRIBUTION BOARD: Supply, installation, testing and commissioning of Sub Distribution Board (Fi Distribution Board) all complete Accessories, Cu Bus Bar, Cu Neutral and Earth Links. It should be The wall-mounting enclosure, made from high-quality electro-galvanized steel (up to 1.6mm thick), is designed for indo applications to accommodate all types of electrical switchgear and control gear assemblies, featuring a removab gland plate, Powder-coated mounting plate, compliance with IEC and NEMA standards, double-door construct and a 3-point cam lock for uniform locking on larger sizes. All Circuit Breaker and Distribution board are as pe Technical Specifications and IEC 60947-2 "6 way SPN DB Double Cover Glazed Door with Followings: (2 M Incomer+4 Module Outgoing) 1 No. 20 A , DP, 10 kA MCB 2 Nos. of 6,10,16 amp MCB SP 1 Nos. of 24 Amp RCCB, 30mA "
K	"6 way SPN DB Double Cover Glazed Door with Followings for solar backup: (2 Module Incomer+4 Module Outgoing) 1 No. 10 A , DP, 10 kA MCB 2 Nos. of 6 amp MCB SP 1 Nos. of 24 Amp DP RCCB, 30mA "
L	"8 way SPN DB Double Cover Glazed Door with Followings: (2 Module Incomer+6 Module Outgoing) 1 No. DP, 10 kA MCB 4 Nos. of 6,10,16 amp MCB SP 1 Nos. of 24 Amp DP RCCB, 30mA "
M	"8 way SPN DB Double Cover Glazed Door with Followings for solar backup: (2 Module Incomer+6 Module Outgoing) 1 No. 10 A , DP, 10 kA MCB 4 Nos. of 6 amp MCB SP 1 Nos. of 24 Amp DP RCCB, 30mA "
N	"10 way SPN DB Double Cover Glazed Door with Followings: (2 Module Incomer+8 Module Outgoing) 1 No , DP, 10 kA MCB 6 Nos. of 6,10,16 amp MCB SP 1 Nos. of 24 Amp DP RCCB, 30mA "
O	"10 way SPN DB Double Cover Glazed Door with Followings for solar backup: (2 Module Incomer+10 Modul Outgoing) 1 No. 16 A , DP, 10 kA MCB 6 Nos. of 6 amp MCB SP 1 Nos. of 24 Amp DP RCCB, 30mA "
P	"12 way SPN DB Double Cover Glazed Door with Followings: (2 Module Incomer+10 Module Outgoing) 1 N A , DP, 10 kA MCB 8 Nos. of 6,10,16 amp MCB SP 1 Nos. of 24 Amp DP RCCB, 30mA "

Q	"12 way SPN DB Double Cover Glazed Door with Followings for solar backup: (2 Module Incomer+10 Modul Outgoing) 1 No. 20 A , DP, 10 kA MCB 8 Nos. of 6 amp MCB SP 1 Nos. of 24 Amp DP RCCB, 30mA "
R	"16 way SPN DB Double Cover Glazed Door with Followings for solar backup: (2 Module Incomer+6 Module Outgoing) 1 No. 20 A , DP, 10 kA MCB 12 Nos. of 6 amp MCB SP 1 Nos. of 24 Amp DP RCCB, 30mA "
S	"6 way TPN DB Double Cover Glazed Door with Followings: (4 Module Incomer 6+6+6 Module Outgoing) 1 32 A , 4P, 10 kA MCB 12 Nos. of 6,10,16 amp MCB SP 3 Nos. of 32 Amp DP RCCB, 30mA "
T	"8 way TPN DB Double Cover Glazed Door with Followings: (8 Module Incomer 8+8+8 Module Outgoing) 1 40 A , 4P, 10 kA MCB 18 Nos. of 6,10,16 amp MCB SP 3 Nos. of 40 Amp DP RCCB, 30mA"
U	"10 way TPN DB Double Cover Glazed Door with Followings: (8 Module Incomer 10+10+10 Module Outgoi No. 50 A , 4P, 10 kA MCB 24 Nos. of 6,10,16 amp MCB SP 3 Nos. of 63 Amp DP RCCB, 30mA"
V	"12 way TPN DB Double Cover Glazed Door with Followings: (8 Module Incomer 10+10+10 Module Outgoi No. 63 A , 4P, 10 kA MCB 30 Nos. of 6,10,16 amp MCB SP 3 Nos. of 63 Amp DP RCCB, 30mA"
W	SINGLE PHASE ENERGY METER: Supply, installation, testing, and commissioning of a single-phase energy meter with digital display, suitable for 230V, 50Hz AC supply, capable of measuring voltage, current, power, a energy consumption. The meter shall comply with IEC 62052-11, IEC 62053-21 and IEC 62053-23 standards, include tamper-proof features, and be complete with mounting accessories, wiring, and all necessary hardware project specifications.
A	CABLES AND WIRES: Supply, Installation and Testing Power cable with aluminum conductor 1100 volt grad XLPE insulation, and armoring, compliant with IEC, BS, or IS standards of cable from Transformer to MCP ar internal power cable to other power pane laid underground/ Overgorund through HDPE pipe and laid through c tray as per specification. (Excluding the cost of cable tray) 6 mm2 2 core Copper XLPE Armoured Conductor
B	10 mm2 2 core Copper XLPE Armoured Conductor
C	16 mm2 2 core Copper XLPE Armoured Conductor
D	4 mm2 3 core Copper XLPE Armoured Conductor
E	6 mm2 4 core Copper XLPE Armoured Conductor
F	10 mm2 4 core Copper XLPE Armoured Conductor
G	16 mm2 4 core Copper XLPE Armoured Conductor
H	25 mm2 4 core Copper XLPE Armoured Conductor
I	70 mm2 3.5 core Aluminium XLPE Armoured Conductor
J	120 mm2 3.5 core Aluminium XLPE Armoured Conductor
K	150 mm2 3.5 core Aluminium XLPE Armoured Conductor
L	185 mm2 3.5 core Aluminium XLPE Armoured Conductor
A	CABLE SHOES AND CABLE GLANDS Supply and installation of cable shoes at both ends of armored and u armored cables from Transformer to MCP and from MCP to various DBs. 4-16 sq.mm. Cable Shoe
B	25 sq.mm. Cable Shoe
C	50 sq.mm. Cable Shoe
D	3.5 core 120 sq. mm. Aluminium Cable Glands
E	3.5 core 150 sq. mm. Aluminium Cable Glands
F	3.5 core 185 sq. mm. Aluminium Cable Glands
G	3.5 core 240 sq. mm. Aluminium Cable Glands
A	LIGHT POINT WIRING " Supply, installation, testing, and commissioning of light point wiring from the desig Distribution Board (DB) to various points, using two 2.5 sq.mm FRLS copper conductor wires through 25 mm conduits, including modular switches, switchboards, boxes, conduits, fittings, and all necessary accessories, as IEC/BS/IS standards. The rate for point wiring shall cover circuit wiring from the DB to the first light, fan, or c switch, and looping between switches, lights, and fans for one-way or two-way control, as per the drawings and specifications. Cable jointing is strictly prohibited except at switches and fixtures, ensuring compliance with IEC/BS/IS standards. (Cost Including Metal box and Modular switch)" Light Point Wiring , One Way
B	Light Point Wiring, Twe Way

A	LIGHT FIXTURES: Supply, installation, testing, and commissioning of the following light fixtures, complete i respects as per the drawings and specifications. The fixtures shall comply with the technical specifications and selected from samples approved by the client and the electrical engineer. Fixtures should comply with standard as IES LM-79, IES LM-80, TM-21, IEC 60598, and IEC 62471 for safety, efficiency, and photometric performance..The light fixtures must be certified as per LM-79 and LM-80 standards and bear certifications suc CE, RoHS, UL, ETL, or equivalent. 8 watt recessed/surface diffused round backlit LED with aluminium PDC housing, Lumen efficacy > 100 lm/watt , high efficiency non yellowing polycarbonate diffuser, deep down opti glare free light, Driver must have Constant current/constant voltage, flicker-free, and surge-protected protection Total Harmonic Distortion (THD): ≤ 10%, Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the application, CRI ≥ 80 life span minimum 50000 Hrs at L70, least 5 years warranty.
B	12 watt recessed/surface diffused round backlit LED with aluminium PDC housing, Lumen efficacy > 100 lm/ high efficiency non yellowing polycarbonate diffuser, deep down optics for glare free light, Driver must have Constant current/constant voltage, flicker-free, and surge-protected protection, Total Harmonic Distortion (THI 10%, Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the applicatio CRI ≥ 80 life span minimum 50000 Hrs at L70, at least 5 years warranty.
C	15 watt recessed/surface diffused round backlit LED with aluminium PDC housing, Lumen efficacy > 100 lm/ high efficiency non yellowing polycarbonate diffuser, deep down optics for glare free light, Driver must have Constant current/constant voltage, flicker-free, and surge-protected protection, Total Harmonic Distortion (THI 10%, Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the applicatio CRI ≥ 80 life span minimum 50000 Hrs at L70, at least 5 years warranty.
D	18 watt recessed/surface diffused round backlit LED with aluminium PDC housing, Lumen efficacy > 100 lm/ high efficiency non yellowing polycarbonate diffuser, deep down optics for glare free light, Driver must have Constant current/constant voltage, flicker-free, and surge-protected protection, Total Harmonic Distortion (THI 10%, Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the applicatio CRI ≥ 80 life span minimum 50000 Hrs at L70, at least 5 years warranty.
E	24 watt recessed/surface diffused round/square backlit LED with aluminium PDC housing, Lumen efficacy > 1 lm/watt , high efficiency non yellowing polycarbonate diffuser, deep down optics for glare free light, Driver mu have Constant current/constant voltage, flicker-free, and surge-protected protection, Total Harmonic Distortion (THD): ≤ 10%, Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the application, CRI ≥ 80 life span minimum 50000 Hrs at L70, at least 5 years warranty.
F	36/40 watt recessed/surface diffused 600x600 mm backlit LED with aluminium PDC housing, Lumen efficacy lm/watt , high efficiency non yellowing polycarbonate diffuser, deep down optics for glare free light, Driver mu have Constant current/constant voltage, flicker-free, and surge-protected protection, Total Harmonic Distortion (THD): ≤ 10%, Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the application, CRI ≥ 80 life span minimum 50000 Hrs at L70, at least 5 years warranty.
G	Supply, installation, testing, and commissioning of 250 mm width bendable flexible lighting polycarbonate fra profiles for wave architectural lighting applications, each profile measuring 3 meters with a power rating of 15 per meter, complete with necessary drivers, connectors, mounting accessories, and as per approved specificatio design requirements. Driver must have Constant current/constant voltage, flicker-free, and surge-protected protection, Total Harmonic Distortion (THD): ≤ 10%, Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the application, CRI ≥ 80 life span minimum 50000 Hrs at L70, at least 5 years warranty.
H	"20 Watt, 4 ft. long IP 65 LED Non Corrosive Weatherproof Lighting, Lumen efficacy > 100 lm/watt , high efficiency non yellowing polycarbonate diffuser, deep down optics for glare free light, Driver must have Const current/constant voltage, flicker-free, and surge-protected protection, Total Harmonic Distortion (THD): ≤ 10 Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the application, CR 80 life span minimum 50000 Hrs at L70, at least 5 years warranty. "
I	"40 Watt, 4 ft. long IP 65 LED Non Corrosive Weatherproof Lighting, Lumen efficacy > 100 lm/watt , high efficiency non yellowing polycarbonate diffuser, deep down optics for glare free light, Driver must have Const current/constant voltage, flicker-free, and surge-protected protection, Total Harmonic Distortion (THD): ≤ 10 Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the application, CR

	80 life span minimum 50000 Hrs at L70, at least 5 years warranty. "
J	9-12 Watt LED Slim Mirror Light with luminous flux of not less than 100 lm/watt, CCT between 4000 -6500K >85. burning hours > 50000 Hrs.
K	9 - 12 W LED , Wall BracketBulk Head light with luminous flux of not less than 90 lm/watt, CCT between 400 6500K. CRI >85 burning hours > 50000 Hrs.
A	CEILING / EXHAUST FAN: Supply, installation, testing, and commissioning of ceiling, wall and Exhaust fan complete with all necessary accessories, including suspension rods, brackets, and wiring, as per the approved drawings and specifications. The fans shall be of IEC/BS/IS standard. The fans should have a high-efficiency m corrosion-resistant blades, and speed control options. Each fan shall be supplied with appropriate mounting kits should be installed and tested in compliance with IEC standards and the project's electrical requirements. The f shall be certified for CE, RoHS, and ISI marking, ensuring high quality and safety. 48" Ceiling Fan, Sweep 120 mm, Power consumption 74 W, Speed 380 RPM, Air delivery 230 CMM , 100% copper motor, double ball bea dynamically balanced blades and anti-rust aluminium body
B	16" Wall Fan, Sweep 400 mm, Power input 50 watts, speed 1300 rpm, air delivery 15 cmm, 3 modes of operati with Corrosion resistant powder coated guards
C	9 " Exhaust Fan, motor speeds no. 1, 4 no. of blades, sweep size 380 mm, Aerodynamically designed & Balanc Blade, Metallic finish.
D	5 Step Fan Regulator, Poly Carbonate.
b)	**POWER POINTS**
A	POWER SOCKET POINT WIRING: Supply, installation, testing, and commissioning of 3-pin 6A/16A univers Twin socket with switch, socket point wiring using 2 nos of 4 sq. mm and 1 no of 1.5 sq. mm FRLS copper wir routed through 25 mm PVC HMS conduit from the DB to various points as per the approved drawings and specifications. The installation includes modular power switches, sockets, boxes, conduits, fittings, and all nece accessories, in compliance with IEC, BS, and IS standards. (Cost Including of Power socket with switch and M box)
B	Supply, installation, testing, and commissioning of 3-pin 6A/16A universal socket with switch, socket point wi using 2 nos of 4 sq. mm and 1 no of 1.5 sq. mm FRLS copper wires, routed through 25 mm PVC HMS conduit the DB to various points as per the approved drawings and specifications. The installation includes modular po switches, sockets, boxes, conduits, fittings, and all necessary accessories, in compliance with IEC, BS, and IS standards. (Cost Including of Power socket with switch and Metal box)
C	Supply, installation, testing, and commissioning of 3-pin 6A/16A floor-mounted 3-pin flip-type socket outlet, complete with concealed metallic box, protective cover, socket point wiring using 2 nos of 4 sq. mm and 1 no o sq. mm FRLS copper wires, routed through 25 mm PVC HMS conduit from the DB to various points as per the approved drawings and specifications. The installation includes modular power switches, sockets, boxes, condu fittings, and all necessary accessories, in compliance with IEC, BS, and IS standards. (Cost Including of Power socket with switch and Metal box)
D	EXTERNAL LIGHTNING PROTECTION SYSTEM AS PER IS/IEC 62305-3 Supply, installation, testing, an commissioning of ceiling, wall and Exhaust fans complete with all necessary accessories, including suspension brackets, and wiring, as per the approved drawings and specifications. The fans shall be of IEC/BS/IS standard fans should have a high-efficiency motor, corrosion-resistant blades, and speed control options. Each fan shall b supplied with appropriate mounting kits and should be installed and tested in compliance with IEC standards an project's electrical requirements. The fans shall be certified for CE, RoHS, and ISI marking, ensuring high qual and safety. Supply, installation, testing & commissioning of 8mm Aluminium Solid Round Conductor for build terrace as a air terminal to meet the requirements of IS/IEC 62305 and IEC 62561-2.
E	Supply, installation, testing & commissioning of Parapet conductor holder for fixing 8mm Aluminium conducto the parapet surface to meet the requirement of IS/IEC - 62305
F	Supply, installation, testing & commissioning of Straight conductor connector for interconnecting 8mm Alumin conductor to meet the requirement of IEC 62305. Tested for Electrical , Mechanical and chemical as per IEC 62
G	Supply, installation, testing & commissioning of suitable Stainless Steel cross connector for 8- 10 mm round A conductor to meet the requirement of IS/IEC - 62305.
H	Supply, installation, testing & commissioning of 3 metre Vertical Air terminal of dia 16-10 mm with Complete Support of Concrete Base (370mm dia) and Air Terminal Conductor joining Clip selected as per angle of protec chart to meet the requirement of IS/IEC 62305. Tested for Electrical, Mechanical and Chemical as per IEC 625 Vertical Air Terminal (VAT 3) with mounting accessories on flat surface (includes - VAT 3 + interception tip + support stone + air terminal joining clip

I	Supply, installation, testing & commissioning of conductor holder for fixing the (wall) 8 mm Aluminium down conductor to meet the requirement of IEC - 62305
J	Supply, installation, testing & commissioning of Test Joint with enclosure suitable connector for 8 mm round A conductor & 10 mm round copper coated conductor to meet the requirement of IEC - 62305.
K	EARTHING SYSTEM Supply, installation, testing & commissioning of 10 mm copper bonded Round steel sol Conductor for ring earthing meet the requirements of IEC 62305 and IEC 62561-2.
L	Supply, installation, testing & commissioning of conductor holder for fixing the (wall) down conductor after te joint for holding 10 mm copper bounded Round steel solid Conductor to meet the requirement of IEC – 62305.
M	Supply, installation, testing & commissioning of UL Listed Maintenance Free Copper coated Earth rod of 3 mt length having the dia. of 25 mm with copper coating thickness of 250 microns. The rod has been tested for Dimension, Marking, Tensile Strength,Salt mist, coating thickness, Electrical resistivity test before and after corrosion test as per IEC 62561-2 & UL 467.
N	Supply, installation, testing & commissioning of earth enhancing mineral compound tested for leaching and TC with NABL accredited Lab as per IEC 62561. (25 kg per bag)
O	Supply, installation, testing & commissioning of make Heavy duty Chamber Inspection Pit made up of plastic material.
P	Supply, installation, testing & commissioning of Universal Clamp made up of stainless steel for terminating cal flat conductor.
Q	25x6 mm Copper Strip
R	25x3 mm Copper Strip
S	8 SWG Cu Wire
T	10 SWG Cu wire
A	TELEPHONE AND EPABX Supply, installation, Testing and Commissioning of telephone point wiring from telephone junction box to individual point with 2 pair drop wire (0.5mm copper wire) through 20 mm internal d PVC conduit concealed as per drawing and specification
B	Supply, installation, Testing and Commissioning of RJ 11 wih GI box. as per Technical Specifications.
C	Supply, installation, Testing and Commissioning of telephone junction box(TJB) made of 18 swg ms sheet cub concealed type with enamel paint complete with 4 IDC connector as per drawing and specification
D	Supply, installation, Testing and Commissioning of 5 Pair Cable Wire (5X2X0.45) mm Heavy through Rigid P Pipe.
E	Supply, installation, Testing and Commissioning of 10 Pair Cable Wire (10X2X0.45) mm Heavy through Rigid Pipe.
F	Supply, installation, Testing and Commissioning of 20 Pair Cable Wire (20X2X0.45) mm Heavy through Rigid Pipe.
G	Supply, installation, Testing and Commissioning of 50 Pair Telephone DB with Crown tag
H	Supply, installation, Testing and Commissioning of 2/20 Drop Wire.
I	SUPPLY, INSTALLATION AND COMISSIONING OF EPABX SYSTEM MAKE OF ALKATEL, ALLCOM PANASONIC OR SIMILLAR EQUIVALENT. 8-72 Lines EPABX
c)	**LIGHT FITTINGS, FANS AND SWITCHES**
A	SECURITY CAMERA Supply, installation, testing, and commissioning of internal security cameras, including definition cameras (minimum 1080p resolution) with night vision, motion detection, and wide dynamic range (features, along with suitable mounting brackets, cabling (Cat6 or RG59 with power), connectors, and all necess accessories. The cameras shall be housed in aesthetically designed enclosures suitable for indoor use and shall comply with IEC, BS, and IS standards, ensuring seamless integration with the central monitoring system as pe project specifications.
B	Supply, installation, testing, and commissioning of external security cameras, including weatherproof IP-rated enclosures (minimum IP66), high-definition cameras (minimum 1080p resolution) with night vision, motion detection, and wide dynamic range (WDR) features, along with mounting brackets, junction boxes, cabling (Ca RG59 with power), connectors, and all necessary accessories. The system shall comply with IEC, BS, and IS standards and integrate with the central monitoring system as per project specifications

C	Supply, installation, testing, and commissioning of PTZ (Pan-Tilt-Zoom) cameras with high-definition resoluti (minimum 1080p), 360° rotational coverage, optical zoom (minimum 20x), night vision, motion tracking, and weatherproof IP66-rated enclosures. The scope includes suitable mounting brackets, junction boxes, cabling (C RG59 with power), connectors, power supply units, and integration with the central monitoring system. All components shall comply with IEC, BS, and IS standards and meet project specifications.
D	Supply, installation, testing, and commissioning of a 32-channel Network Video Recorder (NVR) with support high-definition IP cameras, built-in storage (minimum 8TB, expandable), H.265 video compression, ONVIF compliance, remote viewing capability, and HDMI/VGA outputs for live monitoring. The scope includes powe supplies, necessary connectors, and integration with the surveillance system, ensuring compliance with IEC, BS IS standards.
E	Supply, installation, testing, and commissioning of a PoE network switch with a minimum of 8 ports, supportin IEEE 802.3af/802.3at standards, Gigabit Ethernet connectivity, integrated power supply, and sufficient power b to support connected devices such as IP cameras. The scope includes necessary mounting accessories, patch cal and integration with the surveillance or network system, ensuring compliance with IEC, BS, and IS standards.
F	Supply, installation, testing, and commissioning of a PoE network switch with a minimum of 16 ports, supporti IEEE 802.3af/802.3at standards, Gigabit Ethernet connectivity, integrated power supply, and sufficient power b to support connected devices such as IP cameras. The scope includes necessary mounting accessories, patch cal and integration with the surveillance or network system, ensuring compliance with IEC, BS, and IS standards.
G	Supply, installation, testing, and commissioning of a PoE network switch with a minimum of 24 ports, supporti IEEE 802.3af/802.3at standards, Gigabit Ethernet connectivity, integrated power supply, and sufficient power b to support connected devices such as IP cameras. The scope includes necessary mounting accessories, patch cal and integration with the surveillance or network system, ensuring compliance with IEC, BS, and IS standards.
H	Supply, installation, testing, and commissioning of a 48-inch LED monitor with full HD or 4K resolution, HDMI/VGA input support, wide viewing angle, and suitable for 24/7 operation in a surveillance control room environment. The scope includes wall mounting brackets or table stands, necessary cables, and connectors, ens compliance with IEC, BS, and IS standards.
I	Supply, installation, testing, and commissioning of CAT6 A Cable with PVC conduit with complete accessorie
J	Supply, installation, testing, and commissioning of CAT6 A Cable with PN6 HDPE Pipe For External.
d)	**WIRING AND CABLES**
A	CABLE TRAY Supply, installation, testing, and commissioning of ladder-type cable trays size 500 x 75 made galvanized steel with powder coated with a minimum thickness of 2mm, including all necessary bends, tees, couplers, support brackets, and hardware. The scope includes earthing of the tray using GI earthing strips (mini 25mm x 6mm) with proper connectors, ensuring compliance with IEC, BS, and IS standards for safety and durability. The cable trays are designed for optimal load distribution and cable management in both indoor and outdoor environments.
B	Supply, installation, testing, and commissioning of ladder-type cable trays size 300 x 75 made of galvanized ste with powder coated with a minimum thickness of 2mm, including all necessary bends, tees, couplers, support brackets, and hardware. The scope includes earthing of the tray using GI earthing strips (minimum 25mm x 6m with proper connectors, ensuring compliance with IEC, BS, and IS standards for safety and durability. The cabl trays are designed for optimal load distribution and cable management in both indoor and outdoor environment
C	Supply, installation, testing, and commissioning of perforated cable trays size 300 X75 mm, made of GI with p coated with a thickness of not less than 2mm, including bends, tees, couplers, support brackets, and all necessar hardware. The scope includes earthing of the tray using GI strips (minimum 25mm x 6mm) with appropriate connectors and compliance with IEC, BS, and IS standards for safe and reliable installation.
D	Supply, installation, testing, and commissioning of perforated cable trays size 200 X 50 mm, made of GI with powder coated with a thickness of not less than 2mm, including bends, tees, couplers, support brackets, and all necessary hardware. The scope includes earthing of the tray using GI strips (minimum 25mm x 6mm) with appropriate connectors and compliance with IEC, BS, and IS standards for safe and reliable installation.
E	Supply, installation, testing, and commissioning of perforated cable trays size 150 X 50 mm, made of GI with powder coated with a thickness of not less than 2mm, including bends, tees, couplers, support brackets, and all necessary hardware. The scope includes earthing of the tray using GI strips (minimum 25mm x 6mm) with appropriate connectors and compliance with IEC, BS, and IS standards for safe and reliable installation.
F	Supply, installation, testing, and commissioning of perforated cable trays size 100 X 50 mm, made of GI with powder coated with a thickness of not less than 2mm, including bends, tees, couplers, support brackets, and all necessary hardware. The scope includes earthing of the tray using GI strips (minimum 25mm x 6mm) with

	appropriate connectors and compliance with IEC, BS, and IS standards for safe and reliable installation.
G	11 KV HV CABLE / HT CABLES & LT CONTROL CABLES 95 SQMM 3 Core 11 KV HT XLPE Aluminiu Armored Cable.
f)	**STANDBY GENERATOR**
A	GENERATOR Supply, installation, testing, and commissioning of a 350 kVA diesel generator set comprising t following: a 3-phase, 415 V, 50 Hz, enclosed-type exhaust system with silencer, liquid-cooled diesel engine compliant with ISO 8528 standards; an air-cooled engine model designed for low emissions, meeting EU Stage IIIA/US EPA standards; a brushless, self-excited, 4-pole synchronous alternator with 415 V output, 50 Hz frequ IP23 protection, Class H insulation, and automatic voltage regulation (AVR). The generator set shall include a integrated, microprocessor-based digital control panel featuring AMF (Automatic Mains Failure) functionality, start/stop operation, protection against overload, short circuit, under/over voltage, low oil pressure, and other cr faults, along with remote monitoring capability.
B	" Earthing System Complete earthing system with copper rods, earth cables, and earthing clamps, compliant wi IEC 60364 and local electrical codes."
g)	**TRANSFORMER**
A	500kVA,11000/400V, Dyn 11, 50Hz, Oil filled transformer in free breathing Supply, installation, testing & commissioning of 300 kVA, 11 kV/400 V, ONAN (Oil Natural Air Natural) cooling type, 3-phase, 50 Hz, copp wound transformer.
ii	**EARTHING SYSTEM**
ELEMENT No. 14	**FINISHING**
a)	**INTERNAL FINISHINGS**
i)	**Floor finish: (Tiles, slab or block finishings)**
a)	**Porcelain Tiles**
A	10mm thick Virtified (600*600mm) Tile over screed bed with 4mm open joint including 1:4 CSM base plaster green morter, filling joints with special tile grout on floor & skirting of approved color and brand as per specifi and instruction of engineer.
B	Non-glazed porcelain tile fixing on floor and skirting of approved color, brand,pattern & thickness in proper lin level laid in required thickness base plaster of 1:4 cement sand mortar and green morter with 4mm joints filled special tile grout as per drawing , specification and instruction all complete.
C	18mm thick marble for floor & wall skirting of approved color, brand & pattern in proper line & level laid in 2(thick of 1:2 cement sand mortar and green mortar, joints filled with special grout and providing nosing, mouldi groove cutting etc. as required as per drawing , specification and instruction all complete.
D	2mm thick Homogeneous Phthalate free, PVC Vinyl flooring with single layer of PVC of approved brand & pa in proper line as per drawing , specification and instruction all complete.
b)	**Beds and Backing**
A	38mm thick screed to floor
B	Providing, mixing, laying cement sand punning with 1:1 cement sand mortar on floors, wall in true line & level including curing as per drawing, specification and instructions of engineer all complete. Cement slarry General floor surfaces
ii)	**Wall finish:**
a)	**Internal Plastering**
A	15mm To walls, beams, columns and the like; to concrete or block work base; Internal plastering in two coats, coat 12mm thick cement and sand mix (1:3) steel trowelled;prepare and apply second coat 3mm thick stucco st trowelled to smooth finish,includding sanding with sand paper.
b)	**Wall Tiles or Tanga Stones/Slates**
A	Glazed porcelain wall tiles, imported from Italy or other approved equal; with approved colour; glazed; to regu pattern; bedding and jointing in cement mortar (1:4); grouting joints with coloured cement Walls tiles to approv sizes
c)	**Beds and backings**

A	Providing, mixing, laying cement sand punning with 1:1 cement sand mortar on floors, wall in true line & level including curing as per drawing, specification and instructions of engineer all complete. Cement slarry General floor surfaces
b)	**EXTERNAL FINISHINGS**
i)	**Floor finish: (Tiles, slab or block finishings).**
ii)	**Wall finish**
a)	**External Plastering**
A	15mm To walls; to concrete or block work base; External plastering in two coats, first coat 12mm thick cement sand mix (1:3) steel trowelled;prepare and apply second coat 3mm thick stucco steel trowelled to smooth finish,includding sanding with sand paper.
ELEMENT No. 15	**PAINTING AND DECORATING**
a)	**INTERNAL WORK:**
i)	**Painting and Decorations**
A	Painting, Internal work, three coats, silk acrylic emulsion paint, plaster surface Walls and Ceiling generally
b)	**EXTERNAL WORK:**
i)	**External Painting**
A	Painting, External work, three coats weather guard paint; cement render surfaces Walls and Ceiling generally
ii)	**Gloss/ Oil Painting**
A	Prepare and apply two or more coats of Synthetic Enamel Paint over timber/iron surface including one coat of p to give an even and uniform shade as per drawing, specification and instructions.
	PART B: BUS STAND – CIVIL AND ROAD WORKS
SERIES 2000	**DRAINAGE**
Section 2100	**Drains**
21.01	**Excavation for Open Drains**
21.01	Excavation for open drains (a) Excavating soft material situated within the following depth ranges below the su level: (i) 0.5 m up to 1.5 m
	(ii) Exceeding 1.5 m and up to 3.0 m
	(b) Extra over Subitem 21.01(a) for excavation in rock as defined in Clause 3603, irrespective of depth.
22.01	**Excavation**
22.01	Section 2200: Prefabricated Culverts Excavation (a) Excavating soft material situated within the following dep ranges (i) 0.5 m up to 1.5 m below the surface level:
	(ii) Exceeding 1.5 m and up to 3.0 m
	(iii) Exceeding 3.0 m per increment of 1.5 m
22.02	**Backfilling**
22.02	Backfilling (a) Using excavated material
	(b) Using imported selected material (G45 quality)
	(c) Extra over Subitems 22.02 (a) and (b) for soil cement backfilling (4%cement)
22.03	**Concrete Pipe Culverts on Class A bedding**
22.03	Concrete pipe culverts: (b) On Class B bedding (compacted selected granular material to top of pipe and native formation level) i) Diameter 900 mm
	ii) Diameter 1200 mm
22.07	**Cast in situ concrete and formwork**
22.07	Cast in situ concrete and form work: (a) In Class A bedding, screeds and the encasing for pipes, including form (concrete class 20/20 surround to pipe culverts)

	(b) In inlet and outlet structures, catchpits, manholes, thrust and anchor blocks, including formwork and Class U surface finish (Class 15/10 for blinding)
	(c) (i) In inlet and outlet structures, catchpits, manholes, thrust and anchor blocks, excluding formwork but incl Class U2 surface finish (Class 25/20)
22.10	**Steel Reinforcement**
22.10	Steel reinforcement: (a) High-tensile steel bars
22.21	Accessories: (a) Manhole covers including frames, precast concrete class 30/20, reinforced (i) Size 1555 x 155
	(ii) Size 1855 x 1885 mm
	(ii) HDPE Pipe (110mm dia-6kg/sqcm)
	(b) Steel grates inlet grids to road side catch pits (i) Size 400mm x 600mm
22.24	Duct marker blocks (as shown in drawings)
22.25	Hand excavation to determine the positions of existing services
Series 2300	**Concrete Kerbing, Concrete Channelling,Open Concrete Chutes and Concrete Lining for Open Drains**
23.01	**Concrete kerbing**
23.01	Concrete kerbing (indicated for cast in situ concrete): Precast kerbs as shown in the drawings inclusive of bedd haunching and form work and all incidentals 200×380 (Concrete Class 30/20)
23.03	Concrete chutes (a) Reinforced concrete/stone pitched chutes as shown in drawings excluding mattress at the b end (Concrete Class 30/20)(typical designs):
23.08	Concrete lining for opens drains: Cast in situ concrete lining (class 25/20 for reinforced concrete lined drains) including surface finish class U2 and contraction joints at 5mc/ct
23.12	Steel reinforcement: (a) Welded Steel Fabric (A252) in reinforced concrete drains
	(b) Angle (50*30*6)
Section 2500	**Pitching, Stonework and Protection Against Erosion**
25.01	**Stone Pitching**
25.01	Stone pitching: (c) Wired and grouted stone pitching (total thickness 250 mm)
25.03	Stone masonry walls (b) Cement-mortared stone walls including pointing
25.04	Interlocking blocks for walkway, 200x100x80mm thick, min. strength 30N/mm2 (Mpa) including well graded sand bedding
SERIES 3000	**EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE**
3100	**Clearing, Grubbing And Removal Of Topsoil**
31.01	**Clearing, grubbing and removal of topsoil**
31.01	Clearing, grubbing and removal of topsoil: (a) Clearing and grubbing
	(b) Removal of topsoil
31.02	**Removal and grubbing of large trees and tree stumps**
31.02	Removal and grubbing of large trees and tree stumps: (a) Girth exceeding 1.0 m up to up including 2.0 m
	(b) Girth exceeding 2.0 m up to up including 3.0 m
	(c) Girth exceeding 3.0 m
3600	**Selecting and Utilizing Material From Borrow Pits and Cuttings**
36.01	**Excavations:**
36.01	Excavations: (a) Common excavation to spoil and stockpile as directed by Engineer
	(b) Rock excavation
36.02	**Fill and improved subgrade layers**
36.02	Fill and improved subgrade layers: (a) Improved subgrade layer as specified in the Drawings to require minimu G15 quality material

	(b) Improved subgrade layer as specified in the Drawings to require minimum G7 quality material (stockpilled)
	(d) Fill or improved subgrade layer using rock fill (Coral Stone)
3700	**Pavement Layers of Natural Gravel Materials**
37.02	**Natural Gravel for Sub-base Course**
37.02	Natural gravel : (a) Natural Gravel Class G45 for sidewalks
	(b) Natural Gravel Class G25 for lower subbase
3800	**STABILISATION**
38.02	**Chemical stabilisation, payment for full cocst of providing:-**
38.02	Chemical stabilisation, payment for full cost of providing: (a) Stabilised layer, material class C1, using approve borrow material class G25
38.03	**Chemical stabiliser agent**
38.03	Chemical stabiliser agents: Ordinary Portland cement
SERIES 4000	**BITUMINOUS LAYERS AND SEALS**
4100	**Prime and Curing Membrane**
41.01	**Prime Coat**
41.01	Prime coat: (a) MC-70 cut-back bitumen including blinding material
41.02	Bituminous curing membrane: (a) Bitumen emulsion (30% bitumen) at 0.8L/m2
4200	**Asphalt Concrete Surfacing**
42.02	Asphalt concrete surfacing: Asphalt Concrete Surfacing (AC14) [Using 60/70 Penetration Grade Bitumen and Maximum Size of Aggregates]
	Bitumen for Asphalt Concrete Surfacing: [60/70 penetration grade bitumen]
42.03	Tack Coat of 57% stable grade bitumen emulsion (K-1-60), spread rate of 0.4 litres per square metre
SERIES 5000	**ANCILLARY ROADWORKS**
5100	**Marker and Kilometer Posts**
51.01	**Marker posts:**
51.01	Marker posts as shown in drawings: (i) Road Reserve Marker Post
	(ii) Concrete Egde Marker Posts
51.03	Costruct concrete bollards 300x300mm as shown on the drawings
5200	**Guardrails**
52.02	**Guard rails on steel posts**
52.02	Guardrails on steel posts: (a) Galvanised
52.06	Reflective Plates
5400	**Road Signs**
54.01	Road Signs (Warning, regulatory and Information) (a) Circular Regulatory diameter 900mm
	(b) Rectangular Regulatory, height 600mm X width 450mm
	(c) Triangular Regulatory and warning: side length 900
5500	**Road Markings**
55.01	**Road Markings Paint**
55.03	(a) Thermo-Plastic Road-marking material including setting out and pre-marking (i) Centrelines marking, brok unbroken, 100mm wide the lines:
	(ii) Stop lines, 400mm wide
	(iii) White lettering and symbols

	(iv) Yellow lettering and symbols
	(v) Traffic-island markings (white/yellow)
	(vi) Kerb markings (white/yellow)
	(vii) Pedestrian crossing lines, 500mm wide
	(viii) Preformed Thermoplastic painting applied at junctions, rumble strips before pedestrian crossings
SERIES 8000	**STREET LIGHTS**
8001	**Street Lights**
81.01	STREET LIGHTING (STAND ALONE SOLAR SYSTEM) (a) Supply, Install, Test and Commission by a rep sub-contractor approved by the Employer of Solar Type Street Lighting as detailed in the Drawings and Specifications
	(b) Allow for contractor's overhead and profits as a percentage of above
	PART C: SKOYA SMALL SCALE INDUSTRY AND GENERAL WORKSHOP –
SERIES 2000	**DRAINAGE**
Section 2100	**Drains**
21.01	**Excavation for Open Drains**
21.01	Excavation for open drains (a) Excavating soft material situated within the following depth ranges below the su level: (i) 0.5 m up to 1.5 m
	(ii) Exceeding 1.5 m and up to 3.0 m
	(b) Extra over Subitem 21.01(a) for excavation in rock as defined in Clause 3603, irrespective of depth.
22.01	**Excavation**
22.01	Section 2200: Prefabricated Culverts Excavation (a) Excavating soft material situated within the following dep ranges below the surface level:(i) 0.5 m up to 1.5 m
	(ii) Exceeding 1.5 m and up to 3.0 m
	(iii) Exceeding 3.0 m per increment of 1.5 m
22.02	**Backfilling**
22.02	Backfilling (a) Using excavated material
	(b) Using imported selected material (G45 quality)
	(c) Extra over Subitems 22.02 (a) and (b) for soil cement backfilling (4%cement)
22.03	**Concrete Pipe Culverts on Class A bedding**
22.03	Concrete pipe culverts: (b) On Class B bedding (compacted selected granular material to top of pipe and native formation level) (i) 900mm diameter as indicated on drawings
	(ii) 1200mm diameter as indicated on drawings
22.07	**Cast in situ concrete and formwork**
22.07	Cast in situ concrete and form work: (a) In Class A bedding, screeds and the encasing for pipes, including form (concrete class 20/20 surround to pipe culverts)
	(b) In inlet and outlet structures, catchpits, manholes, thrust and anchor blocks, including formwork and Class U surface finish (Class 15/20 for blinding)
	(c) (i) In inlet and outlet structures, catchpits, manholes, thrust and anchor blocks, excluding formwork but incl Class U2 surface finish (Class 25/20)
22.10	**Steel Reinforcement**
22.10	Steel reinforcement: (a) High-tensile steel bars
22.21	Accessories: (a) Manhole covers including frames, precast concrete class 30/20, reinforced (i) Size 1555 x 155
	(ii) Size 1855 x 1885 mm
	(ii) HDPE Pipe (110mm dia-6kg/sqcm)

	(b) Steel grates inlet grids to road side catch pits (i) Size 208mm x 1300mm
	(ii) Size 208mm x 1700mm
22.25	Hand excavation to determine the positions of existing services
Series 2300	**Concrete Kerbing, Concrete Channelling,Open Concrete Chutes and Concrete Lining for Open Drains**
23.01	**Concrete kerbing**
23.01	Concrete kerbing (indicated for cast in situ concrete): Precast kerbs as shown in the drawings inclusive of bedd haunching and form work and all incidentals 200×380 (Concrete Class 30/20)
23.03	Concrete chutes (typical designs): (a) Reinforced concrete/stone pitched chutes as shown in drawings excludin mattress at the bottom end (Concrete Class 30/20)
23.08	Concrete lining for opens drains: Cast in situ concrete lining (class 25/20 for reinforced concrete lined drains) including surface finish class U2 and contraction joints at 5mc/ct
23.12	Steel reinforcement: (a) Welded Steel Fabric (A252) in reinforced concrete drains
	(b) Angle (50*30*6)
Section 2500	**Pitching, Stonework and Protection Against Erosion**
25.01	**Stone Pitching**
25.01	Stone pitching: (c) Wired and grouted stone pitching (total thickness 250 mm)
25.03	Stone masonry walls (b) Cement-mortared stone walls Including pointing
25.04	Interlocking blocks for walkway, 200x100x80mm thick, min. strength 30N/mm2 (Mpa) including well graded sand bedding
Series 2600	**Gabions**
26.01	**Excavation Works**
26.01	Surface preparation for bedding the Gabions
SERIES 3000	**EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE**
3100	**Clearing, Grubbing And Removal Of Topsoil**
31.01	**Clearing, grubbing and removal of topsoil**
31.01	Section 3100: Clearing, Grubbing And Removal Of Topsoil Clearing, grubbing and removal of topsoil: (a) Cle and grubbing
	(b) Removal of topsoil
31.02	**Removal and grubbing of large trees and tree stumps**
31.02	Removal and grubbing of large trees and tree stumps: (a) Girth exceeding 1.0 m up to up including 2.0 m
	(b) Girth exceeding 2.0 m up to up including 3.0 m
	(c) Girth exceeding 3.0 m
3600	**Selecting and Utilizing Material From Borrow Pits and Cuttings**
36.01	**Excavations:**
36.01	Section 3600: Earthworks Excavations:(a) Common excavation to spoil and Stockpile as directed by Engineer
	(b) Rock excavation
36.02	**Fill and improved subgrade layers**
36.02	Fill and improved subgrade layers: (a) Improved subgrade layer as specified in the Drawings to require minimu G15 quality material
	I(b) Improved subgrade layer as specified in the Drawings to require minimum G7 quality material(stockpilled)
	(d) Fill or improved subgrade layer using rock fill (Coral Stone)
3700	**Pavement Layers of Natural Gravel Materials**
37.02	**Natural Gravel for Sub-base Course**

37.02	Natural gravel : (a) Natural Gravel Class G45 for sidewalks
	(b) Natural Gravel Class G25 for lower subbase
3800	**STABILISATION**
38.02	**Chemical stabilisation, payment for full cocst of providing:-**
38.02	Chemical stabilisation, payment for full cost of providing: (a) Stabilised layer, material class C2, using approve borrow material class G45
38.03	**Chemical stabiliser agent**
	Chemical stabiliser agents: (b) Ordinary Portland Cement
SERIES 4000	**BITUMINOUS LAYERS AND SEALS**
4100	**Prime and Curing Membrane**
41.01	**Prime Coat**
41.01	Prime coat: (a) MC-70 cut-back bitumen including blinding material
41.02	Bituminous curing membrane: (a) Bitumen emulsion (30% bitumen) at 0.8L/m2
4200	**Asphalt Concrete Surfacing**
42.02	Asphalt concrete surfacing: (a) Asphalt Concrete Surfacing (AC14) [Using 60/70 Penetration Grade Bitumen a 14mm Maximum Size of Aggregates]
	(b) Bitumen for Asphalt Concrete Surfacing: [60/70 penetration grade bitumen]
SERIES 5000	**ANCILLARY ROADWORKS**
5100	**Marker and Kilometer Posts**
51.01	**Marker posts:**
51.01	Marker posts as shown in drawings: (i) Road Reserve Marker Post
	(ii) Concrete Egde Marker Posts
51.03	Costruct concrete bollards 300x300mm as shown on the drawings
5200	**Guardrails**
52.02	**Guard rails on steel posts**
52.02	Guardrails on steel posts: (a) Galvanised
52.06	Reflective Plates
5400	**Road Signs**
54.01	Road Signs (Warning, regulatory and Information):- (a) Circular Regulatory diameter 900mm
	(b) Rectangular Regulatory, height 600mm X width 450mm
	(c) Triangular Regulatory and warning: side length 900
5500	**Road Markings**
55.01	**Road Markings Paint**
55.03	(a) Thermo-Plastic Road-marking material including setting out and pre-marking the lines: (i) Centrelines mark broken or unbroken, 100mm wide
	(ii) Stop lines, 400mm wide
	(iii) White lettering and symbols
	(iv) Yellow lettering and symbols
	(v) Traffic-island markings (white/yellow)
	(vi) Kerb markings (white/yellow)
	(vii) Pedestrian crossing lines, 500mm wide
	(viii) Preformed Thermoplastic painting applied at junctions, rumble strips before raised pedestrian crossings a bus stations

SERIES 8000	**STREET LIGHTS**
8001	**Street Lights**
81.01	STREET LIGHTING (STAND ALONE SOLAR SYSTEM) (a) Supply, Install, Test and Commission by a rep sub-contractor approved by the Employer of Solar Type Street Lighting as detailed in the Drawings and Specifications
	(b) Allow for contractor's overhead and profits as a percentage of above
	PART E: CHUNO ACCESS ROADS (3.38KM)
SERIES 2000	**DRAINAGE**
Section 2100	**Drains**
21.01	**Excavation for Open Drains**
21.01	Excavation for catch drain pit (a) Excavating soft material situated within the following depth ranges below the surface level: (i) 0.5 m up to 1.5 m
22.01	**Excavation**
22.01	Excavation (a) Excavating soft material situated within the following depth ranges below the surface level: (i) 0 up to 1.5 m
	(ii) Exceeding 1.5 m and up to 3.0 m
	(iii) Exceeding 3.0 m per increment of 1.5 m
22.02	**Backfilling**
	Backfilling (a) Using excavated material
	(b) Using imported selected material (G45 quality)
	(c) Extra over Subitems 22.02 (a) and (b) for soil cement backfilling (4%cement)
22.03	**Concrete Pipe Culverts on Class A bedding**
22.03	Concrete pipe culverts: (a) On Class A bedding (reinforced concrete min class 25/20; 900 mm or 1200mm dian across road) i) Diameter 900 mm
	ii) Diameter 1200 mm
22.07	**Cast in situ concrete and formwork**
22.07	Cast in situ concrete and form work: (a) In inlet and outlet structures, catchpits, manholes, thrust and anchor blo including formwork and Class U2 surface finish (Class 15/10 for blinding)
	(b) Base of catch pit (Gully), including formwork, (concrete class 20/15)
	(c) In inlet and outlet structures, catchpits, manholes, thrust and anchor blocks, excluding formwork but includi Class U2 surface finish (Class 25/20)
22.10	**Steel Reinforcement**
22.10	Steel reinforcement: (a) High-tensile steel bars
22.21	Accessories: (a) Manhole covers including frames, precast concrete class 30/20, reinforced (i) Size 1555 x 155
	(ii) Size 1855 x 1885 mm
	(c) HDPE Pipe (300mm dia-6kg/sqcm)
	(c) Steel grates inlet grids to road side catch pits (i) Size 400mm x 600mm
22.25	Hand excavation to determine the positions of existing services
Series 2300	**Concrete Kerbing, Concrete Channelling,Open Concrete Chutes and Concrete Lining for Open Drains**
23.01	**Concrete kerbing**
23.01	Concrete kerbing (indicated for cast in situ concrete): (a) Precast kerbs (Type 1) as shown in the drawings inclu of bedding, haunching and form work and all incidentals 200×380 (Concrete Class 30/20)
24.02	**Concrete Class 30 for kerbstone**
24.02	Precast kerbs (Type 2) as shown in the drawings inclusive of bedding, haunching and form work and all incider

	200×200 (Concrete Class 30/20)
Section 2500	**Pitching, Stonework and Protection Against Erosion**
25.01	**Stone Pitching**
25.01	Stone pitching: (c) Wired and grouted stone pitching (total thickness 250 mm)
25.03	Stone masonry walls (b) Cement-mortared stone walls
25.04	Interlocking blocks for walkway, 200x100x80mm thick, min. strength 30N/mm2 (Mpa) including well graded sand bedding
SERIES 3000	**EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE**
3100	**Clearing, Grubbing And Removal Of Topsoil**
31.01	**Clearing, grubbing and removal of topsoil**
31.01	Clearing, grubbing and removal of topsoil: (a) Clearing and grubbing
	(b) Removal of topsoil
31.02	**Removal and grubbing of large trees and tree stumps**
31.02	Removal and grubbing of large trees and tree stumps: (a) Girth exceeding 1.0 m up to up including 2.0 m
	(b) Girth exceeding 2.0 m up to up including 3.0 m
	(c) Girth exceeding 3.0 m
3600	**Selecting and Utilizing Material From Borrow Pits and Cuttings**
36.01	**Excavations:**
36.01	Excavations: (a) Common excavation to spoil and stockpile as directed by Engineer
	(b) Rock excavation
36.02	**Fill and improved subgrade layers**
36.02	Fill and improved subgrade layers: (a) Improved subgrade layer as specified in the Drawings to require minimu G15 quality material
	(b) Improved subgrade layer as specified in the Drawings to require minimum G7 quality material(stockpilled)
	(d) Fill or improved subgrade layer using rock fill (Coral Stone)
3700	**Pavement Layers of Natural Gravel Materials**
37.02	**Natural Gravel for Sub-base Course**
37.02	Natural gravel : (a) Natural Gravel Class G45 for sidewalks
	(b) Natural Gravel Class G25 for lower subgrade
3800	**STABILISATION**
38.02	**Chemical stabilisation, payment for full cocst of providing:-**
38.02	Chemical stabilisation, payment for full cost of providing: (a) Stabilised layer, material class C1, using approve borrow material class G25
38.03	**Chemical stabiliser agent**
38.03	Chemical stabiliser agents: (b) Ordinary Portland Cement
SERIES 4000	**BITUMINOUS LAYERS AND SEALS**
4100	**Prime and Curing Membrane**
41.01	**Prime Coat**
a	MC-70 Cut-back bitumen including blinding material
4200	**Asphalt Concrete Surfacing**
42.02	Asphalt concrete surfacing: (a) Asphalt Concrete Surfacing (AC14) [Using 60/70 Penetration Grade Bitumen a 14mm Maximum Size of Aggregates]
	(b) Bitumen for Asphalt Concrete Surfacing: [60/70 penetration grade bitumen]

SERIES 5000	**ANCILLARY ROADWORKS**
5100	**Marker and Kilometer Posts**
51.01	**Marker posts:**
51.01	Marker posts as shown in drawings: (i) Road Reserve Marker Post
	(ii) Concrete Egde Marker Posts
51.03	Costruct concrete bollards 300x300mm
5200	**Guardrails**
52.02	**Guard rails on steel posts**
52.02	Section 5200: Guardrails and Guard Fences: Guardrails on steel posts: (a) Galvanised
52.06	Reflective Plates
5400	**Road Signs**
54.01	Road Signs (Warning, regulatory and Information) (a) Circular Regulatory diameter 900mm
	(b) Rectangular Regulatory, height 600mm X width 450mm
	(c) Triangular Regulatory and warning: side length 900
5500	**Road Markings**
55.01	**Road Markings Paint**
55.01	Section 5500: Road Markings Thermo-Plastic Road-marking material including setting out and pre-marking th lines: (i) Centrelines marking, broken or unbroken, 100mm wide
	(ii) Stop lines, 400mm wide
	(iii) White lettering and symbols
	(iv) Yellow lettering and symbols
	(v) Traffic-island markings (white/yellow)
	(vii) Pedestrian crossing lines, 500mm wide
	(viii) Preformed Thermoplastic painting applied at junctions, rumble strips before pedestrian crossings
SERIES 8000	**STREET LIGHTS**
8001	**Street Lights**
81.01	STREET LIGHTING (STAND ALONE SOLAR SYSTEM) (a) Supply, Install, Test and Commission by a rep sub-contractor approved by the Employer of Solar Type Street Lighting as detailed in the Drawings and Specifications
	(b) Allow for contractor's overhead and profits as a percentage of above
	PART A: PRELIMINARIES AND CONDITIONS
BILL NO. 1	**PRELIMINARIES AND GENERAL MATTERS**
PART C	**PRELIMINARY ITEMS AND GENERAL MATTERS**
II	**EQUIPMENT, PLANTS, TOOLS AND VEHICLES**
A	Plant, Tools and Vehicles The Contractor shall be responsible for the provision of all plant, tools, and vehicles workmen required for the Works except in so far as may be stated otherwise herein or except for such items specifically and only required for the use of and provided by Client appointed agents as described herein.
B	Site levels Before commencing work the Contractor must arrange for and agree with the Project manager the ex site levels and similarly establish and agree a bench mark. The levels and bench mark thus agreed will then be u for the duration of works for all purposes.
C	Overtime The Contractor shall allow in his tender for any extra costs for overtime working he considers will be necessary in order to complete the work by the contract Date for Completion.
D	Area to be occupied by the Contractor The area of the site which may be occupied by the Contractor for use as storage and for the purpose of erecting workshops, etc., shall be agreed between the Project manager and the Contractor.

E	Details to be private and Confidential The Drawings, Bills of quantities and Contract Documents applicable to contract are restricted by copyright. The Contractor shall treat the details of this Contract as private and confide for his own information only and shall not publish or disclose the details of the Contract in any trade or technic paper or elsewhere (except as necessary for the purpose hereof) without the previous consent in writing of the Employer.
III	**SAFETY, HEALTH AND WELFARE OF THE WORK PEOPLE**
B	Safety, Health and Welfare of the work people The Contractor shall be responsible for and shall ensure the safe welfare of his work people, and those of his Subcontractors, Client appointed agents, Nominated Suppliers and persons employed directly by the Employer. Allow for securing OSHA certificate, providing and maintaining c site adequate medical facilities and approved first aid equipment kept fully replenished and in an accessible pos The contractor shall comply and observe all neccesary measures against Covid-19 as directed by Goverment Authorities.
C	Notices and Fees The Contractor shall pay all fees and charges required in the Conditions of Contract, regulato authorities and any Local Authority where the Works are being executed. The amount of all such fees and char shall be deemed to be included in the Contract Sum. hose in respect of the following items are included elsewh this Document if applicable to the Works. Hoardings Water for the work or Statutory Undertakings.
D	Setting out the works The Contractor shall set out the Works in accordance with the dimensions and levels sho the Drawings and shall be responsible for the correctness of all dimensions and levels so set out by him and wil required to amend all errors arising from inaccurate setting out at his own cost and expense. In the event of any or discrepancy in the dimensions or levels marked on the Drawings being discovered such errors or discrepanci must be reported by the Contractor to the Project manager for his immediate attention. No work shall be comm by the Contractor until he has received written instructions from the Project manager to adjust such discrepanci which may be proved. Upon receipt of such instructions the Contractor shall there upon be responsible for the accurate setting out of the works, giving effect to the adjustments necessary to comply with such instructions, a claim for extra expense based on any discrepancy or error in the dimensions or levels shown on the Drawings n made thereafter.
E	Contractor's Supervision The Contractor shall provide full and adequate supervision during the progress of the and shall keep a competent and authorized Agent or General foreman, approved by the Project manager (which approval may be withdrawn at any time) constantly on the works. Such authorized Agent or General Foreman s give his whole time to the supervision of the works and must be able to read and speak English, to receive and upon (on behalf of the Contractor) all instructions, directions, or orders issued by the Project manager or his representative. No work shall be carried out at night or on gazetted holidays unless authorized by the Project manager in writing.
A	Labour and fair wages The Contractor shall provide all labour and shall include for all costs arising from the cu Government regulations regarding annual leave and passages, medical facilities, public holidays, overtime, trai levy, income tax, housing, travelling allowances, wages and salaries, and any other statutory requirement curre the date of tender. The Contractor shall pay rates of wages and observe hours and conditions of labour not less favourable than the minimum rates of remuneration and minimum conditions of employment applicable in the district in which the work is carried out as laid down by the Regulations of Wages and Conditions of Employm Act, Building and Construction Industry Wages Council. The relevant notice must be kept posted upon the site it can be conveniently read by the employees concerned.
IV	**NOTICES AND FEES TO LOCAL AUTHORITIES AND PUBLIC UNDERTAKINGS**
D	The Contractor shall give all notices in accordance with the Conditions of Contract. The Contractor shall pay al and charges required in the Conditions of Contract, regulatory or statutory authorities and any Local Authority the Works are being executed. The amount of all such fees and charges shall be deemed to be included in the Contract Sum.
F	Pricing and Correction of Bills of Quantities, etc. costs relating to items which are not priced will be deemed to been included elsewhere in these Bills of Quantities
V	**SITE LEVELS AND SETTING OUT THE WORKS**
E	Before commencing work the Contractor must arrange for and agree with the Project Manager on the existing s 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 sho the Drawings and shall be responsible for the correctness of all dimensions and levels so set out by him and wil required to amend all errors arising from inaccurate setting out at his own cost and expense. In the event of any or discrepancy in the dimensions or levels marked on the Drawings being discovered such errors or discrepanci must be reported by the Contractor to the Project Manager for his immediate attention.

VI	**CONTRACTOR'S SUPERVISION**
F	The Contractor shall provide full and adequate supervision during the progress of the works and shall employ a 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 withd at any time) constantly on the works. Such authorized Agent or General Foreman shall give his whole time to t supervision of the works and must be able to read and speak English and or Swahili, to receive and act upon (o behalf of the Contractor) all instructions, directions, or orders issued by the Project Manager or his representati
VII	**GENERAL SCAFFOLDING AND TEMPORARY SUPPORT**
G	The Contractor shall provide, erect, maintain, alter and adapt as necessary and dismantle when no longer requir and remove on completion all necessary scaffolding or staging, including boards, for the whole of the works including works to be carried out by nominated sub-contractors. No timber used for scaffolding if required, formwork, or similar purposes shall be used afterward in the permanent work.
XIII	**TEMPORARY CONNECTION, POWER FOR THE WORKS AND LIGHTING**
Q	Copyright The copyright of these Bills of Quantities is vested in the Employer and they may not be reproduced whole or in part without the Employer's written permission Water for the work The contractor shall at his own expense use whatever means at his disposal, provide on the site plentiful, suitable and clean water for use of the works. The Contract Sum shall be deemed to include for all costs and charges of whole water to be used in the works. Temporary lighting and power for the works The Contractor shall provide all artificial lighting, electric and the energy required for the execution of the work. The provision of light and, where appropriate, power for Agents appointed by the Client and Local Authorities is included in the items of general and special attendance Provisional and Prime Cost Sums. The Contract sum shall be deemed to include for all fees and charges for all temporary services and clearing away on completion, and for the cost of all electricity consumed for the works.
XVI	**SAMPLES**
A	Samples Samples of proposed materials and workmanship shall, if required by the Project manager, be submitte approval, and those samples will be left on site by the Project manager who shall have power to reject all such materials and condemn such workmanship that does not correspond with the approved sample. The following samples (and others as directed by the Project manager) shall be provided; tiles, doors, sanitary fittings, electric fittings, painting, and glass panels.
B	Tests The Project manager may, whenever he considers it desirable, test any materials before they leave the ma premises as well as after delivery on the site, and the Project manager shall be at liberty to reject any materials delivery should he consider them unsatisfactory, notwithstanding the preliminary test and approval of the mater the maker's premises. The costs of these tests are to be borne by the Contractor. When directed by the Project manager, samples of materials (the samples being taken by approved sampling methods) are to be supplied by t Contractor for laboratory tests and shall be delivered by the Contractor at his own cost to the Project manager o or as otherwise directed. The Contractor shall, whenever so instructed by the Structural Engineer, prepare all equipment for pile testing as specified in the measured works section. The Contractor shall keep photographs o instruments readings, ensure safety of performers and observers of pile testing The Contractor shall, whenever instructed by the Project manager, cut out sections of work executed or samples of materials incorporated there shall deliver them where directed for the purpose of testing. All work disturbed shall be made good forthwith b Contractor. All costs incurred in cutting out, making good and delivering as aforesaid, shall be borne by the Contractor unless the result of the test shows that the materials etc, are in accordance with this Contract. The contractor shall and as Project manager may instruct during execution, provide samples for all kind of testing including physical destructive Testing Contactor shall provide at least a 10 year guarantee from a supplier of ar material whenever requested by client with PM Approval; Such as Water proofing material, Anti-termite mater Glass Works, Painting, Curtain Walls, Aluminium material, Granite/Marble, Mashrabya Screens,Porcelain tiles Clading material, acoustic material, signages, ceramic tiles, vinyl Tiles, Carpets, Elevators , Lights, Cables, ceil tiles, Sanitary wares, Furnitures, Ironmongeries, Pumps ,Roofing sheet, Pipes, ventilation devices.
XVII	**TESTING, QUALITY CONTROL AND ASSURANCE**
U	For the sake of quality assurance and control, the contractor shall be responsible for the enforcement of all requ tests of either materials/samples or work at the appropriate stage; be prior to the execution of work or in the cou execution, or after completion of particular trade section or element. The contractor should be committed to tes all the installations required to be tested and provide everything necessary for this purpose and leave the whole perfect working order to the satisfaction of the Employer and Local Authority.
XVIII	**WATCHING AND SECURITY OF THE SITE**
B	Watching and Security The Contractor shall provide all watching and security and everything else necessary by and night for the due protection and Security of the Works and the public and other persons. He shall provide a

	barriers, notices, watchmen to prevent access of unauthorized persons into the site. The Contractor will be liabl all consequences of theft from the site of his own or Subcontractors or Suppliers materials or equipment. Any s theft will not relieve the Contractor of his liability for completion the Works on time.
C	Maintenance of public and private roads and services The Contractor shall be responsible for all damage to roa (whether public or private), crossovers, services and the like arising out of, or in the course of, or by reason of t execution of the works and shall be responsible for observing any by- laws or other regulation imposed by a competent authority regarding the keeping of such roads free from mud, filth, etc, arising as aforesaid.
D	Police regulations The Contractor shall at all times observe any police regulations including those regarding the loading or unloading or any waiting by vehicles on the public highway and the Contract Sum shall be deed to i for strictly compliance therewith.
A	Disposal of water for all sections of the works The Contractor shall notify the Project manager as soon as water percolation or water-logging becomes apparent and he shall obtain the written permission of the Project manag before carrying out any continuous pumping or other method of removal of water which may lower the water le on adjoining sites. The Contractor shall ensure that no nuisance is caused by the outfall of pumped water and sh obtain the necessary permission before connecting temporary drainage to existing drains and/or sewers. Any fe charges in connection with such work shall be deemed to be included in the Contract Sum.
XIX	**PROTECTION OF WORKS**
W	The Contractor shall allow for and provide and/or maintain during the execution of the Works all shoring, strut needling and other supports and shall take all other precautions and adopt such expedients as may be necessary preserve the stability of all buildings, structures, fences, walls, land and property, roads and footpaths, sewers, gullies and other services (including those of adjoining owners) that may in any way be affected by the work to executed under the Contract immediately he has taken possession of the Site and until completion of the Works Contractor shall hold the Employer completely indemnified against all or any claim for damage or losses accru from any settlement resulting from such shoring and strutting or lack thereof and the striking and removal of sa
	Protection of persons and propertyB127:B134B128B127:B135B127:B135B127:B137B127:B141B127:B142B127:B145B127:B148B127 The Contractor shall provide for the efficient of the public, the Employer's servants and property and all other persons occupying or using the premises, also of adjoining or neighbouring property during the progress of the included in or required to be done on connection with the Contract. This shall include provision of scaffolding protective netting around and to the full height of the building, maintain the same until completion of the Work Contractor shall take all precaution to eliminate as far as possible the danger to the public and other persons ari from the entry and exit of vehicles to and from the site. Trespass and nuisance All reasonable means shall be us avoid inconveniencing adjoining owners and occupiers. No workmen or plant employed on the works shall be allowed to trespass upon adjoining properties. If the execution of the works requires that workmen or plant mus enter upon adjoining property, the necessary permission shall be first obtained by the Contractor who shall see these instructions are carried out. The Contractor shall indemnify the Employer against any claim or action for damages on account of any trespass or other misconduct of the Contractor's employees. The Contractor shall n obstruct any public way or otherwise do or suffer to be done anything which may amount to a nuisance or annoyance, and shall not interfere with any right of way or right to adjoining property, and any notice received him or left upon the site requiring the discontinuance or suspension of any part of the works shall at once be forwarded by him to the Project manager or, if given verbally, shall at once be communicated by him to the Pro manager in writing, and the Contractor shall keep the Employer indemnified against any claim or loss conseque upon any act, neglect or omission of the Contractor, his agents, servants or workmen in this respect. Temporary buildings for use by the Contractor The contractor shall, at his own cost, supply and erect all temporary buildin sheds, mess rooms and stores with floors at least 150mm above ground level. No office, stores or other tempora buildings shall be erected on the site without first obtaining the consent of the Project Manager/Project manage the type of temporary building to be supplied and the position in which they are to be erected. Temporary latrin Temporary latrines shall be provided, maintained and removed on completion by the Contractor to the satisfact the Project manager and Local Authorities. Temporary hoarding The works shall be enclosed by the Contractor a fence not less than 2.50m high neat and uniform in appearance to the approval of the Project manager. The fe shall be a sufficient obstacle to prevent the ingress of unauthorized persons or children and shall be complete w necessary padlocked entrance gates, fans and screens as may be requisite to ensure the safety of the public or adjoining owners and of the works. Any commercial paint on the hoarding shall be done at the approval of the Employer. The Contractor shall maintain the fence, gates, and screens, obtain all necessary licenses and pay all in connection therewith, the amounts of which shall be deemed to be included in the Contract Sum. The Contra shall allow for moving or adapting the fencing as and when required during the progress of the works and shall dismantle and remove at completion of the work, but not until all danger to the public has passed and shall mak good all work disturbed. General scaffolding Provide all scaffolding, (tubular steel or timber), that may be requ for the works. Carry forward Brought forward Prime cost (P.C.) items The words "Prime Cost" (or the initials ("P.C.") wherever appearing in these Bills of Quantities, shall mean net cost exclusive of any trade, cash or oth

	discount whatsoever but inclusive of the cost of packing, carriage and delivery. Such cost shall be the sums due Agents approved by the Client or Supplier after adjustment where applicable in respect of measurements or rate Any increases or decreases in these Prime Cost sums resulting from the adjustments and properly paid by the Contractor, shall be added to or deducted from the Contract Sum in the final account. In substantiation the Con will be required to produce to the Project manager all quotations, invoices and receipted accounts as shall be necessary to show the details of the sums actually paid. Any sum added by the Contractor in these Bills of Qua in respect of profit upon any Prime Cost sum will be deducted at the final settlement of accounts and a sum wil added, the amount of which will bear the same proportion to the sum added as the net amount properly expende bears to the original P.C. Sum Particulars to be supplied when inviting quotation under P.C. Sums When invitin quotations for the supply of goods or the execution of work described under P.C. Sums, full particulars as conta herein (except the sums provided), and shown on the drawings in respect of the goods or work in question shall cases be supplied by the contractor to the persons, firms or companies quoting. All such invitations shall contai stipulation that the quotations must state a guaranteed time for delivery or fixing, as the case may be, from the d when the particulars are supplied, in the case of materials to be delivered on the site in bulk, the person, firm or company quoting musts guarantee the delivery of the quantity required, (uniform with the approved samples), b at the time required to suit the progress of the building operations. The Contractor shall, with such invitations, s full details of the times at which such delivery and/or fixing will be required in order that such guaranteed time be stated. Protection of works The Contractor shall allow for and provide and/or maintain during the execution Works all shoring, strutting, needling and other supports and shall take all other precautions and adopt such expedients as may be necessary to preserve the stability of all buildings, structures, fences, walls, land and prop roads and footpaths, sewers, drains, gullies and other services (including those of adjoining owners) that may in way be affected by the work to be executed under the Contract immediately he has taken possession of the Site until completion of the Works. The Contractor shall hold the Employer completely indemnified against all or a claim for damage or losses accruing from any settlement resulting from such shoring and strutting or lack there the striking and removal of same. Protection of works Cont'd Any damage and/or settlement that may be caused arising out of or directly or indirectly consequent upon the aforesaid protective measures or the lack thereof or carrying out of the Works is to be made good by the Contractor at his own expense to the satisfaction of the Pro manager and all other parties concerned. The Contractor shall cover up and protect all finished work liable to d including provision of temporary roofs, gutters, drains, etc., until the completion of the Works. The entire responsibility in respect of all matters mentioned or referred to in this clause shall rest with the Contractor not withstanding any approval given by the Project manager to, or concurrence in, the action taken or proposed to b taken by the Contractor, in pursuance of his obligations. Pricing & Prebid Site Visit Contractor shall have to vis site before pricing bidding BoQ for submission. The site shall assist in familirazation with the site as well as pr Any loss due to ernerously pricing of an item for not visiting the shall be borne by contractor.
XX	**PROGRESS CHART, PROGRESS REPORTS AND PROGRESS PHOTOGRAPHS**
E	Progress chart, progress reports and progress photographs Immediately after signing the Contract the Contracto prepare a time and progress chart showing the time and order in which he proposes to carry out the works withi total construction time stated in the Contract. The chart shall show in detail the construction time and order in w each section of the work is to be carried out and be subdivided into trades or tasks. Where the Contract is made individual buildings a separate chart shall be provided for each. Upon the letting of Subcontracts the Contractor incorporate similar times and details of each separate Subcontractor's work (which information is to be provide the Subcontractor) and the chart shall be so designed to accommodate this information. At the end of each week Contractor is to mark on the chart, in a different colour, the actual time taken to complete the respective stages sections of the work. At the end of each week the Contractor is to mark on the chart, in a different colour, the a time taken to complete the respective stages and sections of the work. The Contractor shall also show upon the the anticipated weekly labour strength required upon the site (divided into labourers and craftsmen) and shall similarly mark up the actual numbers employed. Copies of the completed chart are to be supplied to the Project manager Two days before each of the scheduled site meeting the Contractor shall submit a progress report in triplicate to the Project Manager indicating the periodic progress and giving details of any delays caused by inclement weather or other reasons beyond his control. The report must include information on labour employe the progress of all trades, including Agents appointed by the Client. Also the Contractor shall submit three copi progress photographs clearly indicating the date and time of the activity shown on the photograph.
A	Checking schedules, drawings, etc The Contractor shall be responsible for checking all schedules and drawings supplied by the Project manager and all shop drawings approved by the Project manager. In the event of any discrepancy being found between such schedules and drawings or if the Contractor considers that additional de drawings are required, then in either case the Contractor shall report such discrepancy to the Project manager fo instruction or apply in writing for such detail at least 28 days before the works concerned are to be executed. Th Contractor shall ascertain from the drawings or otherwise any holes, recesses, plugs, etc, which may be require time to form these as the works proceed. No extra payment will be allowed for cutting or forming such holes, recesses, or plugging, Subsequently. The Contractor's attention is drawn to the requirements for the submission samples, shop drawings, certificates and guarantees contained in previous or subsequent items of this Documen

C	SUFFICIENCY OF TENDER The Contractor shall be deemed to have satisfied himself before tendering as to correctness and sufficiency of his tender for the works and of the rates and stated in the priced Bills of Quantiti Rates and prices quoted shall cover all his prices obligations under the contract and all matters and things neces for the proper completion and maintenance of the works.
XXI	**REMOVING RUBBISH, WASTES, PLANTS AND CLEANING OF THE BUILDINGS**
Y	The Contractor shall, upon completion of the Works remove and clear away all temporary buildings, plant, rubi and unused materials, and shall leave the whole of the Site of the Works in a clean and tidy state to the Satisfac of the Project Manager.
XV	**PROJECT SIGNBOARD AND STICKERS**
K	The Contractor shall unless otherwise directed, obtain any necessary consent or license from the Local Authori immediately upon commencement of the works the Contractor shall, in accordance with the details supplied by Project Manager, make and erect a signboard showing the name of the Employer and such other information as be directed and approved by the Project Manager. Also, the Contractor shall arrange payment of Consultants st (Project Managers, Architects, Quantity Surveyors and Engineers) and sticker for his own project registration.
	PART C: WORKSHOP BUILDING STRUCTURE
BILL No 3	**MEASURED WORKS**
ELEMENT No.1	**SUBSTRUCTURE (ALL PROVISIONAL)**
1	**Excavation and Earthworks;**
A	Clear site of small bushes, shrubs, undergrowth, and the like and grub up their roots
B	Excavate over site to remove vegetable soil commencing at ground level average depth 150mm; deposit in spoi heaps and cart away from site
C	Earthwork in excavation using manpower/machine in all kind of soil for foundation trenches of pit, raft etc. inc the cost of dressing of sides, ramming of bottom as per drawing, specification & approval of engineer.
D	Ditto;Extra over excavating in hard rock
E	Earth backfilling well rammed and consolidated around the foundation
F	Load, wheel and cart away surplus excavated material from site.
G	Imported Granular fill materials Selected approved backfilling well rammed and consolidated layers to make up levels under floors
H	Sand filling worksto make up levels under floors
2	**Disposal of water:**
A	Allow for keeping all excavation free from water (except spring or running water) by pumping, baling or by oth means necessary
3	**Planking and strutting.**
A	Allow for provision and subsequent removal of planking and strutting to uphold and maintain all faces of excavations.
4	**Hardcore**
B	150mm thick; stone hardcore bed; leveled; compacted and sand blinded to receive damp proof membrane; mea separately.
5	**Soil sterilization:**
A	Gammalin 20 solution or equal and approved; applied at a rate of 450ml per square metre over hardcore surface beds and top of foundation walls.
B	Ditto; at a rate of 450ml per linear metre of 300mm. width to 235x 600mm. deep backfilling to one external sid foundations.
6	**Damp Proof Membrane**
A	500 Gauge polythene damp proof membranes; laid in two layers on sand blinded hardcore bed surfaces
7	**CONCRETE WORK:**
	Plain insitu concrete grade '15'

A	Concrete Blinding
	Plain insitu concrete grade '20'
A	150 mm thick Concrete bed
	Reinforced insitu concrete grade '25'; vibrated; including vibrating around reinforcements:
A	Foundation trenches to receive wall, column bases, foundation columns, ground beams, columns and beams, staircase
8	**REINFORCEMENTS:**
I	**High tensile steel bar reinforcements with a strength of 500N/mm2 to BS 4449:1969: including bends, ho**
A	Various Sizes
9	**Formwork:**
	Vertical or battering surfaces
A	Sawn Formwork generally To columns
B	Ditto; To Beam
C	Ditto; To Slab, Raft, Stairs, Rcc walls, Sill/lintel etc
11	**FINISHINGS**
	Render; cement and sand (1:3); trowelled
A	12mm thick; to plinth; to concrete or block work base
B	Wax Based Concrete Curing Compound Application of membrane forming wax based curing compound for RC vertical structure (column, share walls etc.) to sprayed over the concrete surfaces to retard the loss of water dur the concrete curing process
12	**DAMP PROOFING**
A	230mm wide; Hessians based damp proof course; laid on blockwork with 150mm end laps
14	**Expansion Joints:**
A	Expansion Joint for Horizontal slab (top of the roof & floors) area with minimum 3 mm th. Aluminum plate wi joint gap up to 800 mm, as per drawing, specification and instructions all complete
B	Supplying and fixing of 16 gauge Aluminium Sheet for the expansion joint gap of beam/slab bottom and intern column gap up to 450 mm as per drawing, specification and instructions all complete .
C	Supplying and applying low viscous epoxy grouting works injectofil for beam and column junction as per specifications and approval of engineer all complete
D	Supplying and applying non shrink chemicals (EXPA G 101) for normal grouting works for RCC works as per specifications and approval of engineer all complete
12	**Prepare and apply three coats of black bituminous paint on:**
A	Rendered surfaces to plinth Walls over 300 mm high
ELEMENT No.2	**FRAMES**
2	**REINFORCEMENTS;**
	High tensile steel bar reinforcements with a strength of 500N/mm2 to BS 4449:1969: including bends, ho
A	METAL WORKS Supplying, fabricating and fixing in position of metal related works by connecting plate, ang iron, MS plate, and making metal stair case, MS gate, gratings, grill etc. including necessary hole cutting , grin welding/bolting red oxide paint with all necessary fixtures as per drawing specification and instruction of engi complete.
B	50mm Diameter, 2mm thick satin finished stainless steel handrail welded on top of steel balusters, open ends cl with flat metal plate
C	Supplying, fabrication and fixing in position 1000 to 1200mm high 16 gauge stainless steel railing for staircase verandah with 50 mm dia for King/newel post, 38 mm dia for intermediate/balusters @ 1 to 1.5 m c/c spacing a one no. 50 mm dia for hand rail on top, and 6 layer of 12.5 mm dia solid rod horizontal/inclined members with necessary fixtures and fitting such as brass caps, necessary hole cutting, metal grip, welding, jointing all compl

	per drawing , specification & approval of Engineer.
D	MS ROLLING SHUTTER DOOR Supplying, fabricating & Installation of mechanically operated MS Rolling Shutter with guidepost, pipe, chain, spring and all necessary accessories including one coat of primer etc.as per drawing, specification and instructions of engineer all complete. Roll up shutter dooor
ELEMENT NO.4	**WALLING.**
1	**BLOCKWORK:**
I	**Solid concrete blocks to BS 6073 Type 'A' dense aggregate, average compressive strength 7N/sq mm; in c**
A	230mm. Walls.
ELEMENT No.5	**ROOFING**
1	**ROOF COVERINGS**
II	**24 Gauge resin coated aluminium roofing sheets IT5 as supplied by Aluminium Africa or any other equa with J-bolts as per manufacturer's instruction**
A	Roof covering sloping not exceeding 30 degrees from the horizontal.
V	**Kryton water treatment membrane or any other equal and approved type laid on screeded bed (m.s) to r**
A	Water Proofing Providing & application of two or more coat of elastromeric waterproofing works by using fibe glass reinforcement meeting the standard ASTM D4404-01 for the shear wall, basement, toilet, bathroom,terrac etc.Including the cost of the cleaning the surface all complete elastromeric waterproofing work as per drawing, specification and instrucitons.
3	**Unframed Structural Hollow section steel pipe**
3.2	**The following are in 1nr roof truss spanning over 15.00 but not exceeding 18.00m (Truss type STB)**
A	The following in 19 nos Trusses T1 using Weldable mild steel to BS.4360 grade S 275 with fabrications and bo site connections: Supplying, fabricating and fixing in position of metal truss related works for roof by connecti plate, angle iron, MS Plate includinf all necessary hole cutting, grinding, welding, bolting, red oxide paint with necessary fixtures as per drawing specification and instruction of engineer all complete Metal trusses instllation works
I	**Unplasticised PVC rainwater pipes to BS 4514**
II	**Unplasticised PVC rainwater gutter as supplied by "Nabaki Africa" or any other equal and approved co and fixing brackets as per supplier's instruction**
A	Gutter on Roofing Supplying and fixing 0.5mm color sheet 150mm wide gutter on roofing with proper shape & all necessary nails, screws, bolts, nuts washers, J or L hooks including 20*4.5*750mm M.S.bracket etc as per drawing & instruction all complete.
6	**FLAT ROOF TREATMENTS**
	BEDS or BACKINGS; MORTAR; cement and sand (1:3); screeded; to roofs; level or to falls; to concrete
A	Providing, mixing, laying and compacting screeding on floor in true line and level including the cost of curing drawing, specification and instruction of engineer. 38 mm thick with (1:2:4 concrete) screeding
ELEMENT No.6	**DOORS:**
1	**HEAVY DUTY ALUMINIUM DOORS**
	"Design, Engineering, Fabrication, installation, Testing and Commissioning of hinged doors with 100 mm approved aluminium fabricator.50 x 42mm Profile for panels. All extruded aluminium provided shall be Powder Coating should be of 50 Micron minimum thickness applied in accordance with either BS6496 or the doors to the openings. All assembly screws and fixings shall be grade A2 or A4 austenitic stainless ste shall be EPDM. Infill Glass to be 10mm Laminated Clear Glass. Full set of shop drawings and structural production."
A	Supply, fabrication and fixing in position of Aluminium door, window and ventilations made of bronze anodise section including all necessary accessories such as rolers, weather brush, hook locks, slide lock and pull SS han tower bolt, dual locks, gaskets, floor springs, water drainages, silicon , glass of 6 mm thick for door & 5 mm th window & 16 gauge GI fly screens on all openable windows & 9mm th. laminated particle board for doors 0n t and balocny etc for following sections all complete as per drawing, specification and approval of engineer. Doo Single/Double panel Swing/Sliding/Casement Section size (102*45*1.5mm) fitted with 5mm clear glass or 9m thick laminated board or ACP board all complete.

B	Ditto; Providing and fixing Double glazed 2 or 3 panel Sliding Window of aluminum section in naturally anodized/powder coated colour. Section size (87*56*1.5mm) fitted with 5mm clear glass with fly mesh shutter complete.
C	Providing and fixing Swing Glass Door of 12mm thick Clear Toughened glass with Stainless steel patches or Aluminum frame all complete D1 entrance (1500x3200)m
ELEMENT No.8	**PLUMBING AND ENGINEERING INSTALLATIONS**
1	**SANITARY APPLIANCES**
i	**Supply and fix the following sanitary appliances including all connections and fixing to FLOORS or WA by services Engineers.**
A	Supply, install, test and commission, Sanitary Appliance as per specifications and schedule of sanitary fitting, (ARROW BRAND) However units of other manufacturers approved equal will be accepted. "RAK" WC pan o Equally approved comprising of 9 litres capacity cistern for side supply internal Fleeflo plastic syphon fitting a 12mm Microvalve HP\LP side supply ballvalve, internal overflow, plastic flush bend, simpla inlet connector ar supports, chrome plated lever , Gemini seat and cover , domex screws and S-trap or P-trap pans.
B	Ditto; Twyford white vitreous china DOC.M Value Pack disabled WC pan Cat No. PK8154WH comprising of bowl with horizontal outlet, hand rinse non overflow, no chainstay, DOC.M support rails (4No), DOC.M hinge support rail and toilet holder, wall hangers (pair), grid waste, DOC.M Value cistern and fittings, DOC.M seat ri stainless steel hinge
C	Ditto; Providing and fixing in position 580 mm size Orissa Pan Hind ware Special or Parry ware Special or equivalent Chinaware Flat Pan with 10 liters capacity white glazed flushing cistern including CP flushing bend angle valve, CP connector, flushing valve, seat cover connection to water and soil lines all complete with testin ready for operation as per drawings, specifications and instruction
D	Ditto; "RAK"or Equally approved,; 42.2cm X 60 cm white glazed porcelain clay Under Counter Hand washbas single central taphole, Complete with overflow, Tubular Type Siphon Waste (A874901), Stop Angel Valve (B7883AA) 0.5" monoblock basin mixer with non return valves and 1.25" pop up waste,1.25" plastic bottle tra 75mm seal.
E	Ditto; Bronze Clean out (floor trap) including rodding eyes, necessary fittings and accessories, complete,press method, depth 24 mm and slip-in to50 mm PVC piping, overall size to be Square type 150mmx150mm, bright The drain will be complete with cover while the cover in clean out to be screwed via two star type screws.
F	Ditto; Porcelain clay white glaze Large flat back urinal size 61x41x38cm with 32mm CP bottle trap all comple with testing and ready for operation.
G	Ditto; 80cm X 36.5cm X 14cm thick white glazed earthenware urinal partition all complete .
H	Ditto; Supply and installation of 37" long and 8" deep Stainless steel Double Bowl kitchen sink with drain boar mm nylon Connector with both ends couplings, 32 mm CP bottle trap, waste Coupling, Swivel Cock with testi ready for operation.
I	Ditto; 15mm C.P. Hand spray with 1.2m long flexible pipe.
J	Ditto; Chrome plated Sava Towel Rod 24"x½" model (FFAS6588-908500BF0)
K	Ditto; Chrome plated Toilet paper Holder model (FFAS6588-908500BF0)
L	Ditto; Chrome plated Rob Hook model (FFAS6588-908500BF0)
M	Ditto; 15mm diameter angle valve with wall flange.
N	Ditto; Supply and installation of Bib cock
O	Ditto; Mirror, special quality plate glass size 450 x 600 x 6mm thick with alkali resistant coating one side, fixi with domex screws to background requiring plugging
P	Ditto; Hand drier 0302004 guardian push button operation plastic cassete unit, snap in mechanism high output, 275 x 290 x 185mm
Q	Ditto; Soap dispenser;glass wall mounted as to RAK 21033 or equal approved fixing with brass screws to backgrounds plugging
R	Ditto; Grab bar 600mm long (Bend type)
S	Ditto; Grab bar 600mm long (Hinz type)
T	Ditto; Drinking Water fountain set

2	**COLD WATER INSTALLATIONS DISTRIBUTION PIPES**
	IPS PIPE PN 20''Class C'' painted with special paint; including joints in running length.Fixing in accord
A	Supply, install, test and commission PPR pipe (DIZAYN GROUP) and tubing class "6" with PN10 to BS 4554 screwed and socketed joints to BS 143 and 126 of approved manufacture. Pressure pipe work, installed, jointed tested complete as per BS standards with pipe fittings, bends, accessories, supports, hangers using clamps with rubber inlay, threaded rods, galvanized steel channels, sleeves, pipe marking, expansion joints, including earthw backfill, concrete encasement, all as specified and shown on drawings, ∅20mm Pipe
B	Ditto; ∅25mm Pipe
C	Ditto; ∅32mm Pipe
D	Ditto; ∅40mm Pipe
E	Ditto; ∅50mm Pipe
F	Ditto; ∅65mm Pipe
G	Supply and installation of forged brass lever operator/gate valve of full flow with forged brass ball (Machine ar mirror smooth finish with hard chrome plated) and spindle with setting and gland of superior quality having minimum working pressure of 10 kg all complete. ∅20mm Pipe
H	Ditto; ∅25mm Pipe
I	Ditto; ∅32mm Pipe
J	Ditto; ∅40mm Pipe
K	Ditto; ∅50mm Pipe
L	Ditto; ∅65mm Pipe
M	Supply and install 2,000 litres capacity ELEVATED water tanks (Simtanks), including fixing inlet supply pipe, overflow pipe, wash out pipe, ball valve box with standard top acess and connection to water supply pipe as pe drawing.
3	**SUPPLY PIPES**
A	Supply and instal uPVC pipes of class 'B' to BS Standards and fittings in running length as follows uPVC pipe installed, jointed and tested complete, to BS 8301, BS 4541, BS 5255 , BS 4660 and BS 5481 as applicable incl supports, pipe fittings, bends, Accessories, hangers, fixing at high level,insulation of the Exposed Pipes over th ceiling,Concrete encasement, Earthwork, backfilling,cleanouts,roding eyes, all as specified And shown on draw ∅50mm Pipe
B	Ditto; ∅75mm Pipe
C	Ditto; ∅110mm Pipe
5	**WASTE AND VENT PIPES:**
	UPVC pipes;Class 'B'; including fittings in running length.
A	EXTERNAL WATER SUPPLY, FOUL WATER DRAINAGE INSTALLATIONS FOUL WATER DRAINA Supply and installation of HDPE -Double wall Corrugated pipe (DWC) (SN8) with all necessary fitting includi excavation for laying the pipe in the trench, 100mm thick sand bedding, testing of joints and backfilling of soil complete as per drawings, specifications and acceptance of engineer-in-charge. ∅110mm Pipe
B	Ditto; ∅160mm Pipe
C	Ditto; ∅200mm Pipe
D	Ditto; ∅300mm Pipe
6	**FOUL WATER DRAINAGE**
i	**EXCAVATION**
A	Construction of Greass trap (1800x800 x 1000) 100 mm thick PCC (1:2:4) in foundation on flat brick soling, 1(mm thick RCC wall and cover slab in M20 design mix concrete with nominal reinforced tmt bar , 12.5mm thic cement plaster (1:4) all inside the wall and benching top and bottom of the slab including neat cement finish wi

	necessary earth work in excavation in all kinds of soil as per drawing
B	Supply and installation of 0.5 HP Electrical motor pump with base plate nuts,bolts etc Monoblock with all com set ready for operation.
ii	**GULLY TRAPS**
A	RAIN WATER CHAMBER Construct a standard Rain water Chamber 450*450mm deep;in thick concrete blo walls complete with benching and all fittings and chamber cover
iii	**MANHOLE**
A	Construct standard manhole size 600 x 600mm average depth 1500mm deep; in 150mm. thick solid concrete bl walls; 150mm. thick plain in-situ concrete grade '15' bed; complete with benching and all necessary pipe fittin 1No. cast iron manholes covers and frames; finished to wall sides and top of slab with water proof cement and render; including excavation back filling and removal of surplus material; all as per and shown in the drawings.
B	Ditto; Size (450x450x1000)mm
iv	**SEPTIC TANK**
A	Construct septic tank overall internal dimensions; size 12000 x 3300x 2000mm. deep in 230mm. thick solid co blocks walls; 230mm. thick plain in-situ concrete grade '15' bed; 100mm. thick reinforced in-situ concrete grad '20' suspended slab reinforced with 10mm diameter x 100 x 100mm BRC square mesh; 80mm. thick baffle wa complete with necessary pipe fittings; 4No. cast iron manholes covers and frames; vent pipe; finished to wall si and top of slab with 15mm thick, water proof cement and sand render; including excavation back filling and re of surplus material; all as per and shown in the drawings.
B	Ditto; Size (8000x2600x2000)mm
v	**SOAK AWAY PIT**
A	Construct Soak pit overall size 5000mm diameter x 1800mm 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 gr '15' foundation at the bottom; 100mm. Thick suspended slab in reinforced insitu concrete grade '20' reinforce 10mm diameter x 100 x 100mm BRC square mesh; 1No. Cast iron manhole cover and frames; vent pipe; top o finished with cement and sand (1:3) screed; including excavations; backfilling and removal of surplus material; per and shown in the drawing.
ELEMENT No.9	**ELECTRICAL INSTALLATIONS**
i	**Supply and install the following:**
a)	**DISTRIBUTION SYSTEM**
A	Supply, installation, testing and commissioning of Sub Distribution Board (Final Distribution Board) all compl Accessories, Cu Bus Bar, Cu Neutral and Earth Links. It should be The wall-mounting enclosure, made from h quality electro-galvanized steel (up to 1.6mm thick), is designed for indoor applications to accommodate all typ electrical switchgear and control gear assemblies, featuring a removable gland plate, Powder-coated mounting compliance with IEC and NEMA standards, double-door construction, and a 3-point cam lock for uniform lock larger sizes. All Circuit Breaker and Distribution board are as per Technical Specifications and IEC 60947-2 16 SPN DB Double Cover Glazed Door with Followings: (2 Module Incomer+6 Module Outgoing) 1 No. 40 A , D kA MCB 12 Nos. of 6,10,16 amp MCB SP 1 Nos. of 24 Amp DP RCCB, 30mA
B	Ditto; 10 way SPN DB Double Cover Glazed Door with Followings: (2 Module Incomer+8 Module Outgoing) 25 A , DP, 10 kA MCB 6 Nos. of 6,10,16 amp MCB SP 1 Nos. of 24 Amp DP RCCB, 30mA
C	Ditto; 8 way SPN DB Double Cover Glazed Door with Followings: (2 Module Incomer+6 Module Outgoing) 1 24 A , DP, 10 kA MCB 4 Nos. of 6,10,16 amp MCB SP 1 Nos. of 24 Amp DP RCCB, 30mA
D	Ditto; 8 way TPN DB Double Cover Glazed Door with Followings: (8 Module Incomer 8+8+8 Module Outgoi No. 40 A , 4P, 10 kA MCB 18 Nos. of 6,10,16 amp MCB SP 3 Nos. of 40 Amp DP RCCB, 30mA
E	Ditto; 10 way TPN DB Double Cover Glazed Door with Followings: (8 Module Incomer 10+10+10 Module Outgoing) 1 No. 50 A , 4P, 10 kA MCB 24 Nos. of 6,10,16 amp MCB SP 3 Nos. of 63 Amp DP RCCB, 30mA
F	Ditto; 12 way TPN DB Double Cover Glazed Door with Followings: (8 Module Incomer 10+10+10 Module Outgoing) 1 No. 63 A , 4P, 10 kA MCB 30 Nos. of 6,10,16 amp MCB SP 3 Nos. of 63 Amp DP RCCB, 30mA
G	Ditto; 16 way TPN DB Double Cover Glazed Door with Followings: (8 Module Incomer 10+10+10 Module Outgoing) 1 No. 63 A , 4P, 10 kA MCB 30 Nos. of 6,10,16 amp MCB SP 3 Nos. of 63 Amp DP RCCB, 30mA
c)	**LIGHT FITTINGS, FANS AND SWITCHES**

A	SECURITY CAMERA Supply, installation, testing, and commissioning of internal security cameras, including definition cameras (minimum 1080p resolution) with night vision, motion detection, and wide dynamic range (features, along with suitable mounting brackets, cabling (Cat6 or RG59 with power), connectors, and all necess accessories. The cameras shall be housed in aesthetically designed enclosures suitable for indoor use and shall comply with IEC, BS, and IS standards, ensuring seamless integration with the central monitoring system as pe project specifications.
B	Supply, installation, testing, and commissioning of PTZ (Pan-Tilt-Zoom) cameras with high-definition resoluti (minimum 1080p), 360° rotational coverage, optical zoom (minimum 20x), night vision, motion tracking, and weatherproof IP66-rated enclosures. The scope includes suitable mounting brackets, junction boxes, cabling (C RG59 with power), connectors, power supply units, and integration with the central monitoring system. All components shall comply with IEC, BS, and IS standards and meet project specifications.
C	Supply, installation, testing, and commissioning of a 32-channel Network Video Recorder (NVR) with support high-definition IP cameras, built-in storage (minimum 8TB, expandable), H.265 video compression, ONVIF compliance, remote viewing capability, and HDMI/VGA outputs for live monitoring. The scope includes powe supplies, necessary connectors, and integration with the surveillance system, ensuring compliance with IEC, BS IS standards.
D	Supply, installation, testing, and commissioning of a PoE network switch with a minimum of 8 ports, supportin IEEE 802.3af/802.3at standards, Gigabit Ethernet connectivity, integrated power supply, and sufficient power b to support connected devices such as IP cameras. The scope includes necessary mounting accessories, patch cal and integration with the surveillance or network system, ensuring compliance with IEC, BS, and IS standards.
E	Supply, installation, testing, and commissioning of a PoE network switch with a minimum of 16 ports, supporti IEEE 802.3af/802.3at standards, Gigabit Ethernet connectivity, integrated power supply, and sufficient power b to support connected devices such as IP cameras. The scope includes necessary mounting accessories, patch cal and integration with the surveillance or network system, ensuring compliance with IEC, BS, and IS standards.
F	Supply, installation, testing, and commissioning of a PoE network switch with a minimum of 24 ports, supporti IEEE 802.3af/802.3at standards, Gigabit Ethernet connectivity, integrated power supply, and sufficient power b to support connected devices such as IP cameras. The scope includes necessary mounting accessories, patch cal and integration with the surveillance or network system, ensuring compliance with IEC, BS, and IS standards.
G	Supply, installation, testing, and commissioning of a 48-inch LED monitor with full HD or 4K resolution, HDMI/VGA input support, wide viewing angle, and suitable for 24/7 operation in a surveillance control room environment. The scope includes wall mounting brackets or table stands, necessary cables, and connectors, ens compliance with IEC, BS, and IS standards.
H	Supply, installation, testing, and commissioning of CAT6 A Cable with PVC conduit with complete accessorie
I	TELEPHONE AND EPABX Supply, installation, Testing and Commissioning of telephone point wiring from telephone junction box to individual point with 2 pair drop wire (0.5mm copper wire) through 20 mm internal d PVC conduit concealed as per drawing and specification
J	Ditto; Supply, installation, Testing and Commissioning of RJ 11 wih GI box. as per Technical Specifications.
K	Ditto; Supply, installation, Testing and Commissioning of telephone junction box(TJB) made of 18 swg ms she cubical, concealed type with enamel paint complete with 4 IDC connector as per drawing and specification
L	Ditto; Supply, installation, Testing and Commissioning of 5 Pair Cable Wire (5X2X0.45) mm Heavy through R PVC Pipe.
M	Ditto; Supply, installation, Testing and Commissioning of 10 Pair Cable Wire (10X2X0.45) mm Heavy through Rigid PVC Pipe.
N	Ditto; Supply, installation, Testing and Commissioning of 20 Pair Cable Wire (20X2X0.45) mm Heavy through Rigid PVC Pipe.
O	Ditto; Supply, installation, Testing and Commissioning of 50 Pair Telephone DB with Crown tag
P	Ditto; Supply, installation, Testing and Commissioning of 2/20 Drop Wire.
R	SUPPLY, INSTALLATION AND COMISSIONING OF EPABX SYSTEM MAKE OF ALKATEL, ALLCOM PANASONIC OR SIMILLAR EQUIVALENT. 8-72 Lines EPABX
S	THREE PHASE POWER SOCKET POINT WIRING: Supply, installation, testing, and commissioning of 3 ph 32 amp point wiring using 3 nos of 6 sq. mm and 1 no of 2.5 sq. mm FRLS copper wires, routed through metal flexible conduit from the DB to various points as per the approved drawings and specifications. The installation includes 3 phase industrial sockets, boxes, conduits, fittings, and all necessary accessories, in compliance with BS, and IS standards. (Cost Including of 3 phase socket with metal flexible conduit and box)

T	Ditto; Supply, installation, testing, and commissioning of 3 phase 16 amp point wiring using 3 nos of 4 sq. mm no of 2.5 sq. mm FRLS copper wires, routed through metal flexible conduit from the DB to various points as pe approved drawings and specifications. The installation includes 3 phase industrial sockets, boxes, conduits, fitti and all necessary accessories, in compliance with IEC, BS, and IS standards. (Cost Including of 3 phase socket metal flexible conduit and box)
d)	**WIRING AND CABLES**
A	Supply, installation, testing, and commissioning of ladder-type cable trays size 500 x 75 made of galvanized ste with powder coated with a minimum thickness of 2mm, including all necessary bends, tees, couplers, support brackets, and hardware. The scope includes earthing of the tray using GI earthing strips (minimum 25mm x 6m with proper connectors, ensuring compliance with IEC, BS, and IS standards for safety and durability. The cabl trays are designed for optimal load distribution and cable management in both indoor and outdoor environment
B	Supply, installation, testing, and commissioning of ladder-type cable trays size 300 x 75 made of galvanized ste with powder coated with a minimum thickness of 2mm, including all necessary bends, tees, couplers, support brackets, and hardware. The scope includes earthing of the tray using GI earthing strips (minimum 25mm x 6m with proper connectors, ensuring compliance with IEC, BS, and IS standards for safety and durability. The cabl trays are designed for optimal load distribution and cable management in both indoor and outdoor environment
C	Supply, installation, testing, and commissioning of perforated cable trays size 300 X75 mm, made of GI with p coated with a thickness of not less than 2mm, including bends, tees, couplers, support brackets, and all necessar hardware. The scope includes earthing of the tray using GI strips (minimum 25mm x 6mm) with appropriate connectors and compliance with IEC, BS, and IS standards for safe and reliable installation.
D	Supply, installation, testing, and commissioning of perforated cable trays size 200 X 50 mm, made of GI with powder coated with a thickness of not less than 2mm, including bends, tees, couplers, support brackets, and all necessary hardware. The scope includes earthing of the tray using GI strips (minimum 25mm x 6mm) with appropriate connectors and compliance with IEC, BS, and IS standards for safe and reliable installation.
D	Supply, installation, testing, and commissioning of perforated cable trays size 150 X 50 mm, made of GI with powder coated with a thickness of not less than 2mm, including bends, tees, couplers, support brackets, and all necessary hardware. The scope includes earthing of the tray using GI strips (minimum 25mm x 6mm) with appropriate connectors and compliance with IEC, BS, and IS standards for safe and reliable installation.
F	Supply, installation, testing, and commissioning of perforated cable trays size 100 X 50 mm, made of GI with powder coated with a thickness of not less than 2mm, including bends, tees, couplers, support brackets, and all necessary hardware. The scope includes earthing of the tray using GI strips (minimum 25mm x 6mm) with appropriate connectors and compliance with IEC, BS, and IS standards for safe and reliable installation.
G	EXTERNAL LIGHTNING PROTECTION SYSTEM AS PER IS/IEC 62305-3 Supply, installation, testing, an commissioning of ceiling, wall and Exhaust fans complete with all necessary accessories, including suspension brackets, and wiring, as per the approved drawings and specifications. The fans shall be of IEC/BS/IS standard fans should have a high-efficiency motor, corrosion-resistant blades, and speed control options. Each fan shall b supplied with appropriate mounting kits and should be installed and tested in compliance with IEC standards an project's electrical requirements. The fans shall be certified for CE, RoHS, and ISI marking, ensuring high qual and safety. Supply, installation, testing & commissioning of 8mm Aluminium Solid Round Conductor for build terrace as a air terminal to meet the requirements of IS/IEC 62305 and IEC 62561-2.
H	Ditto; Supply, installation, testing & commissioning of Parapet conductor holder for fixing 8mm Aluminium conductor on the parapet surface to meet the requirement of IS/IEC - 62305
I	Ditto; Supply, installation, testing & commissioning of Straight conductor connector for interconnecting 8mm Aluminum conductor to meet the requirement of IEC 62305. Tested for Electrical , Mechanical and chemical a IEC 62561.
J	Ditto; Supply, installation, testing & commissioning of suitable Stainless Steel cross connector for 8- 10 mm ro AL conductor to meet the requirement of IS/IEC - 62305.
f)	**STANDBY GENERATOR**
A	Supply, installation, testing, and commissioning of a 350 kVA diesel generator set comprising the following: a phase, 415 V, 50 Hz, enclosed-type exhaust system with silencer, liquid-cooled diesel engine compliant with IS 8528 standards; an air-cooled engine model designed for low emissions, meeting EU Stage IIIA/US EPA stand a brushless, self-excited, 4-pole synchronous alternator with 415 V output, 50 Hz frequency, IP23 protection, C H insulation, and automatic voltage regulation (AVR). The generator set shall include a fully integrated, microprocessor-based digital control panel featuring AMF (Automatic Mains Failure) functionality, auto-start/s operation, protection against overload, short circuit, under/over voltage, low oil pressure, and other critical faul along with remote monitoring capability.

B	Fuel Tank UL-listed, steel, 12-hour capacity, fuel tank with manual/automatic fuel gauge, level sensors, and sp containment.
C	Earthing System Complete earthing system with copper rods, earth cables, and earthing clamps, compliant with 60364 and local electrical codes.
g)	**TRANSFORMER**
A	Supply, installation, testing & commissioning of 800 kVA, 11 kV/400 V, ONAN (Oil Natural Air Natural) coo type, 3-phase, 50 Hz, copper-wound transformer. Tap changer with ±5% adjustment range in 5 steps (±2.5% pe step) for HV side voltage regulation. Tap changer for real-time voltage adjustment on the LV side, suitable for variations.
j)	**SUB LV PANEL**
A	LT Panels suitable for 415 V, 3 phase, 4 wire, 50 Hz power distribution system. The PCC panel shall be fabrica using CRCA sheet steel of 14/16 SWG thickness, with a durable powder-coated finish to ensure corrosion resis and longevity. The design will include precise cut-outs for instruments and switches, ensuring easy installation accessibility. Adequate provision for earthing will be made, with the inclusion of suitable lugs and terminals to ensure safety and compliance. All design and components will adhere to IEC 61439 standards for low-voltage switchgear, ensuring reliability and performance. Additionally, the component ratings and quantities will be customized based on the specific power requirements of the site to meet project demands effectively. MDB 1 a with Followings: 1 No. 200 A 4 Pole MCCB , 36 kA Incomer 1 Set of 300 A TPN CU BUSBAR 1 no of Earth bars Outgoing: 6 Nos.of 80 Amp FP MCCB, 25 kA 2 Nos.of 32 Amp - 63 Amp FP MCCB, 25 kA 10 Nos.of 4 Amp DP MCB, 10 kA 4 Nos.of 16-32 Amp DP MCB, 10 kA R-Y-B indicator lamps and fuse icluding Cable gl for incoming and outgoing cables
B	Ditto; MDB 3 and 6 with Followings: 1 No. 250 A 4 Pole MCCB , 36 kA Incomer 1 Set of 300 A TPN CU BUSBAR 1 no of Earth Bus bars Outgoing: 5 Nos.of 80 Amp FP MCCB, 25 kA 2 Nos.of 32 Amp - 63 Amp FI MCCB, 25 kA 10 Nos.of 40 Amp DP MCB, 10 kA 4 Nos.of 16-32 Amp DP MCB, 10 kA 2 Nos. 6 - 32 A SP , MCB R-Y-B indicator lamps and fuse icluding Cable glands for incoming and outgoing cables
C	Ditto; MDB 4 and 5 with Followings: 1 No. 250 A 4 Pole MCCB , 36 kA Incomer 1 Set of 300 A TPN CU BUSBAR 1 no of Earth Bus bars Outgoing: 5 Nos.of 63 Amp FP MCCB, 25 kA 3 Nos.of 32 Amp - 63 Amp FI MCCB, 25 kA 10 Nos.of 40 Amp DP MCB, 10 kA 4 Nos.of 16-32 Amp DP MCB, 10 kA R-Y-B indicator lam and fuse icluding Cable glands for incoming and outgoing cables
D	Ditto; MDB 8 with Followings: 1 No. 250 A 4 Pole MCCB , 36 kA Incomer 1 Set of 300 A TPN CU BUSBAR of Earth Bus bars Outgoing: 5 Nos.of 80 Amp FP MCCB, 25 kA 10 Nos.of 40 Amp DP MCB, 10 kA 3 Nos.of Amp DP MCB, 10 kA R-Y-B indicator lamps and fuse icluding Cable glands for incoming and outgoing cables
ii	**EARTHING SYSTEM**
A	Supply, installation, testing & commissioning of 10 mm copper bonded Round steel solid Conductor for ring earthing meet the requirements of IEC 62305 and IEC 62561-2.
B	Supply, installation, testing & commissioning of conductor holder for fixing the (wall) down conductor after te joint for holding 10 mm copper bounded Round steel solid Conductor to meet the requirement of IEC – 62305.
C	Supply, installation, testing & commissioning of UL Listed Maintenance Free Copper coated Earth rod of 3 mt length having the dia. of 25 mm with copper coating thickness of 250 microns. The rod has been tested for Dimension, Marking, Tensile Strength,Salt mist, coating thickness, Electrical resistivity test before and after corrosion test as per IEC 62561-2 & UL 467.
D	Supply, installation, testing & commissioning of earth enhancing mineral compound tested for leaching and TC with NABL accredited Lab as per IEC 62561. (25 kg per bag)
E	Supply, installation, testing & commissioning of make Heavy duty Chamber Inspection Pit made up of plastic material.
F	Supply, installation, testing & commissioning of Universal Clamp made up of stainless steel for terminating ca flat conductor.
G	25x6 mm Copper Strip
H	25x3 mm Copper Strip
I	8 SWG Cu Wire
J	10 SWG Cu wire
	Supply, Install, Test and Commission the following to the satisfaction of the Engineer

	Light Fittings, Fans and Switches
A	CABLE SHOES AND CABLE GLANDS Supply and installation of cable shoes at both ends of armored and u armored cables from Transformer to MCP and from MCP to various DBs. 4-16 sq.mm. Cable Shoe
B	Ditto; 25 sq.mm. Cable Shoe
C	Ditto; 35 sq.mm. Cable Shoe
D	Ditto; 50 sq.mm. Cable Shoe
E	Ditto; 3.5 core 120 sq. mm. Aluminium Cable Glands
F	Ditto; 3.5 core 150 sq. mm. Aluminium Cable Glands
G	Ditto; 3.5 core 185 sq. mm. Aluminium Cable Glands
H	Ditto; 3.5 core 240 sq. mm. Aluminium Cable Glands
I	Ditto; 3.5 core 300 sq. mm. Aluminium Cable Glands
J	Ditto; 3.5 core 400 sq. mm. Aluminium Cable Glands
K	LIGHT FIXTURES: Supply, installation, testing, and commissioning of the following light fixtures, complete i respects as per the drawings and specifications. The fixtures shall comply with the technical specifications and selected from samples approved by the client and the electrical engineer. Fixtures should comply with standard as IES LM-79, IES LM-80, TM-21, IEC 60598, and IEC 62471 for safety, efficiency, and photometric performance..The light fixtures must be certified as per LM-79 and LM-80 standards and bear certifications suc CE, RoHS, UL, ETL, or equivalent. 12 watt recessed/surface diffused round backlit LED with aluminium PDC housing, Lumen efficacy > 100 lm/watt , high efficiency non yellowing polycarbonate diffuser, deep down opti glare free light, Driver must have Constant current/constant voltage, flicker-free, and surge-protected protection Total Harmonic Distortion (THD): ≤ 10%, Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the application, CRI ≥ 80 life span minimum 50000 Hrs at L70, least 5 years warranty.
L	Ditto; 15 watt recessed/surface diffused round backlit LED with aluminium PDC housing, Lumen efficacy > 10 lm/watt , high efficiency non yellowing polycarbonate diffuser, deep down optics for glare free light, Driver mu have Constant current/constant voltage, flicker-free, and surge-protected protection, Total Harmonic Distortion (THD): ≤ 10%, Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the application, CRI ≥ 80 life span minimum 50000 Hrs at L70, at least 5 years warranty.
M	Ditto; 18 watt recessed/surface diffused round backlit LED with aluminium PDC housing, Lumen efficacy > 10 lm/watt , high efficiency non yellowing polycarbonate diffuser, deep down optics for glare free light, Driver mu have Constant current/constant voltage, flicker-free, and surge-protected protection, Total Harmonic Distortion (THD): ≤ 10%, Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the application, CRI ≥ 80 life span minimum 50000 Hrs at L70, at least 5 years warranty.
N	Ditto; 24 watt recessed/surface diffused round/square backlit LED with aluminium PDC housing, Lumen effica 100 lm/watt , high efficiency non yellowing polycarbonate diffuser, deep down optics for glare free light, Drive must have Constant current/constant voltage, flicker-free, and surge-protected protection, Total Harmonic Disto (THD): ≤ 10%, Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the application, CRI ≥ 80 life span minimum 50000 Hrs at L70, at least 5 years warranty.
O	Ditto; IP 65 rated 6.5 W/mtr strip light flexible and customisable design as per requirement, Inbuilt 220 V LED driver including with 3 kV surge protection with high color consistancy. burning hours > 50000 Hrs.
P	Ditto; 20 Watt, 4 ft. long IP 65 LED Non Corrosive Weatherproof Lighting, Lumen efficacy > 100 lm/watt , hi efficiency non yellowing polycarbonate diffuser, deep down optics for glare free light, Driver must have Consta current/constant voltage, flicker-free, and surge-protected protection, Total Harmonic Distortion (THD): ≤ 10 Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the application, CR 80 life span minimum 50000 Hrs at L70, at least 5 years warranty.
R	Ditto; 9-12 Watt LED Slim Mirror Light with luminous flux of not less than 100 lm/watt, CCT between 4000 - 6500K. CRI >85. burning hours > 50000 Hrs.

S	CEILING / EXHAUST FAN: Supply, installation, testing, and commissioning of ceiling, wall and Exhaust fan complete with all necessary accessories, including suspension rods, brackets, and wiring, as per the approved drawings and specifications. The fans shall be of IEC/BS/IS standard. The fans should have a high-efficiency m corrosion-resistant blades, and speed control options. Each fan shall be supplied with appropriate mounting kits should be installed and tested in compliance with IEC standards and the project's electrical requirements. The f shall be certified for CE, RoHS, and ISI marking, ensuring high quality and safety. 48" Ceiling Fan, Sweep 120 mm, Power consumption 74 W, Speed 380 RPM, Air delivery 230 CMM , 100% copper motor, double ball bea dynamically balanced blades and anti-rust aluminium body
T	Ditto; 16" Wall Fan, Sweep 400 mm, Power input 50 watts, speed 1300 rpm, air delivery 15 cmm, 3 modes of operations with Corrosion resistant powder coated guards
U	Ditto; 9 " Exhaust Fan, motor speeds no. 1, 4 no. of blades, sweep size 380 mm, Aerodynamically designed & Balanced Blade, Metallic finish.
V	Ditto; 5 Step Fan Regulator, Poly Carbonate.
W	POWER SOCKET POINT WIRING: Supply, installation, testing, and commissioning of 3-pin 6A/16A univers Twin socket with switch, socket point wiring using 2 nos of 4 sq. mm and 1 no of 1.5 sq. mm FRLS copper wir routed through 25 mm PVC HMS conduit from the DB to various points as per the approved drawings and specifications. The installation includes modular power switches, sockets, boxes, conduits, fittings, and all nece accessories, in compliance with IEC, BS, and IS standards. (Cost Including of Power socket with switch and M box)
X	THREE PHASE POWER SOCKET POINT WIRING: Supply, installation, testing, and commissioning of 3 ph 32 amp point wiring using 3 nos of 6 sq. mm and 1 no of 2.5 sq. mm FRLS copper wires, routed through metal flexible conduit from the DB to various points as per the approved drawings and specifications. The installation includes 3 phase industrial sockets, boxes, conduits, fittings, and all necessary accessories, in compliance with BS, and IS standards. (Cost Including of 3 phase socket with metal flexible conduit and box)
	Wiring and Cables
A	Supply, Installation and Testing Power cable with aluminum conductor 1100 volt grade, XLPE insulation, and armoring, compliant with IEC, BS, or IS standards of cable from Transformer to MCP and internal power cable other power pane laid underground/ Overgorund through HDPE pipe and laid through cable tray as per specific (Excluding the cost of cable tray) 6 mm2 2 core Copper XLPE Armoured Conductor
B	Ditto; 10 mm2 2 core Copper XLPE Armoured Conductor
C	Ditto; 4 mm2 3 core Copper XLPE Armoured Conductor
D	Ditto; 6 mm2 4 core Copper XLPE Armoured Conductor
E	Ditto; 10 mm2 4 core Copper XLPE Armoured Conductor
F	Ditto; 16 mm2 4 core Copper XLPE Armoured Conductor
G	Ditto; 50 mm2 3.5 core Aluminium XLPE Armoured Conductor
H	Ditto; 120 mm2 3.5 core Aluminium XLPE Armoured Conductor
I	Ditto; 150 mm2 3.5 core Aluminium XLPE Armoured Conductor
J	Ditto; 185 mm2 3.5 core Aluminium XLPE Armoured Conductor
K	Ditto; 240 mm2 3.5 core Aluminium XLPE Armoured Conductor
L	Ditto; 300 mm2 3.5 core Aluminium XLPE Armoured Conductor
M	Ditto; 400 mm2 3.5 core Aluminium XLPE Armoured Conductor
N	Ditto; 2.5mm2 3 core Copper XLPE Armoured Conductor
O	LIGHT POINT WIRING " Supply, installation, testing, and commissioning of light point wiring from the desig Distribution Board (DB) to various points, using two 2.5 sq.mm FRLS copper conductor wires through 25 mm conduits, including modular switches, switchboards, boxes, conduits, fittings, and all necessary accessories, as IEC/BS/IS standards. The rate for point wiring shall cover circuit wiring from the DB to the first light, fan, or c switch, and looping between switches, lights, and fans for one-way or two-way control, as per the drawings and specifications. Cable jointing is strictly prohibited except at switches and fixtures, ensuring compliance with IEC/BS/IS standards. (Cost Including Metal box and Modular switch)" Light Point Wiring , One Way
P	Ditto; Light Point Wiring, Twe Way
ELEMENT No.	**FINISHING**

14	
a)	**INTERNAL FINISHINGS**
i)	**Floor finish: (Tiles, slab or block finishings)**
a)	**Porcelain Tiles**
A	Non-glazed porcelain tile fixing on floor and skirting of approved color, brand,pattern & thickness in proper lin level laid in required thickness base plaster of 1:4 cement sand mortar and green morter with 4mm joints filled special tile grout as per drawing , specification and instruction all complete.
B	18mm thick marble for floor & wall skirting of approved color, brand & pattern in proper line & level laid in 2 thick of 1:2 cement sand mortar and green mortar, joints filled with special grout and providing nosing, mouldi groove cutting etc. as required as per drawing , specification and instruction all complete.
C	2mm thick Homogeneous Phthalate free, PVC Vinyl flooring with single layer of PVC of approved brand & pa in proper line as per drawing , specification and instruction all complete.
b)	**Beds and Backing**
A	Cement and sand screed (1:3) steel trowelled to a smooth floor finish laid on concrete bed,internally. 40mm thi screed to floor
ii)	**Wall finish:**
a)	**Internal Plastering**
A	15mm To walls, beams, columns and the like; to concrete or block work base; Internal plastering in two coats, coat 12mm thick cement and sand mix (1:3) steel trowelled;prepare and apply second coat 3mm thick stucco st trowelled to smooth finish,includding sanding with sand paper.
b)	**Wall Tiles or Tanga Stones/Slates**
A	Glazed porcelain wall tiles, imported from Italy or other approved equal; with approved colour; glazed; to regu pattern; bedding and jointing in cement mortar (1:4); grouting joints with coloured cement Walls tiles to approv sizes
B	Providing and laying Hardwood on floor & wall skirting of approved color, brand & pattern in proper line & le laid in 20 mm thick of 1:2 cement sand mortar and green morter, joints filled with special grout and providing nosing, moulding groove cutting etc. as required as per drawing , specification and instruction all complete. Hardwood on floor & wall skirting
c)	**Beds and backings**
A	CHICKEN WIRE MESH WORKS Providing & fixing Chicken wire mesh at junction of RCC & Brick/block/c board walls before plaster works including fixing in position with steel nails of 25mm in length approved at rec distance with scaffolding all complete as per drawing, specifications & instructions of Engineer Concrete or blockworks surface areaas
b)	**EXTERNAL FINISHINGS**
ii)	**Wall finish**
a)	**External Plastering**
A	15mm To walls; to concrete or block work base; External plastering in two coats, first coat 12mm thick cement sand mix (1:3) steel trowelled;prepare and apply second coat 3mm thick stucco steel trowelled to smooth finish,includding sanding with sand paper.
ELEMENT No. 15	**PAINTING AND DECORATING**
a)	**INTERNAL WORK:**
A	Painting, Internal work, three coats, silk acrylic emulsion paint, plaster surface Walls and Ceiling generally
b)	**EXTERNAL WORK:**
i)	**External Painting**
A	Painting, External work, three coats weather guard paint; cement render surfaces Walls and Ceiling generally
ii)	**Gloss/ Oil Painting**
A	STEEL SURFACES PAINTING Prepare and apply two or more coats of Synthetic Enamel Paint over timber/i

	surface including one coat of primer to give an even and uniform shade as per drawing, specification and instructions. Gerally to grilles surfaces
	PART B: BUS STAND – PRIME COST & PROVISIONAL SUMS
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 forseen, defined or d should be used in whole or in part at the discretion of the Architects.
A	Allow a Provisional sums of Amount to be spent on discretion of the Project Manager
B	Allow percentage of profit and overheads
C	Allow a Provisional Sum amount for constructing Underground water Tank of 200,000 Cum
	PART B: BUS STAND – BUS AREA/SHED
BILL No 3	**MEASURED WORKS**
ELEMENT No.1	**SUBSTRUCTURE (ALL PROVISIONAL)**
1	**Excavation and Earthworks;**
A	Clear site of small bushes, shrubs, undergrowth, and the like and grub up their roots
B	Excavate over site to remove vegetable soil commencing at ground level average depth 150mm; deposit in spoi heaps and cart away from site
C	Earthwork in excavation using manpower/machine in all kind of soil for foundation trenches of pit, raft etc. inc the cost of dressing of sides, ramming of bottom as per drawing, specification & approval of engineer.
D	Ditto; Extra over excavating in hard rock
E	Earth back filling well rammed and consolidated around the foundation
F	Load, wheel and cart away surplus excavated material from site.
G	Imported Granular fill materials Selected approved backilling well rammed and consolideted layers to make up levels under floors
H	Ditto; Sand filling worksto make up levels under floors
2	**Disposal of water:**
A	Allow for keeping all excavation free from water (except spring or running water) by pumping, baling or by oth means necessary
3	**Planking and strutting.**
A	Allow for provision and subsequent removal of planking and strutting to uphold and maintain all faces of excavations.
4	**Hardcore**
A	150 mm thick well rammed and compacted bed under floors blinded with 25 mm thick murram or quarry dust.
5	**Soil sterilization:**
A	Gammalin 20 solution or equal and approved; applied at a rate of 450ml per square metre over hardcore surface beds and top of foundation walls.
B	Ditto; at a rate of 450ml per linear metre of 300mm. width to 235x 600mm. deep backfilling to one external sid foundations.
6	**Damp Proof Membrane**
A	500 Gauge polythene damp proof membranes; laid in two layers on sand blinded hardcore bed surfaces
7	**CONCRETE WORK:**
	Plain insitu concrete grade '15'
A	Concrete Blinding
	Plain insitu concrete grade '20'

A	Concrete bed, foundation and ramp
8	**REINFORCEMENTS:**
I	**High tensile steel bar reinforcements with a strength of 500N/mm2 to BS 4449:1969: including bends, ho**
A	Various Sizes
9	**Formwork:**
	Vertical or battering surfaces
A	Sawn Formwork generally To Beam
B	Ditto; To Slab, Raft, Stairs, Rcc walls, Sill/lintel etc
11	**FINISHINGS**
	Render; cement and sand (1:3); trowelled
A	12mm thick; to plinth; to concrete or block work base
12	**DAMP PROOFING**
A	230mm wide; Hessians based damp proof course; laid on blockwork with 150mm end laps
12	**Prepare and apply three coats of black bituminous paint on:**
A	Rendered surfaces to plinth Walls over 300 mm high
ELEMENT NO.4	**WALLING.**
1	**BLOCKWORK:**
I	**Solid concrete blocks to BS 6073 Type 'A' dense aggregate, average compressive strength 7N/sq mm; in c**
A	230mm. Walls.
3	**PARTITIONING**
	COMPOSITE UNITS
A	Supplying, fabricating and fixing in position of metal related works by connecting plate, angle iron, MS plate, a making metal stair case, MS gate, gratings, grill etc. including necessary hole cutting , grinding, welding/boltin oxide paint with all necessary fixtures as per drawing specification and instruction of engineer all complete.
B	Supplying, fabrication and fixing in position 1000 to 1200mm high 16 gauge stainless steel railing for staircase verandah with 50 mm dia for King/newel post, 38 mm dia for intermediate/balusters @ 1 to 1.5 m c/c spacing a one no. 50 mm dia for hand rail on top, and 6 layer of 12.5 mm dia solid rod horizontal/inclined members with necessary fixtures and fitting such as brass caps, necessary hole cutting, metal grip, welding, jointing all compl per drawing , specification & approval of Engineer.
ELEMENT No.5	**ROOFING**
1	**ROOF COVERINGS**
V	**Kryton water treatment membrane or any other equal and approved type laid on screeded bed (m.s) to r**
A	Providing & application of two or more coat of elastromeric waterproofing works by using fiber glass reinforce meeting the standard ASTM D4404-01 for the shear wall, basement, toilet, bathroom,terrace etc.Including the c the cleaning the surface all complete elastromeric waterproofing work as per drawing, specification and instruc
6	**FLAT ROOF TREATMENTS**
	BEDS or BACKINGS; MORTAR; cement and sand (1:3); screeded; to roofs; level or to falls; to concret
A	Providing, mixing, laying and compacting screeding on floor in true line and level including the cost of curing drawing, specification and instruction of engineer 38 mm thick with (1:2:4 concrete) screeding
ELEMENT No.6	**DOORS:**
2	**Fire Resistant Door**
	Supply and fix 90 minutes fire rated galvanized anti corrosion plate panel 2mm, door weight 150kg comp per Architect approval
A	Supply, fabrication and fixing in position of Aluminium door, window and ventilations made of bronze anodise section including all necessary accessories such as rolers, weather brush, hook locks, slide lock and pull SS har

	tower bolt, dual locks, gaskets, floor springs, water drainages, silicon , glass of 6 mm thick for door & 5 mm th window & 16 gauge GI fly screens on all openable windows & 9mm th. laminated particle board for doors 0n t and balocny etc for following sections all complete as per drawing, specification and approval of engineer. Doo Single/Double panel Swing/Sliding/Casement Section size (102*45*1.5mm) fitted with 5mm clear glass or 9m thick laminated board or ACP board all complete.
B	Ditto; Providing and fixing Double glazed 2 or 3 panel Sliding Window of aluminum section in naturally anodized/powder coated colour. Section size (87*56*1.5mm) fitted with 5mm clear glass with fly mesh shutter complete.
C	Ditto; Ventilations
ELEMENT No.8	**PLUMBING AND ENGINEERING INSTALLATIONS**
1	**SANITARY APPLIANCES**
i	**Supply and fix the following sanitary appliances including all connections and fixing to FLOORS or WA by services Engineers.**
A	Supply, install, test and commission, Sanitary Appliance as per specifications and schedule of sanitary fitting, (ARROW BRAND) However units of other manufacturers approved equal will be accepted. Supply and install of Commode of approved make White glazed earthenware close coupled Europen Water Closet set with standa Bakelite seat cover, nylone connector pipe complete with testing and ready for operation. Sanitary ware: Hindware,Parryware,Kholer or equivalent CP fixtures: Hindware,Parryware,Kholer / Jaguar or equivalent SWF pipe:Aajaya/ Marvel / Supreme or equivalent Water supply pipe and fitting: Aajaya / Raksya / Astral / Ashirbad equivalent
B	Ditto; Providing and fixing in position 580 mm size Orissa Pan Hind ware Special or Parry ware Special or equivalent Chinaware Flat Pan with 10 liters capacity white glazed flushing cistern including CP flushing bend angle valve, CP connector, flushing valve, seat cover connection to water and soil lines all complete with testin ready for operation as per drawings, specifications and instruction
C	Ditto; "RAK"or Equally approved,; 42.2cm X 60 cm white glazed porcelain clay Under Counter Hand washbas single central taphole, Complete with overflow, Tubular Type Siphon Waste (A874901), Stop Angel Valve (B7883AA) 0.5" monoblock basin mixer with non return valves and 1.25" pop up waste,1.25" plastic bottle trap 75mm seal.
D	Ditto; Supply and installation of 42.2cm X 60 cm white glazed porcelain Padestal Basin single lever Piller cock mm nylon Connector with both ends couplings, 32 mm CP bottle trap, pup up waste Coupling with testing and for operation. (Cold water) Sanitary ware : Duravit / Grohe / American Standard or equivalent.
E	Ditto; Supply and installation of 37" long and 8" deep Stainless steel Single bowl kitchen sink with drain board mm nylon Connector with both ends couplings, 32 mm CP bottle trap, waste Coupling, Swivel Cock with testi ready for operation.
F	Ditto; Porcelain clay white glaze Large flat back urinal size 61x41x38cm with 32mm CP bottle trap all comple with testing and ready for operation.
G	Ditto; 80cm X 36.5cm X 14cm thick white glazed earthenware urinal partition all complete .
H	Ditto; 15mm C.P. water spray with 1.2m long flexible pipe.
I	Ditto; Chrome plated toilet paper holder model
J	Ditto; Chrome plated Sava Soap dish or equal approved fixing with brass screws to backgrounds plugging
K	Ditto; Chrome plated Sava Towel Rod 24"x½" model (FFAS6588-908500BF0)
L	Ditto; 15mm diameter angle valve with wall flange.
M	Ditto; Mirror, special quality plate glass size 450 x 600 x 6mm thick with alkali resistant coating one side, fixi with domex screws to background requiring plugging
N	Ditto; Supply and installation of Bib cock
O	Ditto; Bronze Clean out (floor trap) including rodding eyes, necessary fittings and accessories, complete,press method, depth 24 mm and slip-in to50 mm PVC piping, overall size to be Square type 150mmx150mm, bright The drain will be complete with cover while the cover in clean out to be screwed via two star type screws.
2	**COLD WATER INSTALLATIONS DISTRIBUTION PIPES**
	IPS PIPE PN 20''Class C'' painted with special paint; including joints in running length.Fixing in accord
A	Supply, install, test and commission PPR pipe (DIZAYN GROUP) and tubing class "6" with PN10 to BS 4554

	screwed and socketed joints to BS 143 and 126 of approved manufacture. Pressure pipe work, installed, jointed tested complete as per BS standards with pipe fittings, bends, accessories, supports, hangers using clamps with rubber inlay, threaded rods, galvanized steel channels, sleeves, pipe marking, expansion joints, including earthv backfill, concrete encasement, all as specified and shown on drawings, ∅20mm Pipe
B	Ditto; Providing and fixing in position 580 mm size Orissa Pan Hind ware Special or Parry ware Special or equivalent Chinaware Flat Pan with 10 liters capacity white glazed flushing cistern including CP flushing bend angle valve, CP connector, flushing valve, seat cover connection to water and soil lines all complete with testin ready for operation as per drawings, specifications and instruction
C	Ditto; "RAK"or Equally approved,; 42.2cm X 60 cm white glazed porcelain clay Under Counter Hand washbas single central taphole, Complete with overflow, Tubular Type Siphon Waste (A874901), Stop Angel Valve (B7883AA) 0.5" monoblock basin mixer with non return valves and 1.25" pop up waste,1.25" plastic bottle tra 75mm seal.
B	Ditto; ∅25mm Pipe
C	Ditto; ∅32mm Pipe
D	Supply and installation of forged brass lever operator/gate valve of full flow with forged brass ball (Machine ar mirror smooth finish with hard chrome plated) and spindle with setting and gland of superior quality having minimum working pressure of 10 kg all complete. ∅20mm Pipe
E	Ditto; ∅25mm Pipe
F	Ditto; ∅32mm Pipe
G	Supply and install 2,000 litres capacity ELEVATED water tanks (Simtanks), including fixing inlet supply pipe, overflow pipe, wash out pipe, ball valve box with standard top acess and connection to water supply pipe as pe drawing.
H	Supply and installation of Drinking water fountain with all complete set ready for operation.
3	**SUPPLY PIPES**
A	Supply and instal uPVC pipes of class 'B' to BS Standards and fittings in running length as follows uPVC pipe installed, jointed and tested complete, to BS 8301, BS 4541, BS 5255 , BS 4660 and BS 5481 as applicable incl supports, pipe fittings, bends, Accessories, hangers, fixing at high level,insulation of the Exposed Pipes over th ceiling,Concrete encasement, Earthwork, backfilling,cleanouts,roding eyes, all as specified And shown on draw ∅50mm Pipe
B	Ditto; ∅75mm Pipe
C	Ditto; ∅110mm Pipe
5	**WASTE AND VENT PIPES:**
	UPVC pipes;Class 'B'; including fittings in running length.
A	Supply and installation of HDPE -Double wall Corrugated pipe (DWC) (SN8) with all necessary fitting includi excavation for laying the pipe in the trench, 100mm thick sand bedding, testing of joints and backfilling of soil complete as per drawings, specifications and acceptance of engineer-in-charge. ∅110mm Pipe
B	Ditto; ∅160mm Pipe
C	Ditto; ∅200mm Pipe
6	**FOUL WATER DRAINAGE**
iii	**MANHOLE**
A	Construct standard manhole size 600 x 600mm average depth 1500mm deep; in 150mm. thick solid concrete bl walls; 150mm. thick plain in-situ concrete grade '15' bed; complete with benching and all necessary pipe fittin 1No. cast iron manholes covers and frames; finished to wall sides and top of slab with water proof cement and render; including excavation back filling and removal of surplus material; all as per and shown in the drawings
B;	Ditto; Size (450x450x1000)mm
C	Rain water Chambers Size (450x450 x1200)mm
ELEMENT No.9	**ELECTRICAL INSTALLATIONS**

i	**Supply and install the following:**
a)	**DISTRIBUTION SYSTEM**
A	Supply, installation, testing and commissioning of Sub Distribution Board (Final Distribution Board) all compl Accessories, Cu Bus Bar, Cu Neutral and Earth Links. It should be The wall-mounting enclosure, made from h quality electro-galvanized steel (up to 1.6mm thick), is designed for indoor applications to accommodate all typ electrical switchgear and control gear assemblies, featuring a removable gland plate, Powder-coated mounting compliance with IEC and NEMA standards, double-door construction, and a 3-point cam lock for uniform lock larger sizes. All Circuit Breaker and Distribution board are as per Technical Specifications and IEC 60947-2 6 TPN DB Double Cover Glazed Door with Followings: 1 No. 20 A , DP, 10 kA MCB 20 Nos. of 6,10,16 amp M SP 1 Nos. of 20 Amp DP RCCB, 30mA
B	CABLES AND WIRES: Supply, Installation and Testing Power cable with aluminum conductor 1100 volt grad XLPE insulation, and armoring, compliant with IEC, BS, or IS standards of cable from Transformer to MCP ar internal power cable to other power pane laid underground/ Overgorund through HDPE pipe and laid through c tray as per specification. (Excluding the cost of cable tray) 16 mm2 4 core Copper XLPE Armoured Conductor
C	CABLE SHOES AND CABLE GLANDS Supply and installation of cable shoes at both ends of armored and u armored cables from Transformer to MCP and from MCP to various DBs. 4-16 sq.mm. Cable Shoe
D	LIGHT POINT WIRING Supply, installation, testing, and commissioning of light point wiring from the design Distribution Board (DB) to various points, using two 2.5 sq.mm FRLS copper conductor wires through 25 mm conduits, including modular switches, switchboards, boxes, conduits, fittings, and all necessary accessories, as IEC/BS/IS standards. The rate for point wiring shall cover circuit wiring from the DB to the first light, fan, or c switch, and looping between switches, lights, and fans for one-way or two-way control, as per the drawings and specifications. Cable jointing is strictly prohibited except at switches and fixtures, ensuring compliance with IEC/BS/IS standards. (Cost Including Metal box and Modular switch) Light Point Wiring , One Way
E	LIGHT FIXTURES: Supply, installation, testing, and commissioning of the following light fixtures, complete i respects as per the drawings and specifications. The fixtures shall comply with the technical specifications and selected from samples approved by the client and the electrical engineer. Fixtures should comply with standard as IES LM-79, IES LM-80, TM-21, IEC 60598, and IEC 62471 for safety, efficiency, and photometric performance..The light fixtures must be certified as per LM-79 and LM-80 standards and bear certifications suc CE, RoHS, UL, ETL, or equivalent. 8 watt recessed/surface diffused round backlit LED with aluminium PDC housing, Lumen efficacy > 100 lm/watt , high efficiency non yellowing polycarbonate diffuser, deep down opti glare free light, Driver must have Constant current/constant voltage, flicker-free, and surge-protected protection Total Harmonic Distortion (THD): ≤ 10%, Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the application, CRI ≥ 80 life span minimum 50000 Hrs at L70, least 5 years warranty.
F	Ditto; 24 watt recessed/surface diffused round/square backlit LED with aluminium PDC housing, Lumen effica 100 lm/watt , high efficiency non yellowing polycarbonate diffuser, deep down optics for glare free light, Drive must have Constant current/constant voltage, flicker-free, and surge-protected protection, Total Harmonic Disto (THD): ≤ 10%, Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the application, CRI ≥ 80 life span minimum 50000 Hrs at L70, at least 5 years warranty.
G	CEILING / EXHAUST FAN: Supply, installation, testing, and commissioning of ceiling, wall and Exhaust fan complete with all necessary accessories, including suspension rods, brackets, and wiring, as per the approved drawings and specifications. The fans shall be of IEC/BS/IS standard. The fans should have a high-efficiency m corrosion-resistant blades, and speed control options. Each fan shall be supplied with appropriate mounting kits should be installed and tested in compliance with IEC standards and the project's electrical requirements. The f shall be certified for CE, RoHS, and ISI marking, ensuring high quality and safety. 48" Ceiling Fan, Sweep 120 mm, Power consumption 74 W, Speed 380 RPM, Air delivery 230 CMM , 100% copper motor, double ball bea dynamically balanced blades and anti-rust aluminium body
H	Ditto; 5 Step Fan Regulator, Poly Carbonate.
I	POWER SOCKET POINT WIRING: Supply, installation, testing, and commissioning of 3-pin 6A/16A univers socket with switch, socket point wiring using 2 nos of 4 sq. mm and 1 no of 1.5 sq. mm FRLS copper wires, ro through 25 mm PVC HMS conduit from the DB to various points as per the approved drawings and specificatio The installation includes modular power switches, sockets, boxes, conduits, fittings, and all necessary accessori compliance with IEC, BS, and IS standards. (Cost Including of Power socket with switch and Metal box)
J	SECURITY CAMERA Supply, installation, testing, and commissioning of internal security cameras, including definition cameras (minimum 1080p resolution) with night vision, motion detection, and wide dynamic range (

	features, along with suitable mounting brackets, cabling (Cat6 or RG59 with power), connectors, and all necess accessories. The cameras shall be housed in aesthetically designed enclosures suitable for indoor use and shall comply with IEC, BS, and IS standards, ensuring seamless integration with the central monitoring system as pe project specifications.
K	Ditto; Supply, installation, testing, and commissioning of external security cameras, including weatherproof IP enclosures (minimum IP66), high-definition cameras (minimum 1080p resolution) with night vision, motion detection, and wide dynamic range (WDR) features, along with mounting brackets, junction boxes, cabling (Ca RG59 with power), connectors, and all necessary accessories. The system shall comply with IEC, BS, and IS standards and integrate with the central monitoring system as per project specifications
ELEMENT No. 14	**FINISHING**
a)	**INTERNAL FINISHINGS**
i)	**Floor finish: (Tiles, slab or block finishings)**
a)	**Porcelain Tiles**
A	10mm thick Virtified (600*600mm) Tile over screed bed with 4mm open joint including 1:4 CSM base plaster green morter, filling joints with special tile grout on floor & skirting of approved color and brand as per specifi and instruction of engineer.
B	Non-glazed porcelain tile fixing on floor and skirting of approved color, brand,pattern & thickness in proper lin level laid in required thickness base plaster of 1:4 cement sand mortar and green morter with 4mm joints filled special tile grout as per drawing , specification and instruction all complete.
C	2mm thick Homogeneous Phthalate free, PVC Vinyl flooring with single layer of PVC of approved brand & pa in proper line as per drawing , specification and instruction all complete.
b)	**Beds and Backing**
A	Cement and sand screed (1:3) steel trowelled to a smooth floor finish laid on concrete bed,internally. 38mm thi screed to floor
B	Providing, mixing, laying cement sand punning with 1:1 cement sand mortar on floors, wall in true line & level including curing as per drawing, specification and instructions of engineer all complete. Cement slarry General floor surfaces
ii)	**Wall finish:**
a)	**Internal Plastering**
A	15mm To walls, beams, columns and the like; to concrete or block work base; Internal plastering in two coats, coat 12mm thick cement and sand mix (1:3) steel trowelled;prepare and apply second coat 3mm thick stucco st trowelled to smooth finish,includding sanding with sand paper.
b)	**Wall Tiles or Tanga Stones/Slates**
A	Glazed porcelain wall tiles, imported from Italy or other approved equal; with approved colour; glazed; to regu pattern; bedding and jointing in cement mortar (1:4); grouting joints with coloured cement Walls tiles to approv sizes
c)	**Beds and backings**
A	Bed and backing; one coat work; cement and sand (1:4); 12mm Thick backing; to walls; to receive wall tiles; w floated
b)	**EXTERNAL FINISHINGS**
ii)	**Wall finish**
a)	**External Plastering**
A	15mm To walls; to concrete or block work base; External plastering in two coats, first coat 12mm thick cement sand mix (1:3) steel trowelled;prepare and apply second coat 3mm thick stucco steel trowelled to smooth finish,includding sanding with sand paper.
ELEMENT No. 15	**PAINTING AND DECORATING**
a)	**INTERNAL WORK:**
i)	**Painting and Decorations**

A	Painting, Internal work, three coats, silk acrylic emulsion paint, plaster surface Walls and Ceiling generally
b)	**EXTERNAL WORK:**
i)	**External Painting**
A	Painting, External work, three coats weather guard paint; cement render surfaces Walls and Ceiling generally
ii)	**Gloss/ Oil Painting**
A	Prepare and apply one undercoat and two full coats of gloss oil paint on metal surfaces: To grilles ; measured fl both sides. Gerally to grilles surfaces
	PART F: OFFICE FOE ENGINEERS – ELECTRICAL
BILL No 3	**MEASURED WORKS**
ELEMENT No.9	**ELECTRICAL INSTALLATIONS**
i	**Supply and install the following:**
a)	**DISTRIBUTION SYSTEM**
A	LOW VOLTAGE (LV) MAIN CIRCUITS INSTALLATIONS Supply from Transformer to Main Distribution DBA; cables through trench 4core x 35mm² XLPE/SWA/PVC/Cu cable
B	Supply from Generators to Main Distribution board DBA cables through trench 4core x 35mm² XLPE/SWA/PVC/Cu cable
C	Supply from Main Distribution board (DBA) to UPS and then to Clean Power Distribution Board DBU cables through trench 3core x 10mm² XLPE/SWA/PVC/Cu cable
D	Supply from Main Distribution board (DBA) to First floor Distribution Board DBF cable through tray/ladder 4 16mm² PVC/SWA/PVC/Cu cable
E	Supply from Main panel board toExternal use and pump Distribution Board (DBP) cable through tray/ladder 4c 16mm² PVC/SWA/PVC/Cu cable
F	Ditto; 4core x 6mm² PVC/SWA/PVC/Cu cable for fire fighting pump
G	Ditto; 4core x 6mm² PVC/SWA/PVC/Cu cable for booster water pump
H	Ditto; 4core x 4mm² PVC/SWA/PVC/Cu cable for external lights
I	MAIN CIRCUITS COMPONENTS Provide for Coordination with other trade and TANESCO for application, supply and installation of new 33kV service line and 125A, 400V TP&N digital metering unit c/w all necessary installation accessories
J	Supply and fix the following circuit components and accessories to surface and backgrounds requiring plugging MERLIN GERIN form 4 type B or similar approved with sheet steel case; fully shrouded; Supply and install 10 ways 125A TP&N distribution board (DBA) integral with 125A TPN MCCB and 25kA surge arrestor complete all MCCBs and accessories as per drawings
K	Ditto; Supply and install 6 ways 63TP&N weather proof distribution panel (DBF) integral with 63A TPN RCD incomer and outgoing devices three phase MCCBs and all accessories as per drawings
L	Ditto; Supply and install 6 ways 63TP&N weather proof distribution panel (DBP) integral with 63A TPN RCD incomer and outgoing devices three phase MCCBs and all accessories as per drawings
M	Ditto; Supply and install 4 ways 45A TP&N distribution board (DBU) integral with 45A TPN MCCB and 25kA surge arrestor complete with all MCCBs and accessories as per drawings
d)	**WIRING AND CABLES**
f)	**STANDBY GENERATOR**
g)	**TRANSFORMER**
ii	**EARTHING SYSTEM**
A	Supply and installation of Earth protection system for the Transformer Earth chamber with all necessary earth h voltage conductivity electrodes with drive head assemblies and earthing clamps with link to 2 x 1c x 25mm² Co cable PVC Yellow/Green for neutral terminal and separate earth chamber with link to 1c x 10mm² copper PVC Yellow/Green for transformer casing; Each chamber to have total resistance of not more than 1 Ohm
B	Supply and installation of Earth protection system for the DBA Two earth chambers spaced at minimum of 6m

	with all necessary earth high voltage conductivity electrodes with drive head assemblies and earthing clamps w link to Lightning air terminal and 1cx25mm² Copper cable PVC Yellow/Green; the total resistance of each eart chamber to be not more than 1ohm
C	Ditto; 1core x 16mm² Copper cable PVC Yellow/Green; for the DBF and DBP earthing from DBA
D	Ditto; 1core x 10mm² Copper cable PVC Yellow/Green; for the DBU earthing from DBA
	Supply, Install, Test and Commission the following to the satisfaction of the Engineer
	Distribution System
	Power Points
A	Supply to accessories and equipment ; 3 x 1core x 1.5mm² core PVC/Copper cable and upvc conduit ; bends et from the switches to the lights Lighting circuits ; light points ; in 78 Nr.
B	lighting switch circuits; one gang one way; in 22 Nr.
C	lighting switch circuits; one gang two way; in 6 Nr.
D.	lighting switch circuits; two gang one way; in 7Nr.
E	3 x 1core x 2.5mm² PVC/copper cable and upvc conduit ; bends etc, from the distribution boards to the outlets outlets circuits ; socket outlet points in 98 Nr
F	Ditto; Air conditioning circuits ; DP outlet points in 19 Nr
G	Ditto; Hand driers circuits ; DP outlet points in 4 Nr
H	Water heater circuits ; DP outlet points in 2 Nr in the kitchen and washing area
I	Inline Extract fan circuits ; DP outlet points in 4 Nr
J	Circuits to isolating devices, fuses, etc from the distribution boards to the 4core x 10mm² XLPE/SWA/PVC/Cu cable; Circuits to 45A TPN isolators for UPS
	Light Fittings, Fans and Switches
A	Switches ; MK Logic Plus Catalogue Reference Nr 10 amp : one gang ; one way Ref K4870 WHI
B	Ditto; 10 amp : one gang ; two way Ref K4871 WHI
C	Ditto; 10 amp : two gang ; one way Ref K4872 WHI
D	Switch sockets; MK Logic Plus Cat.Ref.Nr 2 gang 13A flush switch sockets white in colour as MK
E	Ditto; 2 gang 13A flush switch sockets Red in colour as MK
F	Double pole switches ; MK Logic Plus Catalogue Ref. Nr 20 amp ; Ref K 5423 WH1 marked AC units
G	Ditto; 20 amp ; Ref K 5423 WH1 marked WH units
H	Ditto; 20 amp ; Ref K 5423 HD marked WH units
I	Supply and fix the following lighting equipments and Luminaires ; complete with lamps tubes or bulbs ;Thorn Catalogue Reference Numbers Horizontal recessed downlight for 2x18W TC-DEL lamps as Thorn Chalice 190 code 96008886 - Type P
J	Surface mounted luminaire for direct lighting c/w 28W with backlit starburst 2D lamp as Lighting Direct Guam NGU/2D/HF/CL - Type D
K	Ditto; 1200mm surface/ wall mounted luminaire c/w 2x36W T26 Battern linear fluorescent lamps and twin aluminium narrow beam reflector as as Thorn Primata II sap code 96502778 - Type F
L	Ditto; Recessed downlight 16.8W LEDs c/w remote driver as JCC RAKULA code JCC71192 Type B
M	Ditto; Recessed wall light for step and pathways, stainless cover LED 3.2W as JCC711115 Dolomite - Type Q
N	Ditto; DENOTES SURFACE MOUNTED LIGHT 1X28W 2D AS LIGHTING DIRECT MAXIMO SAP COD NDY28/2D/HF/WH/9 LIGHT INDIRECT MAXIMO - Type E
O	Ditto; 600x600mm LED Slim Panel ECOMAX as Opple
P	Ditto; Exit sign single sided as thorn Voyager Elite X SAP CODE 96503790
Q	Ditto: Exit sign double sided as thorn Voyager Elite SX SAP CODE 96503785 with Legend Sap code 9621888 accessories Sap code96218865

R	FINAL CONNECTIONS In accordance with the Specification shrouds and fixing devices to water heaters, fan
S	LIGHTNING PROTECTION Lightning protection system Provide all necessary earth electrodes copper earthi tape, straps, earth plates,lightning terminals, test clamps and forked conductor rod and link to the main earthing x 25mm copper strip through the columns
T	Excavating trenches in compacted fill to receive above bed and surround; pipes or ducts; 150mm. thick sand be surround; back filling with selected excavated material leveling and compaction in layers; disposal of excavate material off site concrete casting and steel grating cover 500mm wide x average 500mm.deep
U	SUNDRIES Provide for all supports fixings anchors insulation blocks and anti vibration devices Provide for all identification plates discs charts and colour coding for Electrical system
V	TESTING AND COMMISSIONING Provide for testing and commissioning the foregoing and requirements described in the Specifications
	Wiring and Cables
A	CLEAN POWER SUPPLY Unintrupted power supply for clean power with; main control and indicator panels out facility ; 1 hour standby with 20kVA, 3 phases and 230/400V
	PART G: DAYWORKS
SERIES 9000	**DAYWORK RATES**
1.00	**Labour**
1.01	Unskilled Labour
1.02	Skilled Labour
1.03	Driver
1.04	Foremen
1.05	Working Headmen
1.06	Operator
1.07	Surveyor
1.08	Technician
2.00	**Material**
2.01	Ordinary Portland Cement
2.02	Reinforcement Steel
2.03	Coarse Aggregates for Concrete
2.04	Sand
2.05	Fine Aggregates for concrete
	Precast Pipe Culvert dia 900mm
	Precast Pipe Culvert dia 600mm
2.07	Natural gravel G15
2.08	Gravel G45
2.09	Petrol
2.10	Diesel
2.11	Performance Grade Bitumen (PG 35/50)
2.12	Cutback Bitumen MC 70
3.00	**Equipment**
3.01	Bulldozer
3.02	Wheel Loader
3.03	Motor Grader
3.04	Water Bowser

3.05	Tipper truck (7 tonne and under)
3.06	Dump truck (more than 7 tonne capacity)
3.07	Concrete Mixer
3.08	Concrete Vibrator
3.09	Pedestrian Roller
3.10	Pneumatic Tyred Roller
3.11	Pressure Bitumen Distributor
3.12	Excavator
3.13	Self Propelled vibrating roller
3.14	Mobile Crane (20 tonne)
	PART F: OFFICE FOR ENGINEERS – ICT
BILL No 3	**MEASURED WORKS**
ELEMENT No. 13	**ICT INSTALLATION**
a)	**Supply, install, test and commision the following: to the satisfaction of engineers**
i)	**EQUIPMENT**
A	40" LED Smart TV as Samsung
B	CABINET 22U SERVER RACK
C	Router
D	NETWORK SWITCH 48 PORTS
E	PATCH PANEL 48 PORTS
F	CABLE MANAGER
G	PATCH CODE 1M
H	DROP CABLE 3M
I	POWER DISTRIBUTION UNIT (PDU)
J	UTP CABLE CAT6
K	EXTENSION CABLE
L	FACE PLATE DOUBLE
M	MODULES KEYSTONE CAT6
N	Wireless Access Point
	PART A: GENERAL ITEMS
SERIES 1000	**GENERAL**
	General Requirements and Provisions
12.02	**Relocation of Services**
a	Arrange and pay for removal and/or alteration to Services provided by Agencies for Electricity Supply, Water Supply and Telecommunication Services.
b	Allow for contractors overhead and profits as a percentage of sub item 12.02 (a)
Section 1300	**Contractor's Establishment On Site and General Obligations**
13.01	**Contractor's General Obligations**
a	Sureties
b	Insurance of Works
c	Insurance of Constructional Plant & Equipment

d	Third Party Insurance
e	Allow for Contractor's overheads and profits as a percentage of subitem 13.01(a)
f	Allow for Contractor's overheads and profits as a percentage of sub item 13.01(b)
g	Allow for Contractor's overheads and profits as a percentage of sub item 13.01(c)
h	Allow for Contractor's overheads and profits as a percentage of sub item 13.01(d)
13.02	**Sign board**
a	Allow for erection standard project sign board at two locations
13.03	**Road Safety Awareness Programme**
a	Instituting Road Safety improvement, Training and Awareness Programs throughout the Contract period
b	(a) Allow Provisional sum for Road Safety Training
c	Allow for contractor's overhead and profits as a percentage of sub item 13.03(b)
Section 1400:	**Engineer's Accommodation and Attendance Upon Engineer and his Site Personnel**
14.06	**Four wheel drive double cabin pick-up for the Engineer and Employer:**
a	Provide vehicles for the Engineer, (Four Wheel Drive Double Cabin Pick - up as per Special Specification SS1407.01 and SS1412.01) approved by the Engineer (2 Nos)
b	Operate and maintain vehicles specified [in 14.06(a)] for an average of 4,500 km per month
c	Operate and maintain vehicles specified [in 14.06(a)] for travel distance in excess of average 4,500 km per mor
d	Allow for Contractor's overheads and profits as a percentage of sub item 14.06 (a)
14.07	**Survey Equipment for the Enginer**
a	Provide specified survey equipment for the Engineer
b	Allow for Contractor's overheads and profits as a percentage of sub item 14.07(a)
c	Maintain specified survey equipment for the Engineer (Ownership of survey equipment to revert to the Employ
14.09	**Laboratory equipment for the Engineer**
a	Testing by the Engineer at Laboratories acceptable by the Employer
b	Allow for Contractor's overheads and profits as a % of sub-item SS 14.09(a)
Section 1700	**Environmental Protection and Waste Disposal Environmental Protection and Waste Disposal**
17.14	**Environmental Protection and Waste Disposal**
i	Environmental and Social Mitigation works to be carried out in accordance with approved ESIA report with PE Monthly Rates to cover costs of compliance with Environmental protection and Waste disposal measures to be carried out in accordance with approved ESIA/ESMP by Environmental Authority as outlined in Volume 2C of Bidding Documents and for compliance with the general requirements of Clause 1700 of the Standard Specific
iii	Monthly rate to cover costs for compliance with provisional Health and Safety Management Plan (HSMP)
Section 1800:	**STD and HIV/AIDS alleviation measures**
18.01	**STD and HIV/AIDS Provisional**
(a)	Allow Provisional sum for Road Safety Training
ii	Allow for Contractor's overhead and profits as a percentage of sub item 18.01(a)
b	Instituting Road Safety improvement, Training and Awareness Programs throughout the Contract period
	PART B: BUS STAND – GUARD HOUSE
BILL No 3	**MEASURED WORKS**
ELEMENT No.8	**PLUMBING AND ENGINEERING INSTALLATIONS**
1	**SANITARY APPLIANCES**
A	SANITARY APPLIANCES AND FITTINGS Supply, install, test and commission, Sanitary Appliance as per

	specifications and schedule of sanitary fitting, (ARROW BRAND) However units of other manufacturers appro equal will be accepted. Providing and fixing in position 580 mm size Orissa Pan Hind ware Special or Parry wa Special or equivalent Chinaware Flat Pan with 10 liters capacity white glazed flushing cistern including CP flus bend, CP angle valve, CP connector, flushing valve, seat cover connection to water and soil lines all complete w testing and ready for operation as per drawings, specifications and instruction
B	Chrome plated toilet paper holder model
C	Chrome plated Sava Soap dish or equal approved fixing with brass screws to backgrounds plugging
D	15mm diameter angle valve with wall flange.
E	Supply and installation of Bib cock
F	Bronze Clean out (floor trap) including rodding eyes, necessary fittings and accessories, complete,press methoc depth 24 mm and slip-in to50 mm PVC piping, overall size to be Square type 150mmx150mm, bright finish. Th drain will be complete with cover while the cover in clean out to be screwed via two star type screws.
G	COLD/HOT WATER INSTALLATION Supply, install, test and commission PPR pipe (DIZAYN GROUP) an tubing class "6" with PN10 to BS 4554 with screwed and socketed joints to BS 143 and 126 of approved manufacture. Pressure pipe work, installed, jointed and tested complete as per BS standards with pipe fittings, b accessories, supports, hangers using clamps with rubber inlay, threaded rods, galvanized steel channels, sleeves marking, expansion joints, including earthwork, backfill, concrete encasement, all as specified and shown on drawings, ∅20mm Pipe
H	∅25mm Pipe
I	"Supply and installation of forged brass lever operator/gate valve of full flow with forged brass ball (Machine a mirror smooth finish with hard chrome plated) and spindle with setting and gland of superior quality having minimum working pressure of 10 kg all complete. " ∅20mm Pipe
J	∅25mm Pipe
K	SOIL, WASTE PIPELINES/VENTS Supply and instal uPVC pipes of class 'B' to BS Standards and fittings in running length as follows uPVC pipe work installed, jointed and tested complete, to BS 8301, BS 4541, BS 525 BS 4660 and BS 5481 as applicable including supports, pipe fittings, bends, Accessories, hangers, fixing at hig level,insulation of the Exposed Pipes over the ceiling,Concrete encasement, Earthwork, backfilling,cleanouts,ro eyes, all as specified And shown on drawings ∅50mm Pipe
L	∅75mm Pipe
M	∅110mm Pipe
N	EXTERNAL WATER SUPPLY, FOUL WATER DRAINAGE INSTALLATIONS FOUL WATER DRAINA Supply and installation of HDPE -Double wall Corrugated pipe (DWC) (SN8) with all necessary fitting includi excavation for laying the pipe in the trench, 100mm thick sand bedding, testing of joints and backfilling of soil complete as per drawings, specifications and acceptance of engineer-in-charge. Pipework ∅110mm Pipe
O	∅160mm Pipe
P	CIVIL WORKS Construction of Septic tank/ Soakaway pit/ Manholes/ Rainwater Chamber of different sizes o mm thick PCC (1:2:4) in foundation above gravel soling, 230 mm thick block wall, 120mm thick RCC slab for cover(M20), 12.5mm thick cement plaster (1:3) all inside the wall and benching top and bottom of the slab incl neat cement finish with SMC/FRP Man hole Frame 570mm, cover 475 mm square, 5 tons Capacity frame 45m Cover 28 mm th. and all necessary earth work in excavation in all kinds of soil as per drawing Manhole Chamb Size (450x450x1000)mm
Q	Size (600x600x1000)mm
R	Rain water Chambers Size (450x450 x1200)mm
ELEMENT No.9	**ELECTRICAL INSTALLATIONS**
i	**Supply and install the following:**
A	SUB DISTRIBUTION BOARD: Supply, installation, testing and commissioning of Sub Distribution Board (Fi Distribution Board) all complete Accessories, Cu Bus Bar, Cu Neutral and Earth Links. It should be The wall-mounting enclosure, made from high-quality electro-galvanized steel (up to 1.6mm thick), is designed for indoo applications to accommodate all types of electrical switchgear and control gear assemblies, featuring a removab gland plate, Powder-coated mounting plate, compliance with IEC and NEMA standards, double-door construct and a 3-point cam lock for uniform locking on larger sizes. All Circuit Breaker and Distribution board are as pe

	Technical Specifications and IEC 60947-2 "6 way SPN DB Double Cover Glazed Door with Followings: 1 No. , DP, 10 kA MCB 6 Nos. of 6,10,16 amp MCB SP 1 Nos. of 20 Amp DP RCCB, 30mA "
B	CABLES AND WIRES: Supply, Installation and Testing Power cable with aluminum conductor 1100 volt grad XLPE insulation, and armoring, compliant with IEC, BS, or IS standards of cable from Transformer to MCP ar internal power cable to other power pane laid underground/ Overgorund through HDPE pipe and laid through c tray as per specification. (Excluding the cost of cable tray) 25 mm2 2 core Copper XLPE Armoured Conductor
C	CABLE SHOES AND CABLE GLANDS Supply and installation of cable shoes at both ends of armored and u armored cables from Transformer to MCP and from MCP to various DBs. 25 sq.mm. Cable Shoe
D	LIGHT POINT WIRING " Supply, installation, testing, and commissioning of light point wiring from the desig Distribution Board (DB) to various points, using two 2.5 sq.mm FRLS copper conductor wires through 25 mm conduits, including modular switches, switchboards, boxes, conduits, fittings, and all necessary accessories, as IEC/BS/IS standards. The rate for point wiring shall cover circuit wiring from the DB to the first light, fan, or c switch, and looping between switches, lights, and fans for one-way or two-way control, as per the drawings and specifications. Cable jointing is strictly prohibited except at switches and fixtures, ensuring compliance with IEC/BS/IS standards. (Cost Including Metal box and Modular switch)" Light Point Wiring , One Way
E	LIGHT FIXTURES: Supply, installation, testing, and commissioning of the following light fixtures, complete i respects as per the drawings and specifications. The fixtures shall comply with the technical specifications and selected from samples approved by the client and the electrical engineer. Fixtures should comply with standard as IES LM-79, IES LM-80, TM-21, IEC 60598, and IEC 62471 for safety, efficiency, and photometric performance..The light fixtures must be certified as per LM-79 and LM-80 standards and bear certifications suc CE, RoHS, UL, ETL, or equivalent. 8 watt recessed/surface diffused round backlit LED with aluminium PDC housing, Lumen efficacy > 100 lm/watt , high efficiency non yellowing polycarbonate diffuser, deep down opti glare free light, Driver must have Constant current/constant voltage, flicker-free, and surge-protected protection Total Harmonic Distortion (THD): ≤ 10%, Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the application, CRI ≥ 80 life span minimum 50000 Hrs at L70, least 5 years warranty.
F	9 - 12 W LED , Wall BracketBulk Head light with luminous flux of not less than 90 lm/watt, CCT between 400 6500K. CRI >85 burning hours > 50000 Hrs.
G	24 watt recessed/surface diffused round/square backlit LED with aluminium PDC housing, Lumen efficacy > 1 lm/watt , high efficiency non yellowing polycarbonate diffuser, deep down optics for glare free light, Driver mu have Constant current/constant voltage, flicker-free, and surge-protected protection, Total Harmonic Distortion (THD): ≤ 10%, Power Factor (PF): ≥ 0.9, CCT 4000 - 6500 depending on the application, CRI ≥ 80 life span minimum 50000 Hrs at L70, at least 5 years warranty.
H	CEILING / EXHAUST FAN: Supply, installation, testing, and commissioning of ceiling, wall and Exhaust fan complete with all necessary accessories, including suspension rods, brackets, and wiring, as per the approved drawings and specifications. The fans shall be of IEC/BS/IS standard. The fans should have a high-efficiency m corrosion-resistant blades, and speed control options. Each fan shall be supplied with appropriate mounting kits should be installed and tested in compliance with IEC standards and the project's electrical requirements. The f shall be certified for CE, RoHS, and ISI marking, ensuring high quality and safety. 48" Ceiling Fan, Sweep 120 mm, Power consumption 74 W, Speed 380 RPM, Air delivery 230 CMM , 100% copper motor, double ball bea dynamically balanced blades and anti-rust aluminium body
I	5 Step Fan Regulator, Poly Carbonate.
J	POWER SOCKET POINT WIRING: Supply, installation, testing, and commissioning of 3-pin 6A/16A univers socket with switch, socket point wiring using 2 nos of 4 sq. mm and 1 no of 1.5 sq. mm FRLS copper wires, rou through 25 mm PVC HMS conduit from the DB to various points as per the approved drawings and specificatio The installation includes modular power switches, sockets, boxes, conduits, fittings, and all necessary accessori compliance with IEC, BS, and IS standards. (Cost Including of Power socket with switch and Metal box)
K	SECURITY CAMERA Supply, installation, testing, and commissioning of internal security cameras, including definition cameras (minimum 1080p resolution) with night vision, motion detection, and wide dynamic range (features, along with suitable mounting brackets, cabling (Cat6 or RG59 with power), connectors, and all necess accessories. The cameras shall be housed in aesthetically designed enclosures suitable for indoor use and shall comply with IEC, BS, and IS standards, ensuring seamless integration with the central monitoring system as pe project specifications.
L	Supply, installation, testing, and commissioning of external security cameras, including weatherproof IP-rated enclosures (minimum IP66), high-definition cameras (minimum 1080p resolution) with night vision, motion

	detection, and wide dynamic range (WDR) features, along with mounting brackets, junction boxes, cabling (Ca RG59 with power), connectors, and all necessary accessories. The system shall comply with IEC, BS, and IS standards and integrate with the central monitoring system as per project specifications
BILL No 4	**EXTERNAL WORKS**
1	**GUARD HOUSE**
ELEMENT No. 1	**SUBSTRUCTURE (ALL PROVISIONAL)**
1	**Excavation and Earthworks;**
A	EARTHWORK Removing bushes, shrubs, trees, etc. Clearing the site; grubbing up roots bushes, shrub, underg or the like
B	Excavate oversite to remove top soil average 150 mm, cart away and depisit away from site.
C	Excavation Earthwork in excavation using manpower/machine in all kind of soil for foundation trenches of pit, etc. including the cost of dressing of sides, ramming of bottom as per drawing, specification & approval of eng
D	Planking and strutting Allow for the provision and subsequent removal of planking and strutting to uphold and maintain all faces of excavations.
E	Disposal of water Allow for keeping excavations the site and excavations free of surface water (except spring running water) by bailing, pumping or other means.
F	Disposal Earth back filling well rammed and consolidated around the foundation
G	Load, wheel and cart away surplus excavated material from site.
H	Imported Granular fill materials Selected approved backilling well rammed and consolideted layers to make up levels under floors
I	Sand filling works to make up levels under floors
J	Hardcore Fill 150 mm thick well rammed and compacted bed under floors blinded with 25 mm thick murram o quarry dust.
A	Anti-termite Treatment Chemical anti-termite treatment, excuted complete by an approved specialist under a te guarantee, to surfaces of hardcore.
B	Backfilling, one side of wall foundations and the like at the rate of 8 litres per cubic metres.
C	Damp proof membrane Cabrodamp or equal and approved damp-proof membrane, laid over blinded hardcore(measured separately) with 300 side and end laps (measured net-allow for laps)
D	CONCRETE WORK Plain In-situ Concrete; Grade "15" norminal mix 1:3:6 using Ordinary Portland Cement (sand and coarse aggregates of 25 mm Concrete blinding
E	In-situ Concrete; Plain, Grade "20" including vibrating around reinforcement Concrete bed, foundation and ram
F	Reinforcement, bars;BS 4461; hot rolled derfomed high yield steel, straight or bent Various Sizes
G	Sawn Formwork generally To Beam
H	To Slab, Raft, Stairs, Rcc walls, Sill/lintel etc
I	DPC B.S 743 Type 5A; Hessian based; lapped at joints and angles; bedded in cement mortar (1:3) Horizontal 2 mm wide
J	Insitu finishings; cement and sand mortar (1:4); External render. To plinth 12mm thick
K	Painting; external work; prepare and apply three coats of black bituminous paint on renders surfaces: Walls ove mm high
ELEMENT No. 3	**WALLING;**
a)	**BLOCK WORK:**
i)	**Solid cement and sand blocks with strength of 5MPa: bedded and jointed in cement/sand mortar.**
A	FRAMED STRUCTURAL/ BLOCKWORKS BLOCKWORK Blockwork; solid concrete blocks; B.S.6073 Ty compresive strength 3.5 N/sq.mm in cement mortar(1:3) 230 mm thick walling
B	ELEMENT No. 3 : METAL WORKS METAL WORKS Supplying, fabricating and fixing in position of metal related works by connecting plate, angle iron, MS plate, and making metal stair case, MS gate, gratings, grill et including necessary hole cutting , grinding, welding/bolting red oxide paint with all necessary fixtures as per dr

	specification and instruction of engineer all complete.
ELEMENT No. 4	**ROOFING.**
a)	**ROOF STRUCTURE:**
i)	**STRUCTURAL TIMBERWROK:**
a)	**Well seasoned, treated softwood; pressure impregnated; moisture content not more than 20%**
a)	**Well seasoned, treated softwood; pressure impregnated; moisture content not more than 20%**
A	ROOF COVERING Flat roof screeding " Providing, mixing, laying and compacting screeding on floor in true l and level including the cost of curing as per drawing, specification and instruction of engineer. 13.1.1 38 mm th with (1:2:4 concrete) screeding"
B	Water Proofing Providing & application of two or more coat of elastromeric waterproofing works by using fibe glass reinforcement meeting the standard ASTM D4404-01 for the shear wall, basement, toilet, bathroom,terrac etc.Including the cost of the cleaning the surface all complete elastromeric waterproofing work as per drawing, specification and instrucitons.
ELEMENT No. 5	**DOORS**
a)	**WOOD WORK.**
i)	**Prime quality hardwood paneled doors**
A	ALUMINIUM WORKS Supply, fabrication and fixing in position of Aluminium door, window and ventilation made of bronze anodised section including all necessary accessories such as rolers, weather brush, hook locks, lock and pull SS handle, tower bolt, dual locks, gaskets, floor springs, water drainages, silicon , glass of 6 mm t for door & 5 mm th. for window & 16 gauge GI fly screens on all openable windows & 9mm th. laminated part board for doors 0n toilet and balocny etc for following sections all complete as per drawing, specification and approval of engineer. Doors -Single/Double panel Swing/Sliding/Casement Section size (102*45*1.5mm) fitte 5mm clear glass or 9mm thick laminated board or ACP board all complete.
B	Providing and fixing Double glazed 2 or 3 panel Sliding Window of aluminum section in naturally anodized/po coated colour. Section size (87*56*1.5mm) fitted with 5mm clear glass with fly mesh shutter all complete. gs, drainages, silicon , glass of 6 mm thick for door & 5 mm th. for window & 16 gauge GI fly screens on all opena windows & 9mm th. laminated particle board for doors 0n toilet and balocny etc for following sections all com as per drawing, specification and approval of engineer. Doors -Single/Double panel Swing/Sliding/Casement S size (102*45*1.5mm) fitted with 5mm clear glass or 9mm thick laminated board or ACP board all complete.
C	Providing and fixing Double glazed 2 or 3 panel Sliding Window of aluminum section in naturally anodized/po coated colour. Section size (87*56*1.5mm) fitted with 5mm clear glass with fly mesh shutter all complete.
ELEMENT No. 7	**FINISHINGS.**
a)	**Floor finish:(Tiles, slab or block finishings:)**
i)	**Porcelain tiles; ROCA with cushion edges; BS 1281; fixed to bed with adhesives and pointed with5mm w**
A	WALL FINISHINGS Plaster;12.5mm first coat of cement and sand (1:3);3mm second coat of cement and lime putty(1:5);steel trowelled to smooth: 15mm two coat work;to concrete or blockwork base;generally to walls, internally and externally
B	20mm two coat work;to concrete or blockwork base;generally to walls, internally and externally
C	WALL TILES Glazed porcelain wall tiles, imported from Italy or other approved equal; with approved colour; glazed; to regular pattern; bedding and jointing in cement mortar (1:4); grouting joints with coloured cement W tiles to approved sizes
D	FLOOR TILES Non-glazed porcelain tile fixing on floor and skirting of approved color, brand,pattern & thickn proper line & level laid in required thickness base plaster of 1:4 cement sand mortar and green morter with 4mm joints filled with special tile grout as per drawing , specification and instruction all complete.
E	BEDS OR BACKINGS Cement and sand screed (1:3) steel trowelled to a smooth floor finish laid on concrete bed,internally. 38mm thick screed to floor
F	Providing, mixing, laying cement sand punning with 1:1 cement sand mortar on floors, wall in true line & level including curing as per drawing, specification and instructions of engineer all complete. Cement slarry General floor surfaces
ELEMENT No. 8	**PAINTING AND DECORATING.**

a)	**INTERNAL WORK**
i)	**Prepare and apply one thinned coat and two full coats of silk acrylic emulsion paint as per the Architect'**
A	INTERNAL PAINTING Painting, Internal work, three coats, silk acrylic emulsion paint, plaster surface Walls Ceiling generally
B	EXTERNAL PAINTING Painting, External work, three coats weather guard paint; cement render surfaces Wa Ceiling generally
C	STEEL SURFACES PAINTING Prepare and apply two or more coats of Synthetic Enamel Paint over timber/i surface including one coat of primer to give an even and uniform shade as per drawing, specification and instrucitons. Gerally to grilles surfaces
	PART F: OFFICE FOR ENGINEERS – EXTERNAL WORKS
BILL No 4	**EXTERNAL WORKS**
1	**GUARD HOUSE**
ELEMENT No. 1	**SUBSTRUCTURE (ALL PROVISIONAL)**
1	**Excavation and Earthworks;**
A	SECTION No.1: LANDSCAPING PARKING AND WALKWAYS Earthworks (a) Clear site vegetation; bush curb, undergrowth and general debris; grubbing up roots; filling in voids left by removal of roots with selected imported fill material
B	Excavation of top soil Excavate to remove vegetable soil; average 150mm thick deep and dispose materials aw from site to a tip to be approved by the Engineer
D	Granular earth filling class G15 well rammed and consolidated in 150mm layers to attain 98% maximum dry d
E	Aggregate/Chipping to Parking Spaces 60mm thick 1/2" aggregate/chippings to parking areas well compacted parking areas
F	Precast Concrete Kerbstones Kerbs, splayed BS 340. bedding, jointing and pointing in Cement&Sand mortar (1 including all excavation, disposal & formwork Precast concrete kerbs, in straight length, size 300 x 150mm, be and jointed in cement sand mortar (1:3) including 450 x 150 mm haunching one side with in situ concrete grad with all necessary excavation, backfilling and removal of surplus material
G	Ground Cover and Grass Excavate oversite preparing soil to receive approved manure
A	Planting of Pemba Grass, raking, levelling of selected light compaction to receive ground soil and cover, water and applying manure.
B	Apply Diamonnium Phosphate Fertilizer to Plants
3	**Planking and strutting.**
5	**FENCING AND GATES.**
a)	**BLOCKWORK FENCE**
i)	**SUBSTRUCTURE**
a)	**Excavations and earth works,,.**
A	SECTION No.2: BLOCK WALL FENCE Site Clearance Clear site vegetation; bushes, curb, undergrowth and general debris; grubbing up roots; filling in voids left by removal of roots with selected imported fill material
B	Excavation and earthworks Excavate over site average 150mm deep to remove vegetable soil and remove from
C	Excavate column pits commencing at stripped level, not exceeding 1.50 metres deep
D	Excavate foundation trench commencing at stripped level and not exceeding 1.50 metres deep.
E	Reinforced concrete grade '25' including vibrating around reinforcements with fair surface finish in: (i) Founda footing
	(ii) column bases
	(iii) ground beams
	(iv) columns
	(v) coping

	High tensile twisted bars reinforcement to BS 4449:1969: (Provisional) (i) 12 mm Diameter bars
	(ii) 8mm Diameter bars
	Formwork Wrought formwork to: (i) Vertical sides of column bases
	(ii) Vertical sides of strip foundation in trenches
	(iii) Vertical sides of columns
	(iv) Vertical sides of ground beam
	(vi)Vertical sides of concrete framing
	CONCRETE WORKS Plain insitu concrete grade '10' in 50mm Thick blinding
	WALLING Solid concrete blocks to BS 2028 type 'A' bedded and jointed in cement and sand (1:4) mortar:230r Wall
	150mm Wall
	100mm thick 350mm wide insitu reinforced concrete coping to block wall; bull nose throated with 20mm radiu
	Plastering in two coats steel troweled to smooth finish (i) 15mm thick to walls
	15mm thick to ground beams
	15mm thick to columns
	15mm thick framing to fence walls
	Prepare and apply one thinned coat and two full coats of weather guard paint To rendered walls
	To rendered columns
	To rendered frames of fence walls
	Sundries Render; cement and sand (1:3); trowelled 12mm thick; to plinth; to concrete or block work base
	Prepare and apply three coats of black bituminous paint to rendered plinth beam externally
	SECTION No.3: FLAG POSTS Site preparation Site Clearance: Clear site of small trees bushes, shrubs, undergrowth and the like including grubbing up their roots and removing from site the resulting rubbish.
	Excavate foundation trench commencing at stripped level and not exceeding 1.50 metres deep.
	Backfilling of selected materials around foundations well rammed and consolidated.
	Hardcore 100mm thick stone hardcore bed; leveled; compacted and sand blinded to receive polythene membrar measured separately.
	CONCRETE WORKS: Plain in situ concrete grade ‘25’; 100mm thick Strip Foundations
	100mm Thick; beds
	FORMWORK Sawn Formwork to: Edges of bed; 75 to 150mm high
H	BLOCKWORK Solid concrete blocks to BS 2028 type 'A' bedded and jointed in cement and sand (1:4) mortar: 230mm Wall
J	MILD STEEL WORKS Black pipes class "B" steel works welded fabrication and bolted on site connections including fabricting, bolting together, hoisting and fixing into position including concrete foundations finishing paintings as per architects's details 75mm diameter Flag posts
K	FINISHING Render; cement and sand (1:3); trowelled 12mm thick; to plinth; to concrete or block work base
L	Prepare and apply two coats of black bituminous paint on: Rendered surfaces to plinth
M	SECTION No.4: GUARD HUT SITE PREPARATION Clear site of small trees bushes, shrubs, undergrowth a like including grubbing up their roots and removing from site the resulting rubbish.
N	EXCAVATIONS AND EARTHWORKS Excavate over site average 150mm deep to remove vegetable soil an remove from site
D	Excavate foundation trench commencing at stripped level and not exceeding 1.50 metres deep.
F	Backfilling of imported materials around foundations well rammed and consolidated.
H	Load up surplus excavated material and remove from site

K	Disposal of Water:- Allow for keeping excavations free from water (except spring or running water) by pumpir baling or by other means necessary
L	Planking and Strutting Allow for the provision and subsequent removal of planking and strutting to uphold and maintain all faces of excavations
A	HARDCORE 100mm Bed levelled, compacted to 98% MDD and blinded with 20mm thick layer of sand to rec polythene membrane (measured separately)
A	SOIL STERILIZATION Treat top of hardcore with "Aldex 48" or other equal and approved anti-termite solutio the rate of 7.00 litres per square metre and strictly in accordance with manufacture's printed instructions.
B	Ditto to earth backfilling at a rate of 8.00 litres per linear metre per 300mm width x 210mm depth to one side o peripheral foundation wall
C	CONCRETE WORK Plain insitu concrete grade '10' in 50mm Thick blinding
D	Reinforced/Plain concrete grade '25' including vibrating around reinforcements with fair surface finish in: Foundations footing
E	Ground beams
F	100mm Thick bed
G	Steps
H	column footing
J	columns
H	REINFORCEMENTS High tensile twisted bars reinforcement to BS 4449:1969: (Provisional) 12mm Diameter
J	8mm Diameter bars
K	Formwork Wrought formwork to: Vertical sides of strip foundation in trenches
L	Vertical sides of ground beam
M	Edges of bed over 75mm but not exceeding 150mm wide
N	Vertical sides of columns bases
P	Vertical sides of columns
A	FOUNDATION WALLING:- Solid concrete blocks to B.S. 6073; type A; 7.0N persquare millimetre 230mm Foundation wallaverage compressive strength; bedded and jointed in class (iii) mortar:230mm Foundation wall
B	DAMP-PROOF MEMBRANES:- 500 Gauge polythene damp proof membrane laid over blinded hardcore with minimum of 150mm side laps
C	Hessian based bitumen damp proof course to BS 743 type 5A 230mm wide laid horizontally on blockwork
D	Sundries:- 15mm Thick water proof plaster using water proof solution mixed with Cement and sand mortar to approved manufacturer ratio applied externally to plinth wall on concrete or blockwork base
E	Prepare and apply three coats of black bituminous paint to rendered plinth wall externally
F	FRAME CONCRETE WORK:- Reinforced concrete grade ‘25’ including vibrating around reinforcement Susp Beams/Horizontal Beams
G	Columns
H	Window shade
J	150mm thick Roof slab
K	150 x 50mm thick coping
L	100mm thick parapet wall
	REINFORCEMENTS Fabric mesh reinforcements to BS 4483 ref. A 252 R8-200mm both directions laid in co bed
M	High tensile twisted bars reinforcement to BS 4449:1969: (Provisional) 16mm Diameter bars
N	8mm Diameter bars
A	Formwork Wrought formwork to: Vertical sides of parapet wall

B	Sides and soffits of horizontal beams;
C	Vertical sides of columns;
D	Soffits of roof slab
E	Soffits of window shade
F	FRAME WALLING Blockwork; solid concrete blocks; BS 6073 type A; compressive strength 4.0N/sq.mm; in cement mortar (1:3); Note - Provide for Galvanized hoop iron wall ties built into alternate courses for walls abu RC columns (wall ties NOT measured separately)150mm thick walling
G	230mm thick walling
H	Precast concrete grade “25” including hoisting to position and bedding and pointing with cement mortar (1:4) 530mmx 75mm Cill weathered, throated and finished fair all round
A	DOORS Panelled doors; Hardwood selected; comprised of 44 x 125mm stiles, top and intermediate rails; 44 x 180mm bottom rails; all once grooved; open panels infilled with 38mm thick moulded hardwood panel ; tounge grooved; including all planted mouldings Size 800 x 2100mm high
B	Frames and finishings 45 x 145mm Frame with one labours, fixed to ground
D	45 x 145mm Transome
E	13 x 15mm Glazing beads
F	20 x 50mm Moulded architrave
G	Sawn hardwood third grade 25 x 100mm Grounds, plugged
H	IRON MONGERY Supply and fix the following ironmongery as manufactured by "HAFELE" or other equal a approved fixed to hardwood with matching screws Two lever cylinder mortice lock Hafele Latchbolt "Satin ch plated reversible" art no.911.50.788 complete with handle
J	Pairs of Butt Hinge 4"x3"x3mm SSS stainless steel satin
K	Half Cylinder mortice lock with thumbturn stainless steel satin
L	Half moon satin finish stainless steel door stopper cat no.937.52.070
M	Flush bolts
N	Door closer
A	GLAZING 6mm Thick O.Q Clear sheet glass glazed with hardwood beads (m/s) Panes over 0.1 not exceed 0.5 square metres
B	ALUMINIUM WINDOWS METALWORK Supply and fix composite window unit comprising of 6mm thick way reflective glass panes on natural anodised aluminium framing, sliding or hinged and fixed casement includ all accessories and ironmongery, cutting and pinning lugs and bedding frame in cement mortar and sealing surr with approved mastic to approved manufacturer's specification and as per architect drawings Window size 230 1750mm high
C	Window size 1300 x 600mm high
E	INTERNAL FINISHES WALL FINISHES Porcelain tiles ex- Italy with cushion edges fixed to screed with app adhesives and pointed with coloured grout 10mm Tiling to floors
F	10mm tiles to Skirting 100mm high with rounded edge and coved junction with paving
G	10mm tiles to Treads, 300mm wide with non-slip material on top
H	10mm tiling to Risers 150mm wide with rounded nosing and coved junction with treads
J	PLASTERING Plastering in two coats steel trowelled to smooth finish 15mm To Walls
K	15mm To soffit of slab
L	15mm To sides and soffits of beams
M	15mm To vertical sides of columns
N	15mm to Vertical sides of parapet wall
P	15mm to Soffits of window shade
A	TILES, SLABS AND BLOCK FINISHINGS Glazed ceramic wall tiles with cushion edges to Bs 1281 fixed to

	backings with adhesive and pointing with white cement 10mm Tiling to walls
B	Cut and fit around small pipes, bars and the like
C	Beds and Backings Cement and sand (1:4) wood floated surface finish 30mm Backing to receive floor tiles
D	12mm Backing to receive wall tiles
E	EXTERNAL WORK Rendering in two coats steel trowelled to a smooth finish 15mm To walls
F	PAINTING & DECORATION INTERNAL WORK Prepare and apply one thinned coat and two full coats of v silk paint To plastered walls
G	To plastered soffits of slab
J	To vertical sides of columns
K	To Vertical sides of parapet wall
L	To Soffits of window shade
M	EXTERNAL WORK Prepare and apply one thinned coat and two full coats of weather guard paint To rendered
H	To plastered sides and soffits of beams
	PART F: OFFICE FOR ENGINEERS – FIRST FLOOR
BILL No 3	**MEASURED WORKS**
ELEMENT No.2	**FRAMES**
	CONCRETE WORKS:
II	**Reinforced insitu concrete grade '25' including vibrating around reinforcements.**
A	Column
B	Sespended Beams/Horizontal Beams(Roof Beams)
C	230mm thick reinforced concrete wall
D	Gutter Beams
2	**REINFORCEMENTS;**
	High tensile steel bar reinforcements with a strength of 500N/mm2 to BS 4449:1969: including bends, ho
A	16mm Diameter bars
B	12mm Diameter bars
C	10mm Diameter bars
D	8mm Diameter bars
3	**Formworks**
	Wrought formwork to:
A	Vertical sides of columns
B	Sides and soffits of horizontal beams;
C	vertical sides of concrete wall
D	Soffits of roof slab
E	Edge of roof slab
ELEMENT NO.4	**WALLING.**
1	**BLOCKWORK:**
I	**Solid concrete blocks to BS 6073 Type 'A' dense aggregate, average compressive strength 7N/sq mm; in c**
A	230mm thick Wall
B	150mm thick
C	230mm thick parapet wall
III	**Precast concrete: Precast concrete grade 25 finished fair on all exposed faces including hoisting into posi**

	cement and sand (1:3) mortar:
B	150mmx 75mm Cill weathered, throated and finished fair all round
B	240x75mm Coping, ditto
ELEMENT No.5	**ROOFING**
1	**ROOF COVERINGS**
I	**28 Gauge type Aluminium/Zinc coated (IT5) roofing sheets as manufactured by the ALUCO or other equ corrugations side laps and 250mm end laps fixed to steel purlins (measured separately) with 120x8mm ga bitumen washers and neoprene caps to bolts:**
A	Roof coverings sloping not exceeding 45 degrees from horizontal
2	**ROOF STRUCTURE**
	The following are in timber trusses Softwood pressure impregnated with preservative
A	50 x 100mm Wall Plate
B	50 X 100mm Rafter
C	50 X 100mm Tie Beam
D	50 x 100mm King Post and Struits
E	50x75mm Purlin
F	50 X 50mm thick treated softwood branderings
I	**Unplasticised PVC rainwater pipes to BS 4514**
II	**Unplasticised PVC rainwater gutter as supplied by "Nabaki Africa" or any other equal and approved co and fixing brackets as per supplier's instruction**
A	150mm Diameter UPVC down pipes with pipe holder bat
B	Nossle outlet
C	Elbow
D	Shoe
6	**FLAT ROOF TREATMENTS**
	BEDS or BACKINGS; MORTAR; cement and sand (1:3); screeded; to roofs; level or to falls; to concrete
A	50mm Thick Average light weight cement sand (1:3) screed mixed with Kryton admixture 2% by weight of cem steel trowelled smooth; 40mm (Average) screed to falls, cross falls and slopes not exceeding 15 degrees from horizontal to receive roofing felt
B	Ditto; 25mm To parapet concrete wall
ELEMENT No.6	**DOORS:**
1	**HEAVY DUTY ALUMINIUM DOORS**
	"Design, Engineering, Fabrication, installation, Testing and Commissioning of hinged doors with 100 mm approved aluminium fabricator.50 x 42mm Profile for panels. All extruded aluminium provided shall be Powder Coating should be of 50 Micron minimum thickness applied in accordance with either BS6496 or the doors to the openings. All assembly screws and fixings shall be grade A2 or A4 austenitic stainless ste shall be EPDM. Infill Glass to be 10mm Laminated Clear Glass. Full set of shop drawings and structural production."
A	Ditto; Size 1770 x 2800mm high overall, double leaf
B	Ditto; Size 900 x 2800mm high overall, double leaf
C	Ditto; Size 800 x 2800mm high overall
2	**Fire Resistant Door**
	Supply and fix 90 minutes fire rated galvanized anti corrosion plate panel 2mm, door weight 150kg comp per Architect approval
A	Composite steel security doors and frames with finishing to Architect's approval including profiled frame, weat

	stripping, push plate and pull handle and manufacture's exit panic bar and including assembling units on site, stripping protective layer and fixing to manufacturer's specification and proprietary bedding Standard security d and frame overall size 800x2000 mm high, model 725 with associated door level/handle, door stop to manufact specification, heavy duty hinges and including touch-up to door and frame and all necessary ironmongery to Architect's satisfaction
5	**OTHER DOORS**
	Mild steel metal grill unit comprising of 37.5 x 37.5mm mild steel hollow section framing and 25 x 3mm t by the project manager, including all necessary ironmongeries and materials, grinding and polishing all
A	Door opening Size 900 x 2100mm high
ELEMENT No.7	**WINDOWS**
2	**Metal works Anodized aluminium casement window frames, 1.5mm thick sections complete with 6mm th necessary ironmongeries**
A	Supply and fix composite window unit comprising of 6mm thick one way reflective glass panes on natural anod aluminium framing, sliding or hinged and fixed casement including all accessories and ironmongery, cutting an pinning lugs and bedding frame in cement mortar and sealing surrounds with approved mastic to approved manufacturer's specification and as per architect drawings Window size 2000 x2100mm high
B	Ditto; Window size 1200 x2100mm high
C	Ditto: Window size 1770 x2100mm high
D	Ditto; Window size 2150 x1350mm high
E	Ditto; Window size 2770 x 4350mm high
3	**Mild Steel Metal grill unit comprising of 25 x 25mm mild steel hollow section framing and 25 x 3mm thic the project manager, including all necessary material, grinding and polishing all welded connections to a**
A	Window opening overall size 2000 x 2100mm High
B	Window opening overall size 1200 x 2100mm High
C	Window opening overall size 1770 x 2100mm High
D	Window opening overall size 2150 x 1350mm High
E	Window opening overall size 2770 x 4350mm High
ELEMENT No.8	**PLUMBING AND ENGINEERING INSTALLATIONS**
1	**SANITARY APPLIANCES**
i	**Supply and fix the following sanitary appliances including all connections and fixing to FLOORS or WA by services Engineers.**
A	WC suites, white glazed vitreous china; low level; nine litre white glazed vitreous china cistern, cover and brac ball valves,flush pipe; plastic seat and cover; operating handle and pipe; plastic seat and cover; operating handl connecting to soil and vent pipe.
B	WC suites, white glazed vitreous china; squarter high level; nine litre white glazed vitreous china cistern, brack ball valves, flush pipe; operating handle and connecting to soil and vent pipe.
C	Hand wash basin, with single tap hole, white glazed vitreous china; complete with cold water tap, fixing bracke with screws to backgrounds requiring plugging; bedding waste in white lead.
D	Urinal , while glazed vitreous china; five litre white glazed vitreous china cistern, cover and brackets; ball valv flush pipe; operating handle and connecting to soil and vent pipe.
E	Stainless steel kitchen sink with double bowl,single drainer,38mm chrome plated strainer waste, chain and rubb plug with slotted tail; 38mm plastic bottle trap with 75mm sealand fixed with chromium plated screws
F	Supply and install water heaters with capacity 15Litres complete with all associated
G	Supply and Fix Toilet roll holder; Cat, No T9003028
H	Supply and fix 6mm silver Mirror, lead backed, size 850 x 600mm with arise edges fixed to wall with mirror sc
I	Supply and install Soap Dispenser
J	Supply and install shattaf hose

K	Supply and Fix Hand Spray
L	Supply and fix Laboratory Body Spray
2	**COLD WATER INSTALLATIONS DISTRIBUTION PIPES**
	IPS PIPE PN 20''Class C'' painted with special paint; including joints in running length.Fixing in accord
A	Water Distribution system; Dizayn PPR 80 green pipes and fittings to BS 1387. Supply and install 40mm diam water supply pipe including fittings and accessories (elbows,tees, connectors, bends etc)
B	Ditto: Supply and install 25mm diameter water supplypipe including fittings and accessories (elbows,tees, connectors, bends etc)
C	Ditto; Supply and install 20mm diameter water supply pipe including fittings and accessories (elbows,tees, connectors, bends etc)
D	Ditto; Supply and install 15mm flexible pipe connectors to wash hand basin (WHB), Water closet (WCs), and kitchen sink.
E	Ditto: Supply and fix 15mm diameter corner valves with hand wheel, polished by manufacturer.
F	Ditto; Supply and fix 25mm diameter stop valves with hand wheel, polished by manufacturer.
3	**SUPPLY PIPES**
A	Supply and install 110mm diameter pipe (uPVC) for foulwater including fittings and standard holderbats fixing wall or slab requiring plugging.
B	Supply and install 50mm diameter pipe (uPVC) for foulwater including fittings and standard holderbats fixing wall or slab requiring plugging.
C	Supply and install 40mm diameter pipe (uPVC) for waste water including fittings and standard holderbats fixin wall or slab requiring plugging
D	Allow for elbows, bends connector traps etc to suit the above installation
E	Supply and install vent cowl of 110mm diameter
F.	PORTABLE FIRE EXTINGUISHERS Supply and install 9kg carbon dioxide portable fire extinguishers
ELEMENT No. 14	**FINISHING**
a)	**INTERNAL FINISHINGS**
i)	**Floor finish: (Tiles, slab or block finishings)**
a)	**Porcelain Tiles**
A	Porcelain tiles ex- Italy with cushion edges fixed to screed with approved adhesives and pointed with coloured 10mm Tiling to floors
B	Ditto; 10mm Skirting 100mm high with rounded edge and coved junction with paving
b)	**Beds and Backing**
A	Beds and Backings Cement and sand (1:4) wood floated surface finish: 30mm Beding to receive floor tiles
ii)	**Wall finish:**
a)	**Internal Plastering**
A	15mm To walls, beams, columns and the like; to concrete or block work base; Internal plastering in two coats, coat 12mm thick cement and sand mix (1:3) steel trowelled;prepare and apply second coat 3mm thick stucco st trowelled to smooth finish,includding sanding with sand paper.
b)	**Wall Tiles or Tanga Stones/Slates**
A	Glazed ceramic wall tiles with cushion edges to Bs 1281 fixed to backings with adhesive and pointing with whi cement 10mm Tiling to walls
B	Ditto; Cut and fit around small pipes, bars and the like
C	CEILING FINISHES 9mm Thick gpsum board to horizontal ceiling fixed with counter sunk screws to treated s wood branderingsmeasured separately including sealing the joints with fibre tape andgypsum powder ,internall
D	Ditto; 9mm thick gypsum cornice fixed with counter sunk screws to block work background and ceiling joists

	gypsum powder
c)	**Beds and backings**
A	Bed and backing; one coat work; cement and sand (1:4); 12mm Thick backing; to walls; to receive wall tiles; w floated
b)	**EXTERNAL FINISHINGS**
ii)	**Wall finish**
a)	**External Plastering**
A	15mm To walls; to concrete or block work base; External plastering in two coats, first coat 12mm thick cement sand mix (1:3) steel trowelled;prepare and apply second coat 3mm thick stucco steel trowelled to smooth finish,includding sanding with sand paper.
ELEMENT No. 15	**PAINTING AND DECORATING**
a)	**INTERNAL WORK:**
i)	**Painting and Decorations**
A	Prepare and apply one thinned coat and two full coats of vinyl silk paint; To plastered walls
b)	**EXTERNAL WORK:**
i)	**External Painting**
A	Prepare and apply one undercoat and two full coats of weather guard paint on: To rendered walls
	PART F: OFFICE FOR ENGINEERS – MECHANICAL INSTALLAT
BILL No 3	**MEASURED WORKS**
ELEMENT No.10	**AIR CONDITIONING AND MECHANICAL VENTILATIONS**
ii)	**AIR CONDITIONING INSTALLATIONS**
a)	**"Supply, install, test and commissioning of LG MULTI-V 5 Inverter units Air-conditioning system (VRF should operate up to 40oC dB temperature & 50Hz/R410A/380 ~415 & should have frequency modulatio have a Corrosion Resistance Certification from third party (like UL) for Testing of Heat Exchanger for a be able to perform Dust removal function, during which, the condensing unit fan will rotate in reverse di condenser coil. "**
2	**Indoor units**
a)	**Ceiling Cassette Type Indoors**
	Supply, Install, Test, Commission and The Fan Evaporator Unit, Ceiling Cassette type each complete wit Controller & Cassette Panel. The Wired remote controller should have colored screen with touch button Indoor
A	Supply, install, test and commission the A/C units Manufactured by LG. The outdoor units should operate up to 46OC DB temperature. However approved equal will be Manufacturer accepted. Single split air conditioners sy (Indoor & Outdoor units) in-ceiling mounted type indoor unit of capacity 36,000 Btu/hr each completed with condensate pump and wireless controllers
B	Ditto; Single split air conditioners system (Indoor & Outdoor units) in-ceiling mounted type indoor unit of capa 24,000 Btu/hr each completed with condensate pump and wireless controllers
b)	**Wall Mounted Indoor Unit Type**
A	Supply, install, test and commission the A/C units Manufactured by LG. The outdoor units should operate up to 46OC DB temperature. However approved equal will be Manufacturer accepted. Single split air conditioners sy (Indoor & Outdoor units) in-wall mounted type indoor unit of capacity 24,000 Btu/hr each completed with condensate pump and wireless controllers
B	Ditto; Single split air conditioners system (Indoor & Outdoor units) in-ceiling mounted type indoor unit of capa 18,000 Btu/hr each completed with condensate pump and wireless controllers
C	Ditto; Single split air conditioners system (Indoor & Outdoor units) in-ceiling mounted type indoor unit of capa 15,000 Btu/hr each completed with condensate pump and wireless controllers
D	Ditto; Single split air conditioners system (Indoor & Outdoor units) in-ceiling mounted type indoor unit of capa

	9,000 Btu/hr each completed with condensate pump and wireless controllers
e)	**Refrigerant Pipping:**
	Supply, Install, test and commissioning copper piping for liquid and vapour refrigerants, run in vertical/ indoor and outdoor units insulated with "Armaflex" or similar to be approved and charged with R 410A
A	For connecting one indoor A/C unit with one outdoor unit (36,000 Btu/hr cooling), liquid and vapour line
B	For connecting one indoor A/C unit with one outdoor unit (24,000 Btu/hr cooling), liquid and vapour line
C	For connecting one indoor A/C unit with one outdoor unit (18,000 Btu/hr cooling), liquid and vapour line
D	For connecting one indoor A/C unit with one outdoor unit (15,000 Btu/hr cooling), liquid and vapour line
E	For connecting one indoor A/C unit with one outdoor unit (9,000 Btu/hr cooling), liquid and vapour line
f)	**Condensate Drainage System**
	Supply, install, test and commission condensate drainage system in PVC pipe in accordance with BS 350 wool or styropur and provided with vapour barrier and installing at a slope of 1:50 and allow for all nec
A	Dia 32 mm
B	Dia 25 mm
C	Supply , install, commissioning and over/under voltage protection to matching with the capacity of A/C .
g)	**Inter-unit Wiring**
	Supply and Install the following control wiring cables in conduit including necessary accessories
A	Supply and installation of wiring and power connection from DP switches to the AC outdoor units mounted on canopy/external wall as indicated in the drawings.
h)	**Trunking**
A	Allow for PVC designer trunking to suite surface refrigerant pipes complete with bends, Covers & associated accessories
j)	**Mounting Supports**
A	Supply and install the mounting brackets, supports and other fittings for outdoor unit
B	Allow for security grills complete with padlock. The grill color to be approved by Architect.
iii)	**MECHANICAL VENTILATION**
a)	**Supply, Install inline extract fan and wall mouted fan for toilet extract system complete with standby uni**
A	Supply, install, test and commissioning in-line extract fan manufactured by Xpelair with capacity 500m3/hr co with associated accessories to enable fan to work. However othermanufacturer approved equal will be accepted
B	Supply, install, test and commissioning in-line extract fan manufactured by Xpelair with capacity 250m3/hr co with associated accessories to enable fan to work. However othermanufacturer approved equal will be accepted
b)	**AIR EXTRACTING DUCTS**
	Supply and install ventilation duct in galvanised steel plate, with flanged joints air-tightened with approv requirements, including straps, rawl bolts, screws and brackets for suspension. Plate thickness 0.8mm
A	100mm diameter
B	150 mm Dia
C	Supply and install 150mm diameter disc valve to be mounted in the toilet
D	Supply and install Extract grilles to be mounted in the wall
E	Supply and install flexible duct with 100mm diameter
	PART D: CONSTRUCTION AND MANAGEMENT OF KIYANGU OUTLET DRA
SERIES 3000	**EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE**
3100	**Clearing, Grubbing And Removal Of Topsoil**
31.01	**Clearing, grubbing and removal of topsoil**
1.1	EARTHWORK Removing bushes, shrubs, trees, etc. (a) Clearing the site; grubbing up roots bushes, shrub,

	undergrowth or the like
	(b) Excavate oversite to remove top soil average 150 mm, cart away and deposit away from site.
3300	**Breaking Up Existing Pavement Layers**
33.01	**Excavating Material From an Existing Pavements**
33.01	Excavation:- (c) Earthwork in excavation using manpower/machine in all kind of soil for foundation trenches o raft etc. including the cost of dressing of sides, ramming of bottom as per drawing, specification & approval of engineer.
	Planking and strutting:- (d) Allow for the provision and subsequent removal of planking and strutting to uphold maintain all faces of excavations.
	Disposal of water:- (e) Allow for keeping excavations the site and excavations free of surface water (except sp or running water) by bailing, pumping or other means.
3600	**Selecting and Utilizing Material From Borrow Pits and Cuttings**
36.01	**Excavations:**
36.02	**Fill and improved subgrade layers**
36.02	Embarkment Fill works:- (f) Formation of Embankment including, providing of suitable materials for embankm construction, compaction in layers. Compacted depth, watering and haulage, etc. all complete, as per specificat drawings and instruction of Engineer
	Earth back filling:- (g) Backfilling to structures, foundation pits etc. from excavated materials including wateri compaction and density test all complete. As per specification, drawings and instruction of Engineer
	Load, wheel and cart away surplus excavated material from site.
25.03	Section 2500: Pitching, Stonework And Protection Against Erosion Stonework /Stone soling:- (j) Providing and Laying stone soling all complete as per specification, drawings and instruction of Engineer.
SERIES 6000	**STRUCTURES**
Series 6400:	**Series 6400: Concrete for Structures**
64.01	**Cast in situ concrete:**
64.01	CONCRETE WORK:- (k) Plain In-situ Concrete; Grade "15" nominal mix 1:3:6 using Ordinary Portland Cem (OPC), sand and coarse aggregates of 25 mm Concrete blinding (50mm thick)
	In-situ Concrete; Plain, Grade "20" including vibrating around reinforcement (a) Concrete Works
	Reinforced In-situ Concrete; Grade "30" including vibrating around reinforcement:- (b) Foundation , super stru deck slab, girder etc including compaction, curing all complete, as per specification, drawings and instruction o Engineer
Series 6700:	**Steel Structure**
	STRUCTURAL STEEL Reinforcement, bars; BS 4461; hot rolled deformed high yield steel, straight or bent (c Various Sizes
	Formwork (Class F2 Finish) generally;- (d) To vertical plain surface all complete as per specification and instru of Engineer
	GEOTEXTILE MATERIALS (e) Providing and laying of a geotextile filter between pitching and embankment slopes as per Drawing, Technical Specifications and instruction of Engineer
	METAL WORKS:- (f) Providing, fabricating and installing Trash Rack (Consisting of 100X50X5 size Channe 16mm dia Steel Rods) as per drawing, Technical Specification and instruction of Engineer all complete
53.01	Section 5300 Fencing:- Supplying and Erecting new fencing material for Mtwara Technical Secondary School; 230mm thick foundation , 250mm thick reinforced ground beam and 150mm thick wall including plastering an painting and front grill gate 6m wide in each of the school
	PART E: SAMIA CITY ACCESS ROADS (2.4KM)
SERIES 2000	**DRAINAGE**
Section 2100	**Drains**
21.01	**Excavation for Open Drains**

21.01	Excavation for catch drain pit:- Excavating soft material situated within the following depth range below the su level: (i) 0.5 m. up to 1.5 m
22.01	**Excavation**
	Section 2200: Prefabricated Culverts (a) Excavating soft material situated within the following depth ranges be the surface level: (i) 0.5 m up to 1.5 m
	(ii) Exceeding 1.5 m and up to 3.0 m
	(iii) Exceeding 3.0 m per increment of 1.5 m
22.02	**Backfilling**
22.02	Backfilling (a) Using excavated material
	(b) Using imported selected material (G45 quality)
	(c) Extra over Subitems 22.02 (a) and (b) for soil cement backfilling (4%cement)
22.03	**Concrete Pipe Culverts on Class A bedding**
22.03	Concrete pipe culverts: (a) On Class A bedding (reinforced concrete min class 25/20; 900 mm or 1200mm dian across road) i) Diameter 900 mm
	ii) Diameter 1200 mm
22.07	**Cast in situ concrete and formwork**
22.07	Cast in situ concrete and form work: (a) In inlet and outlet structures, catchpits, manholes, thrust and anchor blo including formwork and Class U2 surface finish (Class 15/10 for blinding)
	(b) Base of catch pit (Gully), including formwork, (concrete class 20/15)
	(c) In inlet and outlet structures, catchpits, manholes, thrust and anchor blocks, excluding formwork but includi Class U2 surface finish (Class 25/20)
22.10	**Steel Reinforcement**
22.10	Steel reinforcement: (a) High-tensile steel bars
22.21	Accessories: (a) Manhole covers including frames, precast concrete class 30/20, reinforced (i) Size 1555 x 1555
	(ii) Size 1855 x 1885 mm
	(b) HDPE Pipe (300mm dia-6kg/sqcm)
	(c) Steel grates inlet grids to road side catch pits :- (i) Size 400mm x 600mm
22.25	Hand excavation to determine the positions of existing services
Series 2300	**Concrete Kerbing, Concrete Channelling,Open Concrete Chutes and Concrete Lining for Open Drains**
23.01	**Concrete kerbing**
23.01	Concrete kerbing (indicated for cast in situ concrete): (a) Precast kerbs (Type 1) as shown in the drawings inclu of bedding, haunching and form work and all incidentals 200×380 (Concrete Class 30/20)
	(b) Precast kerbs (Type 2) as shown in the drawings inclusive of bedding, haunching and form work and all incidentals 200×200 (Concrete Class 30/20)
Section 2500	**Pitching, Stonework and Protection Against Erosion**
25.01	**Stone Pitching**
25.01	Section 2500: Pitching, Stonework And Protection Against Erosion Stone pitching: (c) Wired and grouted ston pitching (total thickness 250 mm)
25.03	Stone masonry walls (b) Cement-mortared stone walls including pointing
25.04	Interlocking blocks for walkway, 200x100x80mm thick, min. strength 30N/mm2 (Mpa) including well graded sand bedding
SERIES 3000	**EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE**
3100	**Clearing, Grubbing And Removal Of Topsoil**
31.01	**Clearing, grubbing and removal of topsoil**

31.01	Clearing, grubbing and removal of topsoil: (a) Clearing and grubbing
	(b) Removal of topsoil
31.02	**Removal and grubbing of large trees and tree stumps**
31.02	Removal and grubbing of large trees and tree stumps: (a) Girth exceeding 1.0 m up to up including 2.0 m
	(b) Girth exceeding 2.0 m up to up including 3.0 m
	(c) Girth exceeding 3.0 m
3600	**Selecting and Utilizing Material From Borrow Pits and Cuttings**
36.01	**Excavations:**
36.01	Excavations: (a) Common excavation to spoil and stockpiled as directed by Engineer
	(b) Rock excavation
36.02	**Fill and improved subgrade layers**
36.02	Fill and improved subgrade layers: (a) Improved subgrade layer as specified in the Drawings to require minimu G15 quality material
	(b) Improved subgrade layer as specified in the Drawings to require minimum G7 quality material(stockpilled)
	(c) Fill or improved subgrade layer using rock fill (Coral Stone)
3700	**Pavement Layers of Natural Gravel Materials**
37.02	**Natural Gravel for Sub-base Course**
37.02	Natural gravel : (a) Natural Gravel Class G45 for sidewalks
	(b) Natural Gravel Class G25 for lower subbase
3800	**STABILISATION**
38.02	**Chemical stabilisation, payment for full cocst of providing:-**
38.02	Chemical stabilisation, payment for full cost of providing: (a) Stabilised layer, material class C1, using approve borrow material class G25
38.03	**Chemical stabiliser agent**
38.03	Chemical stabiliser agents: (b) Ordinary Portland Cement
SERIES 4000	**BITUMINOUS LAYERS AND SEALS**
4100	**Prime and Curing Membrane**
41.01	**Prime Coat**
41.01	Prime coat: MC-70 Cut-back bitumen including blinding material
4200	**Asphalt Concrete Surfacing**
42.02	Asphalt Concrete Surfacing (AC14) [Using 60/70 Penetration Grade Bitumen and 14mm Maximum Size of Aggregates]
	(b) Bitumen for Asphalt Concrete Surfacing: [60/70 penetration grade bitumen]
SERIES 5000	**ANCILLARY ROADWORKS**
5100	**Marker and Kilometer Posts**
51.01	**Marker posts:**
51.01	Marker posts as shown in drawings: (i) Road Reserve Marker Post
	(ii) Concrete Egde Marker Posts
55.01	Fencing:- Supplying and Erecting new fencing material for Schools; 230mm thick foundation , 250mm thick reinforced ground beam and 150mm thick wall including plastering and painting and front grill gate 6m wide i of the school
51.03	Costruct concrete bollards 300x300mm
5200	**Guardrails**

52.02	**Guard rails on steel posts**
5400	**Road Signs**
54.01	Road Signs (Warning, regulatory and Information) (a) Circular Regulatory diameter 900mm
	(b) Rectangular Regulatory, height 600mm X width 450mm
	(c) Triangular Regulatory and warning: side length 900
5500	**Road Markings**
55.01	**Road Markings Paint**
55.03	Thermo-Plastic Road-marking material including setting out and pre-marking the lines: (i) Centrelines marking broken or unbroken, 100mm wide
	(ii) Stop lines, 400mm wide
	(iii) White lettering and symbols
	(iv) Yellow lettering and symbols
	(v) Traffic-island markings (white/yellow)
	(vii) Pedestrian crossing lines, 500mm wide
	(viii) Preformed Thermoplastic painting applied at junctions, rumble strips before pedestrian crossings
SERIES 8000	**STREET LIGHTS**
8001	**Street Lights**
81.01	STREET LIGHTING (STAND ALONE SOLAR SYSTEM) (a) Supply, Install, Test and Commission by a rep sub-contractor approved by the Employer of Solar Type Street Lighting as detailed in the Drawings and Specifications
	(b) Allow for contractor's overhead and profits as a percentage of above
	PART F: OFFICE FOR ENGINEERS – GROUND FLOOR
BILL No 3	**MEASURED WORKS**
ELEMENT No.1	**SUBSTRUCTURE (ALL PROVISIONAL)**
1	**Excavation and Earthworks;**
A	Clear site of small bushes, shrubs, undergrowth, and the like and grub up their roots
B	Excavate over site average 150mm deep to remove vegetable soil and remove from site
C	Excavate column pits commencing at stripped level, not exceeding 1.50 metres deep
D	Excavate column pits commencing at stripped level, over 1.5m but not exceeding 3.0m deep
E	Excavate foundation trench commencing at stripped level and not exceeding 1.50 metres deep.
F	Backfilling of selected materials around foundations well rammed and consolidated.
G	Load up surplus excavated material and remove from site
H	Imported earth filling preferably course sand well rammed and consolidated in layers not exceeding 300mm thi including excavating in borrow pits to make up levels under floor
2	**Disposal of water:**
A	Allow for keeping all excavation free from water (except spring or running water) by pumping, baling or by oth means necessary
3	**Planking and strutting.**
A	Allow for provision and subsequent removal of planking and strutting to uphold and maintain all faces of excavations.
4	**Hardcore**
A	250mm thick; stone hardcore bed; leveled; compacted and 20mm sand blinded to receive damp proof membran measured separately.
5	**Soil sterilization:**

A	Treat top of hardcore with "Aldex 48" or other equal and approved anti-termite solution at the rate of 7.00 litres square metre and strictly in accordance with manufacture's printed instructions.
B	Ditto to earth backfilling at a rate of 8.00 litres per linear metre per 300mm width x 210mm depth to one side o peripheral foundation wall
7	**CONCRETE WORK:**
	Plain insitu concrete grade '15'
A	50mm Thick Blinding
	Reinforced insitu concrete grade '25'; vibrated; including vibrating around reinforcements:
B	Foundation Footing
C	Column Bases
D	Ground Beams
E	Columns
F	100 Thick bed
8	**REINFORCEMENTS:**
I	**High tensile steel bar reinforcements with a strength of 500N/mm2 to BS 4449:1969: including bends, ho**
A	16 mm Diameter
B	12 mm Dia.
C	08 mm Dia.
II	**Fabric Wiremesh**
A	Fabric mesh reinforcements to BS 4483 ref A.393 R8-200mm both directions laid in concrete bed
9	**Formwork:**
	Vertical or battering surfaces
A	Vertical sides of column bases
B	Vertical sides of strip foundation in trenches
C	Vertical sides of columns
D	Vertical sides of ground beam
E	Edges of bed over 75mm but not exceeding 150mm wide
11	**FINISHINGS**
	Render; cement and sand (1:3); trowelled
A	12mm Thick water proof plaster using water proof solution mixed with Cement and sand mortar to approved manufacturer ratio applied externally to plinth wall on concrete or blockwork base
10	**WALLING**
	Solid concrete blocks to BS 6073 Type 'A' dense aggregate, average compressive strength 7N/sq mm; in c
A	230mm Wall
12	**DAMP PROOFING**
A	230mm wide; Hessians based damp proof course; laid on blockwork with 150mm end laps
B	500 Gauge polythene damp proof membrane laid over blinded hardcore with minimum of 150mm side laps
12	**Prepare and apply three coats of black bituminous paint on:**
A	Rendered surfaces to plinth
ELEMENT No.2	**FRAMES**
	CONCRETE WORKS:
A	Plain insitu concrete Grade 15; Steps

B	Ditto; Ramps
II	**Reinforced insitu concrete grade '25' including vibrating around reinforcements.**
A	Columns
B	Suspended Beams/Horizontal Beams
C	150mm thick Slab
2	**REINFORCEMENTS;**
	High tensile steel bar reinforcements with a strength of 500N/mm2 to BS 4449:1969: including bends, ho
B	16mm Diameter
C	12mm Diameter
E	08mm Diameter
3	**Formworks**
	Wrought formwork to:
A	Vertical sides of columns
B	Vertical sides of suspended beams
C	Sides and soffits of horizontal beams and slab
E	Edges of bed over 75mm but not exceeding 150mm wide
ELEMENT No.3	**STAIRS AND RAMPS**
1	**CONCRETE WORKS**
	Reinforced insitu concrete grade '25' including vibrating around reinforcements-Stairs
A	150mm Thick landing
B	Horizontal landing beams
C	Stairs and Weist
2	**REINFORCEMENTS**
	High tensile reinforcement steel bars to B.S 4461:1969 including bends, hooks, tying wire, spacers and di
D	12mm Diameter
3	**FORMWORKS**
	Marine Board formwork to:
A	Horizontal soffits of stair (sloping soffits of stairs)
B	Horizontal soffits of landing
C	Sides and soffits of landing beams
D	Edges of landing over not exceeding 150mm high
E	Strings of stair
4	**Balustrade**
A	Provide all materials, fabricate and fix stainless steelbalustrade system 1200mm high comprising of 50x4mm th stainless steel hollow tubular uprights spaced at 900mm centres welded to and including stainless steel plate an associated bolts and nuts; including 63x4mm thick stainless steel handrail, 16mm stainless steel vertical bars 25 c/c and 63x4mm thick intermediate rails as per detail drawing
ELEMENT NO.4	**WALLING.**
1	**BLOCKWORK:**
I	**Solid concrete blocks to BS 6073 Type 'A' dense aggregate, average compressive strength 7N/sq mm; in c**
A	100 mm thick
B	150mm thick Walling

C	230mm thick walling
III	**Precast concrete: Precast concrete grade 25 finished fair on all exposed faces including hoisting into posi cement and sand (1:3) mortar:**
B	150x150x150mm High Lintel reinforced with and including 4No. 12mm diametre high tensile bars in length ar 8mm diameter links at 150mm centre.
ELEMENT No.6	**DOORS:**
1	**HEAVY DUTY ALUMINIUM DOORS**
	"Design, Engineering, Fabrication, installation, Testing and Commissioning of hinged doors with 100 mr approved aluminium fabricator.50 x 42mm Profile for panels. All extruded aluminium provided shall be Powder Coating should be of 50 Micron minimum thickness applied in accordance with either BS6496 or the doors to the openings. All assembly screws and fixings shall be grade A2 or A4 austenitic stainless ste shall be EPDM. Infill Glass to be 10mm Laminated Clear Glass. Full set of shop drawings and structural production."
A	Composite double door size 2770 x 2850mm high overall comprising of four shutters divided into two panels, t fixed and two openable complete with all iron mongeries,
B	Ditto; Size 1770 x 2850mm high overall , double leaf
4	**WOOD WORK**
II	**Prime quality hardwood, Paneled Doors, 50mm Thick Pannel glazed door; comprising of 120mm wide st intermediate rail; with 8mm thick solid panels, housed to stiles and rail.**
A	Double leafed Doors; Size 1800 x 2400mm high; Ref Door schedule D1
B	Ditto; Size 1500 x 2400mm high; Ref Door schedule D2
C	Ditto; Size 1770 x 2400mm high; Ref Door schedule D3
D	Single leafed doors; Size 1000 x 2250mm high; Ref Door schedule D4
E	Ditto; Size 900 x 2250mm high; Ref Door schedule D5
F	Ditto; Size 910 x 2250mm high; Ref Door schedule D6
G	Ditto; Size 710 x 2250mm high; Ref Door schedule D7
IV	**Frames and finishing:**
A	45 x 145mm Frame with one labour, fixed to ground
B	45 x 145mm Mullion
C	45 x 145mm Transome
D	13 x 15mm Glazing beads
E	20 x 50mm Moulded architrave
V	**Hardwood frames**
A	Sawn Hardwood; 25x100mm Grounds, plugged.
5	**OTHER DOORS**
	Mild steel metal grill unit comprising of 37.5 x 37.5mm mild steel hollow section framing and 25 x 3mm t by the project manager, including all necessary ironmongeries and materials, grinding and polishing all
A	Door opening Size 2770 x 2850mm high
B	Size 1770 x 2850mm high
6	**IRON MONGERY**
	Supply and fix the following ironmongery; HAFELE/UNION or other equal and approved; to hardwood
A	Three lever cylinder mortice lock Hafele Latchbolt "Satin chrome plated reversible" art no.911.50.788 complet handle
B	Two lever cylinder mortice lock Hafele Latchbolt "Satin chrome plated reversible" art no.911.50.788
C	Pairs of Butt Hinge 4"x3"x3mm SSS stainless steel satin

D	Half Cylinder mortice lock with thumbturn stainless steel satin
E	Half moon satin finish stainless steel door stopper cat no.937.52.070
F	Flush bolts
G	Door closer
7	**GLAZING**
	5mm thick clear glass fixed with hard wood beads m/s:
D	Panes over 0.1 M2 not exceeding 0.5 M2
ELEMENT No.7	**WINDOWS**
1	**HEAVY DUTY ALUMINIUM ALLOY WINDOWS-DOUBLE GLAZING**
II	**Supply and fix the following aluminium units ex-Itally or otherwise approved; complete with accessories clear glass panel; Anodized aluminium framing (50x100mm Mullions and transomes) hammered finish;1 fixed to concrete/blockwork; all as per Architectural Drawings/Window Schedules:**
A	Aluminum window; overall size 2000X2100mm high; comprising of four equal fixed panel as per Architect Dr
D	Ditto; Window size 1770 x2100mm high
C	Ditto; Window size 1200 x2100mm high
D	Window size 2150 x1350mm high
3	**Mild Steel Metal grill unit comprising of 25 x 25mm mild steel hollow section framing and 25 x 3mm thic the project manager, including all necessary material, grinding and polishing all welded connections to a**
A	Window opening overall size 2000 x2100mm high
B	Window size 1770 x2100mm high
C	Window size 1200 x2100mm high
D	Window size 2150 x1350mm high
ELEMENT No.8	**PLUMBING AND ENGINEERING INSTALLATIONS**
1	**SANITARY APPLIANCES**
A	WC suites, white glazed vitreous china; low level; nine litre white glazed vitreous china cistern, cover and brac ball valves,flush pipe; plastic seat and cover; operating handle and connecting to soil and vent pipe.
B	WC suites, white glazed vitreous china; squarter high level; nine litre white glazed vitreous china cistern, brack ball valves, flush pipe; operating handle and connecting to soil and vent pipe.
C	Hand wash basin, with single tap hole, white glazed vitreous china; complete with cold water tap, fixing bracke with screws to backgrounds requiring plugging; bedding waste in white lead.
D	Disabled WC suites, white glazed vitreous china; nine litre white glazed vitreous china cistern, cover and brack ball valves,flush pipe; syphon, overflow outlet, operating handle, wall hanger and connect to soil and vent pipe
E	Stainless steel kitchen sink with double bowl,single drainer,38mm chrome plated strainer waste, chain and rubb plug with slotted tail; 38mm plastic bottle trap with 75mm sealand fixed with chromium plated screws
F	Urinal , while glazed vitreous china; five litre white glazed vitreous china cistern, cover and brackets; ball valv flush pipe; operating handle and connecting to soil and vent pipe.
G	Supply and fix Toilet roll holder; Cat, No T9003028
H	Supply and fix 6mm silver Mirror, lead backed, size 850 x 600mm with arise edges fixed to wall with mirror sc
I	Supply and fix Hand Spray
J	Supply and install chromium plated shower rose with 15mm diameter supply pipe and mixer valve. Shower tra x 760 x 150 mm, white glazed fireclay.
K	Supply and install water heaters with capacity 15Litres complete with all associated
L	Supply and install Soap Dispenser
M	Supply and install shattaf hose
N	Allow connection of water supply pipe (25mm) PVC pipe from the public water supply system to the ground w

	storage tank including excavations, backfilling and disposal
O	Water Storage Tank Supply and install elevated water storage tank,type "SIMTANK", with storage capacity 3,000L.complete with all accessories for hoisting to position
P	Supply and install ground water storage tank, type"SIMTANK", with storage capacity 5,000Lcomplete with accessories for hoisting to position
Q	Allow for supply and install ball valve, gate valve and return valve to the ground and elevated tanks.
R	Allow for overflow and vent pipe to ground and elevated tanks diameter 40mm.
S	Supply and lay 25mm diameter PVC pipe from ground water storage to elevated tank including supports and fixtures.
1	Water Distribution system; Dizayn PPR 80 green pipes and fittings to BS 1387. Supply and install 40mm diam water supply pipe including fittings and accessories (elbows,tees, connectors, bends etc)
2	Ditto; Supply and install 25mm diameter water supply pipe including fittings and accessories (elbows,tees, connectors, bends etc)
3	Ditto; Supply and install 20mm diameter water supply pipe including fittings and accessories (elbows,tees, connectors, bends etc)
4	Ditto; Supply and install 15mm flexible pipe connectors to wash hand basin (WHB), Water closet (WCs), and kitchen sink.
5	Ditto; Supply and fix 15mm diameter corner valves with hand wheel, polished by manufacturer.
6	Supply and fix 25mm diameter stop valves with hand wheel, polished by manufacturer.
7	Supply, install, test and commissioning water transfer pumps with capacity 3cu.m per hour- 12mWG as type Grundfos or similar, including starter, timer, control panel, float switch, dry running protection , float valve, an other necessary accessories.
8	Supply and install 110mm diameter pipe (uPVC) for foulwater including fittings and standard holderbats fixing wall or slab requiring plugging.
9	Supply and install 50mm diameter pipe (uPVC) for foulwater including fittings and standard holderbats fixing wall or slab requiring plugging.
10	Supply and install 40mm diameter pipe (uPVC) for waste water including fittings and standard holderbats fixin wall or slab requiring plugging
11	Allow for elbows, bends connector traps etc to suit the above installation
12	Supply and install vent cowl of 110mm diameter
6	**FOUL WATER DRAINAGE**
i	**EXCAVATION**
A	Excavate trench not exceeding 0.6m deep and average 500mm width and lay sewerage pipes not exceeding 80r diameter from sanitary fittings or gully traps to manholes.
B	Excavate trench not exceeding 0.6m deep and average 500mm width and lay sewerage pipes not exceeding 110 diameter from sanitary fittings or stack pipes to manholes.
C	Excavate trench not exceeding 1.0m deep and average 500mm width and lay sewerage pipes not exceeding 110 diameter from manhole to manholes including backfilling
D	Allow for gully trap, size 250 x 250mm
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
iii	**MANHOLE**
A	Construct standard manhole size 600 x 600mm average depth 1500mm deep; in 150mm. thick solid concrete bl walls; 150mm. thick plain in-situ concrete grade ‘15’ bed; complete with benching and all necessary pipe fittin 1No. cast iron manholes covers and frames; finished to wall sides and top of slab with water proof cement and render; including excavation back filling and removal of surplus material; all as per and shown in the drawings
iv	**SEPTIC TANK**

A	Construct septic tank overall internal dimensions; size 6000 x 4000x 2500mm. deep in 230mm. thick solid con blocks walls; 230mm. thick plain in-situ concrete grade '15' bed; 100mm. thick reinforced in-situ concrete grad '20' suspended slab reinforced with 10mm diameter x 100 x 100mm BRC square mesh; 80mm. thick baffle wa complete with necessary pipe fittings; 4No. cast iron manholes covers and frames; vent pipe; finished to wall si and top of slab with 15mm thick, water proof cement and sand render; including excavation back filling and re of surplus material; all as per and shown in the drawings.
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 gr '15' foundation at the bottom; 100mm. Thick suspended slab in reinforced insitu concrete grade '20' reinforced 10mm diameter x 100 x 100mm BRC square mesh; 1No. Cast iron manhole cover and frames; vent pipe; top o finished with cement and sand (1:3) screed; including excavations; backfilling and removal of surplus material; per and shown in the drawing.
Vi. PORTABLE FIRE EXTINGUISHERS	Supply and install 9kg carbon dioxide portable fire extinguishers
ELEMENT No. 14	**FINISHING**
a)	**INTERNAL FINISHINGS**
i)	**Floor finish: (Tiles, slab or block finishings)**
a)	**Porcelain Tiles**
A	Porcelain tiles ex- Italy with cushion edges fixed to screed with approved adhesives and pointed with coloured 10mm Tiling to floors
B	Ditto; 10mm To Landings
C	Ditto; 10mm Skirting 100mm high with rounded edge and coved junction with paving
D	Ditto; 10mm Treads, 300mm wide with non-slip material on top
E	Ditto; 10mm Risers 150mm wide with rounded nosing and coved junction with treads
b)	**Beds and Backing**
A	Cement and sand (1:4) wood floated surface finish; 30mm Backing to receive floor tiles
ii)	**Wall finish:**
a)	**Internal Plastering**
A	15mm To walls
B	15mm To soffits of landing
C	15mm To strings
D	15mm To soffit of slab
E	15mm To sides and soffits of beams
F	15mm To sloping soffits of stairs
b)	**Wall Tiles or Tanga Stones/Slates**
A	Glazed ceramic wall tiles with cushion edges to Bs 1281 fixed to backings with adhesive and pointing with wh cement; 10mm Tiling to walls
B	Cut and fit around small pipes, bars and the like
c)	**Beds and backings**
A	Bed and backing; one coat work; cement and sand (1:4); 12mm Thick backing; to walls; to receive wall tiles; w floated
b)	**EXTERNAL FINISHINGS**
ii)	**Wall finish**
a)	**External Plastering**

A	15mm To walls; to concrete or block work base; External plastering in two coats, first coat 12mm thick cement sand mix (1:3) steel trowelled;prepare and apply second coat 3mm thick stucco steel trowelled to smooth finish,includding sanding with sand paper.
ELEMENT No. 15	**PAINTING AND DECORATING**
a)	**INTERNAL WORK:**
i)	**Painting and Decorations**
A	Prepare and apply one thinned coat and two full coats of vinyl silk paint; To plastered walls
B	Ditto; To plastered soffits of landing
C	To plastered sides of strings
D	To plastered soffits of slab
E	To plastered sides and soffits of beams
F	To plastered sloping soffits of stairs
iii)	**Varnish and the Like**
A	Prepare and apply one undercoat and two full coats of polyurethane clear varnish on timber surfaces: general surfaces of doors ; over 300mm wide
B	Ditto; Over 100 not exceeding 200mm girths
b)	**EXTERNAL WORK:**
i)	**External Painting**
A	Prepare and apply one undercoat and two full coats of weather guard paint on: walls and cills.
	PART F: OFFICE FOR ENGINEERS – PRIME AND PROVISION SU
BILL No 2	**PRIME COST AND PROVISIONAL SUMS**
PC 1	**PRIME COST SUMS**
	Prime Cost Sum for works to be executed by Local Authority or Public Undertakings
A	Provide for connection of electrical installation to high tension cable by TANESCO including Builders work fo Community facilities as per Suprevising Engineers Instructions.
B	Add: for profit.
C	Add: for general and special attendance.
D	Provide for water connection to water distribution pipe by MTUWASA/RUWASA including meter Chamber a installations for Community facilities as per Supervising Engineers Instructions.
E	Add: for profit
F	Add: for general and Special attendance
G	Allow for fire alarm and detection system installations by nominated contractor as per Engineer`s design and specification
H	Add: for profit,
J	Add: for general and Special attendance.
PC 2	**PROVISIONAL SUMS**
	The following Provisional sums are for the works or costs which can not entirely be forseen, defined or d should be used in whole or in part at the discretion of the Architects.
A	Signage and Signwriting
D	Provide for two number white boards
B	Allow a Provisional sum for the fittings and fixtures

Summary
BILL No 3 MEASURED WORKS
SERIES 2000 DRAINAGE
SERIES 3000 EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE
SERIES 4000 BITUMINOUS LAYERS AND SEALS
SERIES 5000 ANCILLARY ROADWORKS
SERIES 8000 STREET LIGHTS
BILL NO. 1 PRELIMINARIES AND GENERAL MATTERS
BILL No 2 PRIME COST AND PROVISIONAL SUMS
SERIES 9000 DAYWORK RATES
SERIES 1000 GENERAL
BILL No 4 EXTERNAL WORKS
SERIES 6000 STRUCTURES
A. Total of Bills
B. Less Specified Provisional Sum
C. SUB TOTAL [(A) - (B)]
D. ADD Provisional Sum of Physical Contingency
E. SUB TOTAL [(C) + (D)]
F. ADD Provisional Sum of Variation of Prices
G. Sub Total [(E) + (F)]
H. ADD Value Added Tax (VAT) [18% of G]
I. Bid Price [(A) + (D) +(F) + (H)] Carried to the Form of Tender

PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

SECTION VIII: GENERAL CONDITIONS OF CONTRACT

These General Conditions of Contract (GCC), read in conjunction with the particular conditions of Contract (PCC) and other documents listed therein, should be a complete document expressing fairly the rights and obligations of both parties.

These General Conditions of Contract have been developed on the basis of considerable international experience in the drafting and management of contracts, bearing in mind a trend in the construction industry towards simpler, more straight forward language.

The GCC can be used for both smaller admeasurement contracts and lump sum contracts.

A: GENERAL

1. Definition	1.1	Boldface type is used to identify defined terms. (a) The **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. (b) The **Activity Schedule** is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump-sum contract. It includes a lump-sum price for each activity, which is used for valuations and for assessing the effects of Variations and Compensation Events. (c) The **Adjudicator is** the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in GCC 23. (d) **Bank** means the financing institution named in the **PCC.** (e) **Bill of Quantities** means the priced and completed Bill of Quantities forming part of the Bid. (f) **Compensation Events** are those defined in GCC Clause 42 hereunder. (g) The **Completion Date** is the date of completion of the Works as certified by the Project Manager, in accordance with GCC Sub-Clause 57.1. (h) The **Contract** is the Contract between the Employer and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in GCC Sub-Clause 2.3 below. (i) The **Contractor** is the party whose Bid to carry out the Works has been accepted by the Employer. (j) The **Contractor's Bid** is the completed bidding document submitted by the Contractor to the Employer. (k) The **Contract Price** is the Accepted Contract Amount stated in the Letter of Acceptance and thereafter as adjusted in accordance with the Contract. (l) **Days** are calendar days; months are calendar months. (m)**Dayworks** are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant. (n) A **Defect** is any part of the Works not completed in accordance with the Contract. (o) The **Defects Liability Certificate** is the certificate issued by Project Manager upon correction of defects by the Contractor. (p) The **Defects Liability Period** is the period named in the **PCC** pursuant to GCC Sub-Clause 38.1 and calculated from the Completion Date. (q) **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, include calculations and other information provided or approved by the Project Manager for the execution of the Contract. (r) The **Employer** is the party who employs the Contractor to carry out the Works, as specified in the PCC. (s) **Equipment** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works. (t) "**In writing**" or "**written"** means hand-written, type-written, printed or electronically made, and resulting in a permanent record; (u) The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance. (v) The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The **Intended Completion Date** is specified in the PCC. The **Intended Completion Date** may be revised only by the Project Manager by issuing an extension of time or an acceleration order. (w) **Materials** are all supplies, including consumables, used by the

		Contractor for incorporation in the Works. (x) **Plant** is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function. (y) **The Project Manager** is the person named in the PCC (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract. (z) **PCC** means Particular Conditions of Contract. (aa) The **Site** is the area defined as such in the PCC. (bb) **Site Investigation Reports** are those that were included in the bidding document and are factual and interpretative reports about the surface and subsurface conditions at the Site. (cc) **Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager. (dd) The **Start Date** is given in the **PCC.** It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates. (ee) A **Subcontractor i**s a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site. (ff) **Temporary Works** are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works. (gg) A **Variation** is an instruction given by the Project Manager which varies the Works. (hh) The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the PCC. (ii) **"Contractor's Personnel"** refers to all personnel whom the Contractor utilizes on the Site or other places where the Works are carried out, including the staff, labor and other employees of each Subcontractor. (jj) **"Key Personnel"** means the positions (if any) of the Contractor's personnel that are stated in the Specification. (kk) **"ES"** means Environmental and Social (including Sexual Exploitation and Abuse (**SEA),** and Sexual Harassment (**SH));** (ll) "Sexual Exploitation and Abuse" "(**SEA)"** means 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. In Bank financed operations/projects, sexual exploitation occurs when access to or benefit from a Bank financed Goods, Works, Non-consulting Services or Consulting Services is used to extract sexual gain; Sexual Abuse is defined as the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions; (mm) **"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; and (nn) **"Employer's Personnel"** refers to the Project Manager and all other staff, labor and other employees (if any) of the Project Manager and of the Employer engaged in fulfilling the Employer's obligations under the Contract; and any other personnel identified as Employer's Personnel, by a notice

		from the Employer or the Project Manager to the Contractor.
2. Interpretation	2.1	In interpreting these GCC, words indicating one gender include all genders. Words indicating the singular also include the plural and words indicating the plural also include the singular. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.
	2.2	If sectional completion is specified in the PCC, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
	2.3	The documents forming the Contract shall be interpreted in the following order of priority: (a) Agreement, (b) Letter of Acceptance, (c) Letter of Bid, (d) Particular Conditions of Contract, (e) General Conditions of Contract, including Appendices, (f) Specification, (g) Drawings, (h) Bill of Quantities, and (i) any other document **listed in the PCC** as forming part of the Contract.
3. Language and Law	3.1	The language of the Contract and the law governing theContract are stated in the **PCC**.
	3.2	Throughout the execution of the Contract, the Contractor shall comply with the import of goods and services prohibitions in the Employer's country when: (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country; 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 Borrower's Country prohibits any import of goods from that country or any payments to any country, person, or entity in that country.
4. Project Manager's Decisions	4.1	Except where otherwise specifically stated, the Project Manager shall decide contractual matters between the Employer and the Contractor in the role representing the Employer.
5. Delegation	5.1	Unless otherwise specified in the PCC, the Project Manager may delegate any of his duties and responsibilities to other people, except to the Adjudicator, after notifying the Contractor, and may revoke any delegation after notifying the Contractor.
6. Communications	6.1	Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.
7. Subcontracting	7.1	The Contractor may subcontract with the approval of the Project Manager but may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor's obligations. The Contractor shall require that its Subcontractors execute the Works in accordance with the Contract, including complying with the relevant ES requirements and the obligations set out in Sub-Clause 28.1
	7.2	Submision by the Contractor for approval of the Project Manager, addition of any Subcontractor not named in the Contract, shall also include the Subcontractor's declaration in accordance with Appendix C- Sexual exploitation and Abuse (SEA) and/or Sexual Harassment (SH) Performance Declaration

8. Other Contractors	8.1	The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors, as **referred to in the PCC**. The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification.
	8.2	The Contractor shall also, as stated in the Specification or as instructed by the Project Manager, cooperate with and allow appropriate opportunities for the Employer's or any other personnel, notified to the Contractor by the Employer or Project Manager, to conduct any environmental and social assessment.
9. Personnel and Equipment	9.1	The Contractor shall employ the Key Personnel and use the Equipment identified in its Bid, to carry out the Works or other personnel and Equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of Key Personnel and Equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
	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 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; (g) undertakes behavior which breaches the Code of Conduct for Contractor's Personnel (ES). If appropriate, the Contractor shall then promptly appoint (or cause to be appointed) a suitable replacement with equivalent skills and experience. Notwithstanding any requirement from the Project Manager 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.
	9.3	The Contractor shall take all necessary safety measures to avoid the occurrence of incidents and injuries to any third party, associated with the use of, if any, Equipment on public roads or other public infrastructure. The Contractor shall monitor road safety incidents and accidents to identify negative safety issues, and establish and implement necessary measures to resolve them.
	9.4	**Labor**
		9.4.1 Engagement of Staff and Labor. The Contractor shall provide and employ on the Site for the execution of the Works such skilled, semi-skilled and unskilled labor as is necessary for the proper and timely execution of the Contract. The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labor with appropriate qualifications and experience from sources within the Country. Unless otherwise provided in the Contract, the Contractor shall be responsible for the recruitment, transportation, accommodation and welfare facilities in accordance with GCC Sub-Clause 9.4.6, of the Contractor's Personnel, and for all payments in connection therewith.

		The Contractor shall provide the Contractor's Personnel information and documentation that are clear and understandable regarding their terms and conditions of employment. The information and documentation shall set out their rights under relevant labor laws applicable to the Contractor's Personnel (which will include any applicable collective agreements), including their rights related to hours of work, wages, overtime, compensation and benefits, as well as those arising from any requirements in the Specification. The Contractor's Personnel shall be informed when any material changes to their terms or conditions of employment occur.
		9.4.2 Conditions of Labor. The Contractor shall inform the Contractor's Personnel about: (a) any deduction to their payment and the conditions of such deductions in accordance with the applicable laws or as stated in the Specification; and (b) 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 tax under the laws of the Country for the time being in force. The Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such laws. Where required by applicable laws or as stated in the Specification, the Contractor shall provide the Contractor's Personnel written notice of termination of employment and details of severance payments in a timely manner. The Contractor shall have paid the Contractor's Personnel (either directly or where appropriate for their benefit) all due wages and entitlements including, as applicable, social security benefits and pension contributions, on or before the end of their engagement/ employment.
		9.4.3 The Contractor may bring into 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 its best endeavors 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.
		9.4.4 The Contractor shall at its own expense provide the means of repatriation to and the Contractor's Personnel employed on the Contract at the Site to their various home countries. It shall also provide suitable temporary maintenance of all such persons from the cessation of their employment on the Contract to the date programmed for their departure. In the event that the Contractor defaults in providing such means of transportation and temporary maintenance, the Employer may provide the same to such personnel and recover the cost of doing so from the Contractor.
		9.4.5 Disorderly conduct. The Contractor shall at all times during the progress of the Contract use its best endeavors to prevent any unlawful, riotous or disorderly conduct or behavior by or amongst the Contractor's Personnel.
		9.4.6 Facilities for Staff and Labor. Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. If stated in the Specification, the Contractor shall give access to or provide services that

		accommodate the physical, social and cultural needs of the Contractor's Personnel. The Contractor shall also provide similar facilities for the Employer's Personnel if stated in the Specification.
		9.4.7 The Contractor shall, in all dealings with the Contractor's Personnel, pay due regard to all recognized festivals, official holidays, religious or other customs and all local laws and regulations pertaining to the employment of labor. 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.
		9.4.8 Supply of Foodstuffs. 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.
		9.4.9 Supply of Water. 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.
		9.4.10 Measures against Insect and Pest Nuisance. 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 the danger to their health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.
		9.4.11 Alcoholic Liquor or Drugs. The Contractor shall not, otherwise than in accordance with the laws of the Country, 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.
		9.4.12 Arms and Ammunition. 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.
		9.4.13 Funeral Arrangements. The Contractor shall be responsible, to the extent required by local regulations, for making any funeral arrangements for any of its local employees who may die while engaged upon the Works.
		9.4.14 Forced Labor. The Contractor, including its Subcontractors, shall not employ or engage forced labor. Forced labor 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 labor, such as indentured labor, bonded labor or similar labor-contracting arrangements. No persons shall be employed or engaged who have been subject to trafficking. Trafficking in persons is defined as the recruitment, transportation, transfer, harboring 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.
		9.4.15 Child Labor. The Contractor, including its Subcontractors, shall not employ or engage a child under the age of 14 unless the national law 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. 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 approval. The Contractor shall be subject to regular monitoring by the Project Manager that includes monitoring of health, working conditions and hours of work. 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 (d) transport of heavy loads; (e) in unhealthy environments exposing children to hazardous substances, agents, or processes, or to temperatures, noise or vibration damaging to health; or (f) under difficult conditions such as work for long hours, during the night or in confinement on the premises of the employer.
		9.4.16 Employment Records of Workers. The Contractor shall keep complete and accurate records of the employment of labor 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.
		9.4.17 Workers' Organizations. In countries where the relevant labor laws recognize workers' rights to form and to join workers' organizations 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. Where the relevant labor laws substantially restrict workers' organizations, 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 organizations and collective bargaining or alternative mechanisms. Workers' organizations are expected to fairly represent the workers in the workforce.
		9.4.18 Non-Discrimination and Equal Opportunity. 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. Special measures of protection or assistance to remedy past discrimination or selection for a particular job based on the inherent requirements of the job shall not be deemed discrimination. The Contractor shall provide protection and assistance as necessary to ensure non-discrimination and equal opportunity, including for specific groups such as women, people with disabilities, migrant workers and children (of working age in accordance with GCC Sub-Clause 9.4.15).
		9.4.19 Contractor's Personnel Grievance Mechanism. The Contractor shall have a grievance mechanism for Contractor's Personnel, and where relevant the workers' organizations stated in GCC Sub-Clause 9.4.17, 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. 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. 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. The grievance mechanism may utilize existing grievance mechanisms, providing that they are properly designed and implemented, address concerns promptly, and are readily accessible to Contractor's Personnel. Existing grievance mechanisms may be supplemented as needed with Contract-specific arrangements.
		9.4.20 Training of Contractor's Personnel. 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 referred to in GCC Sub-Clause 18.2. 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.
10. Employer's and Contractor's Risks	10.1	The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.
11. Employer's Risks	11.1	From the Start Date until the Defects Liability Certificate has been issued, the following are Employer's risks: (a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to (i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or (ii) negligence, breach of statutory duty, or interference with

		any legal right by the Employer or by any person employed by or contracted to him except the Contractor. (b) (The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in the Employer's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.
	11.2	From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is an Employer's risk except loss or damage due to (a) a Defect which existed on the Completion Date, (b) an event occurring before the Completion Date, which was not itself an Employer's risk, or (c) the activities of the Contractor on the Site after the Completion Date.
12. Contractor's Risks	12.1	From the Starting Date until the Defects Liability Certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Employer's risks are Contractor's risks.
13. Insurance	13.1	The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the **PCC** for the following events which are due to the Contractor's risks: (a) loss of or damage to the Works, Plant, and Materials; (b) loss of or damage to Equipment; (c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and (d) personal injury or death.
	13.2	Policies and certificates for insuranceshall be delivered by the Contractor to the Project Manager for the ProjectManager's approval before the Start Date. All such insurance shall provide forcompensation to be payable in the types and proportions of currencies requiredto rectify the loss or damage incurred.
	13.3	If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.
	13.4	Alterations to the terms of an insurance shall not be made without the approval of the Project Manager.
	13.5	Both parties shall comply with any conditions of the insurance policies.
14. Site Data	14.1	The Contractor shall be deemed to have examined any Site Data referred to in the **PCC,** supplemented by any information available to the Contractor.
15. Contractor to Construct the Works	15.1	The Contractor shall construct and install the Works in accordance with the Specification and Drawings.
	15.2	If the Contract specifies that the Contractor shall design any part of the permanent Works, the Contractor shall take into the Employer's requirements which may include, if stated in the Specification: (a) designing structural elements of the Works taking into account climate change considerations; (b) applying the concept of universal access (the concept of

		universal access means unimpeded access for people of all ages and abilities in different situations and under various circumstances; and (c) considering the incremental risks of the public's potential exposure to operational accidents or natural hazards, including extreme weather events.
16. The Works to Be Completed by the Intended Completion Date	16.1	The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.
	16.2	The Contractor shall not carry out mobilization to the Site unless the Project Manager gives approval, an approval that shall not be unreasonably delayed, to the measures the Contractor proposes to address 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 Bid and agreed as part of the Contract. The Contractor shall submit, to the Project Manager for its approval any additional MSIPs as are necessary to manage the ES risks and impacts of ongoing Works. 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 its approval.
17. Approval by the Project Manager	17.1	The Contractor shall submit Specification and Drawings showing the proposed Temporary Works to the Project Manager, for his approval.
	17.2	The Contractor shall be responsible for design of Temporary Works.
	17.3	The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
	17.4	The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.
	17.5	All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Project Manager before this use.
18. Health, Safety and Protection of the Environment	18.1	The Contractor shall be responsible for the safety of all activities on the Site.
	18.2	The Contractor shall: (a) comply with all applicable health and safety regulations and Laws; (b) comply with all applicable health and safety obligations specified in the Contract; (c) take care for the health and safety of all persons entitled to be on the Site and other places, if any, where the Works are being executed; (d) keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons; (e) provide fencing, lighting, safe access, guarding and watching of the Works until the issue of the Contract Certificate of Completion; (f) 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; (g) provide health and safety training of Contractor's Personnel as appropriate and maintain training records; (h) actively engage the Contractor's Personnel in promoting understanding, and methods for, implementation of health and safety requirements, as well as in providing information to Contractor's Personnel, training on occupational safety and health, and provision of personal protective equipment without expense to the Contractor's Personnel; (i) put in place workplace processes for Contractor's Personnel to report work situations that they believe are not safe or healthy, and to remove themselves from a work situation which they have reasonable justification to believe presents an imminent and serious danger to their life or health; (j) Contractor's Personnel who remove themselves from such work situations shall not be required to return to work until necessary remedial action to correct the situation has been taken. Contractor's Personnel shall not be retaliated against or otherwise subject to reprisal or negative action for such reporting or removal; (k) where the Employer's Personnel, any other contractors employed by the Employer, and/or personnel of any legally constituted public authorities and private utility companies are employed in carrying out, on or near the site, of any work not included in the Contract, collaborate in applying the health and safety requirements, without prejudice to the responsibility of the relevant entities for the health and safety of their own personnel; and (l) establish and implement a system for regular (not less than six-monthly) review of health and safety performance and the working environment. Subject to GCC Sub-Clause 16.2, the Contractor shall submit to the Project Manager for its approval 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. 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, (a) which shall include at a minimum: (i) 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; (ii) details of the training to be provided, records to be kept; (iii) 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); (iv) remedies for adverse impacts such as occupational injuries, deaths, disability and disease; (v) 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, (vi) 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 labor; (vii) 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 GCC Sub-Clause 9.4.6; and (b) any other requirements stated in the Specification.
	18.3	Protection of the environment (a) The Contractor shall take all necessary measures to: 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. 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.
19. Archaeological and Geological Findings	19.1	All fossils, coins, articles of value or antiquity, structures, groups of structures, and other remains or items of geological, archaeological, paleontological, historical, architectural or religious interest found on the Site shall be placed under the care and custody of the Employer. The Contractor shall: (a) take all reasonable precautions, including fencing-off the area or site of the finding, to avoid further disturbance and prevent Contractor's Personnel or other persons from removing or damaging any of these findings; (b) train relevant Contractor's Personnel on appropriate actions to be taken in the event of such findings; and (c) implement any other action consistent with the requirements

		of the Specification and relevant laws. The Contractor shall, as soon as practicable after discovery of any such finding, notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.
20. Possession of the Site	20.1	The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated **in the PCC**, the Employer shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.
21. Access to the Site	21.1	The Contractor shall allow the Project Manager and any person authorized by the Project Manager (including the Bank staff or consultants acting on the Bank's behalf, stakeholders and third parties, such as independent experts, local communities, or non-governmental organizations), including to carry out environmental and social audit, as appropriate, access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.
22. Instructions, Inspections and Audits	22.1	The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.
	22.2	The Contractor shall keep, and shall make all reasonable efforts to cause its Subcontractors and subconsultants to keep, accurate and systematic accounts and records in respect of the Works in such form and details as will clearly identify relevant time changes and costs.
	22.3	Inspections & Audit by the Bank Pursuant to paragraph 2.2 e. of Appendix A to the GCC- Fraud and Corruption, the Contractor shall permit and shall cause its agents (where declared or not), subcontractors, subconsultants, service providers, suppliers, and personnel, to permit, the Bank and/or persons appointed by the Bank to inspect the site and/or the accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have such accounts, records and other documents audited by auditors appointed by the Bank. The Contractor's and its Subcontractors' and subconsultants' attention is drawn to GCC Sub-Clause 25.1 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).
23. Appointment of the Adjudicator	23.1	The Adjudicator shall be appointed jointly by the Employer and the Contractor, at the time of the Employer's issuance of the Letter of Acceptance. If, in the Letter of Acceptance, the Employer does not agree on the appointment of the Adjudicator, the Employer will request the Appointing Authority designated **in the PCC**, to appoint the Adjudicator within 14 days of receipt of such request.
	23.2	Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator shall be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority **designated in the PCC** at the request of either party, within 14 days of receipt of such request.
24. Procedure for Disputes	24.1	If the Contractor believes that a decision taken by the Project Manager was either outside the authority given to the Project Manager by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within 14 days of the notification of the Project Manager's decision.
	24.2	The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.
	24.3	The Adjudicator shall be paid by the hour at the rate specified **in**

		the PCC, together with reimbursable expenses of the types specified **in the PCC**, and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision shall be final and binding
	24.4	The arbitration shall be conducted in accordance with the arbitration procedures published by the institution named and in the place specified **in the PCC.** The rules of procedure for arbitration proceedings to be specified in PCC will be as follows: For smaller contracts, the institution is usually from the Employer's Country. For larger contracts, and contracts that are likely to be awarded to international contractors, it is recommended that the arbitration procedure of an international institution. For larger contracts with international contractors, it is recommended to selectone institution among those listed below; **"United Nations Commission on International Trade Law (UNCITRAL) Arbitration Rules:** Any dispute, controversy, or claim arising out of or relating to this Contract, or breach, termination, or invalidity thereof, shall be settled by arbitration inaccordance with the UNCITRAL Arbitration Rules as at present in force." or **"Rules of Conciliation and Arbitration of the International Chamber of Commerce (ICC):** All disputes arising out of or in connection with the present Contract shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with said Rules." or **"Rules of Arbitration Institute of the Stockholm Chamber of Commerce:** Any dispute, controversy, or claim arising out of or in connection with this Contract, or the breach, termination, or invalidity thereof, shall be finally settled by arbitration in accordance with the Arbitration Rules of the Arbitration Institute of the Stockholm Chamber of Commerce." or **"Rules of the London court of International Arbitration:** Any dispute arising out of or in connection with this

		Contract, including any question regarding its existence, validity, or termination shall be referred to and finally resolved by arbitration under the LCIA Rules, which Rules are deemed to be incorporated by reference to this clause." The place of arbitration shall be specified in PCC.
25. Fraud and Corruption	25.1	The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in Appendix A to the GCC.
	25.2	The Employer requires the Contractor to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.
26. Stakeholder Engagement	26.1	The Contractor shall provide relevant contract-related information, as the Employer and/or Project Manager may reasonably request to conduct Stakeholder engagements. "Stakeholder" refers to individuals or groups who: (i) are affected or likely to be affected by the Contract; and (ii) may have an interest in the Contract. The Contractor may also directly participate in Stakeholder engagements, as the Employer and/or Project Manager may reasonably request..
27. Suppliers (other than Subcontractors)	27.1	Forced Labor: The Contractor shall take measures to require its suppliers (other than Subcontractors) not to employ or engage forced labor including trafficked persons as described in GCC Sub-Clause 9.4.14. If forced labor/trafficking cases are identified, the Contractor shall take measures to require the suppliers to take appropriate steps to remedy them. Where the supplier does not remedy the situation, the Contractor shall within a reasonable period substitute the supplier with a supplier that is able to manage such risks.
	27.2	Child Labor: The Contractor shall take measures to require its suppliers (other than Subcontractors) not to employ or engage child labor as described in GCC Sub-Clause 9.4.15. If child labor cases are identified, the Contractor shall take measures to require the suppliers to take appropriate steps to remedy them. Where the supplier does not remedy the situation, the Contractor shall within a reasonable period substitute the supplier with a supplier that is able to manage such risks.
	27.3	Serious Safety Issues: The Contractor, including its Subcontractors, shall comply with all applicable safety obligations, including as stated in GCC Sub-Clause 18.2. The Contractor shall also take measures to require its suppliers (other than Subcontractors) to adopt procedures and mitigation measures adequate to address safety issues related to their personnel. If serious safety issues are identified, the Contractor shall take measures to require the suppliers to take appropriate steps to remedy them. Where the supplier does not remedy the situation, the Contractor shall within a reasonable period substitute the supplier with a supplier that is able to manage such risks.
	27.4	Obtaining natural resource materials in relation to supplier: The Contractor shall obtain natural resource materials from suppliers that can demonstrate, through compliance with the applicable verification and/ or certification requirements, that obtaining such materials is not contributing to the risk of significant conversion or significant degradation of natural or critical habitats such as unsustainably harvested wood products, gravel or sand extraction from river beds or beaches. If a supplier cannot continue to demonstrate that obtaining such

		materials is not contributing to the risk of significant conversion or significant degradation of natural or critical habitats, the Contractor shall within a reasonable period substitute the supplier with a supplier that is able to demonstrate that they are not significantly adversely impacting the habitats.
28. Code of Conduct	28.1	The Contractor shall have a Code of Conduct for the Contractor's Personnel. The Contractor shall take all necessary measures to ensure that each Contractor's Personnel is made aware of the Code of Conduct including specific behaviors that are prohibited, and understands the consequences of engaging in such prohibited behaviors. These measures include providing instructions and documentation that can be understood by the Contractor's Personnel and seeking to obtain that person's signature acknowledging receipt of such instructions and/or documentation, as appropriate. The Contractor shall also ensure that the Code of Conduct is visibly displayed in multiple locations on the Site and any other place where the Works will be carried out, as well as in areas outside the Site accessible to the local community and project affected people. The posted Code of Conduct shall be provided in languages comprehensible to Contractor's Personnel, Employer's Personnel and the local community. The Contractor's Management Strategy and Implementation Plans shall include appropriate processes for the Contractor to verify compliance with these obligations.
29. Security of the Site	29.1	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 Project Manager to the Contractor. Subject to GCC Sub-Clause 16.2, the Contractor shall submit for the Project Manager's No-objection a security management plan that sets out the security arrangements for the Site. 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. 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. In making security arrangements, the Contractor shall also comply with any additional requirements stated in the Specifications.

B. TIME CONTROL

30. Program and Progress Reports	30.1	Within the time stated in the PCC, after the date of the Letter of Acceptance, the Contractor shall submit to the Project Manager for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works. In the case of a lump-sum contract, the activities in the Program shall be consistent with those in the Activity Schedule. The Project Manager's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Project Manager again at any time. A revised Program shall show the effect of Variations and Compensation Events.
	30.2	An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.
	30.3	The Contractor shall monitor progress of the Works and submit to the Project manager progress report and any updated Program showing the actual progress achieved and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities, at intervals no longer than the periods stated in the PCC. If the Contractor does not submit an updated Program within this period, the Project Manager may withhold the amount stated in the PCC from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted. In the case of lump-sum Contract, the Contractor shall provide an updated Activity Schedule within 14 days of being instructed to by the Project Manager.
	30.4	Unless otherwise stated in the Specification, each progress report shall include the Environmental and Social (ES) metrics set out in Appendix B.
	30.5	In addition to the progress reports, the Contractor shall inform the Project Manager immediately of any allegation, incident or accident in the Site, 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. 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 Subclause.
31. Extension of the Intended Completion Date	31.1	The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.
	31.2	The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager for a decision upon the effect of a Compensation

		Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.
32. Acceleration	32.1	When the Employer wants the Contractor to finish before the Intended Completion Date, the Project Manager shall obtain priced proposals for achieving the necessary acceleration from the Contractor. If the Employer accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both the Employer and the Contractor.
	32.2	If the Contractor's priced proposals for an acceleration are accepted by the Employer, they are incorporated in the Contract Price and treated as a Variation.
33. Delays Ordered by the Project Manager	33.1	The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.
	33.2	During such suspension, the Contractor shall protect, store and secure such part or the Works against any deterioration, loss or damage.
	33.3	The Project Manager may also notify the cause for the suspension.
34. ManagementMeetings	34.1	Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
	34.2	The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.
35. Early Warning	35.1	The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.
	35.2	The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Project Manager.

C: QUALITY CONTROL

36. Identifying Defects	36.1	The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.
37. Tests	37.1	The Project Manager may instruct the Contractor to carry out a test not specified in the Specification to check whetherany work has a Defect and in the event the test shows that itdoes, the Contractor shall pay for the test and any samples thereof. If there is no Defect, the test shall be a Compensation Event.
38. Correction of Defects	38.1	The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the PCC. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
	38.2	Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.
39. Uncorrected Defects	39.1	If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected, and the Contractor shall pay this amount.

D. COST CONTROL

40. Contract Price	40.1	The Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item. **In the lump-sum contracts,** The Contractor shall provide updated Activity Schedules within 14 days of being instructed to by the Project Manager. The Activity Schedule shall contain the priced activities for the Works to be performed by the Contractor. The Activity Schedule is used to monitor and control the performance of activities on which basis the Contractor will be paid. If payment for materials on site shall be made separately, the Contractor shall show delivery of Materials to the Site separately on the Activity Schedule.
41. Changes in the Quantities	41.1	If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change. The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the prior approval of the Employer. **In the lump-sum contracts,** The Activity Schedule shall be amended by the Contractor to accommodate changes of Program or method of working made at the Contractor's own discretion. Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.
	41.2	If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.
42. Variations	42.1	All Variations shall be included in updated Programs produced by the Contractor. **In the lump-sum contracts,** All Variations shall be included in updated Programs and Activity Schedules produced by the Contractor.
	42.2	The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to do so by the Project Manager. The Contractor shall also provide information of any ES risks and impacts of the Variation. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.
	42.3	If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.
	42.4	If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.
	42.5	The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.
	42.6	If the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in GCC Sub-Clause 41.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the

		Contractor shall be in the form of new rates for the relevant items of work. **In the lump-sum contracts,** The Paragraph for GCC 42.6 above is not applicable.
	42.7	Value Engineering: The Contractor may prepare, at its own cost, a value engineering proposal at any time during the performance of the contract. The value engineering proposal shall, at a minimum, include the following; (a) the proposed change(s), and a description of the difference to the existing contract requirements; (b) a full cost/benefit analysis of the proposed change(s) including a description and estimate of costs (including life cycle cost) the Employer may incur in implementing the value engineering proposal; (c) a description of any effect(s) of the change on performance/functionality; and (d) a description of the proposed work to be performed, a program for its execution and sufficient ES information to enable an evaluation of ES risks and impacts. The Employer may accept the value engineering proposal if the proposal demonstrates benefits that: (a) accelerates the contract completion period; or (b) reduces the Contract Price or the life cycle costs to the Employer; or (c) improves the quality, efficiency, safety or sustainability of the Facilities; or (d) yields any other benefits to the Employer, without compromising the functionality of the Works. If the value engineering proposal is approved by the Employer and results in: (a) a reduction of the Contract Price; the amount to be paid to the Contractor shall be the percentage specified in the PCC of the reduction in the Contract Price; or (b) an increase in the Contract Price; but results in a reduction in life cycle costs due to any benefit described in (a) to (d) above, the amount to be paid to the Contractor shall be the full increase in the Contract Price.
43. Cash Flow Forecasts	43.1	When the Program, is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates. **In the lump-sum contracts,** When the Program and Activity Schedule is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.
44. Payments Certificates	44.1	The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.
	44.2	The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
	44.3	The value of work executed shall be determined by the Project Manager.
	44.4	The value of work executed shall comprise the value of the quantities of work in the Bill of Quantities that have been completed. **In the lump-sum contracts,** "The value of work executed shall comprise the value of completed

		activities in the Activity Schedule."
	44.5	The value of work executed shall include the valuation of Variations and Compensation Events.
	44.6	The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
	44.7	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 Project Manager, 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: (a) failure to comply with any ES obligations or work described in the Works' Requirements which may include: working outside site boundaries, excessive dust, failure to keep public roads in a safe usable condition, damage to offsite vegetation, pollution of water courses from oils or sedimentation, contamination of land e.g. from oils, human waste, damage to archeology or cultural heritage features, air pollution as a result of unauthorized and/or inefficient combustion; (b) failure to regularly review C-ESMP and/or update it in a timely manner to address emerging ES issues, or anticipated risks or impacts; (c) failure to implement the C-ESMP e.g. failure to provide required training or sensitization; (d) failing to have appropriate consents/permits prior to undertaking Works or related activities; (e) failure to submit ES report/s (as described in Appendix B), or failure to submit such reports in a timely manner; (f) failure to implement remediation as instructed by the Project Manager within the specified timeframe (e.g. remediation addressing non-compliance/s).
45. Payments	45.1	Payments shall be adjusted for deductions for advance payments and retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 28 days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payments are made.
	45.2	If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
	45.3	Unless otherwise stated, all payments and deductions shall be paid or charged in the proportions of currencies comprising the Contract Price.
	45.4	Items of the Works for which no rate or price has been entered in shall not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.
46. Compensation Events	46.1	The following shall be Compensation Events: (a) The Employer does not give access to a part of the Site by the Site Possession Date pursuant to GCC Sub-Clause 20.1. (b) The Employer modifies the Schedule of Other Contractors in a

		way that affects the work of the Contractor under the Contract. (c) The Project Manager orders a delay or does not issue Drawings, Specification, or instructions required for execution of the Works on time. (d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects. (e) The Project Manager unreasonably does not approve a subcontract to be let. (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site. (g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons. (h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor. (i) The advance payment is delayed. (j) The effects on the Contractor of any of the Employer's Risks. (k) The Project Manager unreasonably delays issuing a Certificate of Completion.
	46.2	If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
	46.3	As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.
	46.4	The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor's not having given early warning or not having cooperated with the Project Manager.
47. Tax	47.1	The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 28 days before the submission of bids for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of GCC Clause 49.
48. Currencies	48.1	Where payments are made in currencies other than the currency of the Employer's country **specified in the PCC,** the exchange rates used for calculating the amounts to be paid shall be the exchange rates stated in the Contractor's Bid.
49. Price Adjustment	49.1	Prices shall be adjusted for fluctuations in the cost of inputs only if provided for in the PCC. If so provided, the amounts certified in each payment certificate, before deducting for Advance Payment, shall be

		adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. A separate formula of the type specified below applies to each Contract currency: $\mathbf{P_c = A_c + B_c\ I_{mc}/I_{oc}}$ where: $\mathbf{P_c}$ is the adjustment factor for the portion of the Contract Price payable in a specific currency **"c."** $\mathbf{A_c}$ and $\mathbf{B_c}$ are coefficients specified in the PCC, representing the nonadjustable and adjustable portions, respectively, of the Contract Price payable in that specific currency **"c;"** and $\mathbf{I_{mc}}$ is the index prevailing at the end of the month being invoiced and Ioc is the index prevailing 28 days before Bid opening for inputs payable; both in the specific currency **"c."**
	49.2	If the value of the index is changed after it has been used in a calculation, the calculation shall be corrected and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.
50. Retention	50.1	The Employer shall retain from each payment due to the Contractor the proportion stated in the PCC until Completion of the whole of the Works.
	50.2	Upon the issue of a Certificate of Completion of the Works by the Project Manager, in accordance with GCC Sub-Clause 57.1, half the total amount retained shall be repaid to the Contractor and half when the Defects Liability Period has passed and the Project Manager has certified that all Defects notified by the Project Manager to the Contractor before the end of this period have been corrected. The Contractor may substitute retention money with an "on demand" Bank guarantee.
51. Liquidated Damage	51.1	The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the PCC for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount defined in the PCC. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.
	51.2	If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in GCC Sub-Clause 45.1.
52. Bonus	52.1	The Contractor shall be paid a Bonus calculated at the rate per calendar day stated in the PCC for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.
53. Advance Payment	53.1	The Employer shall make advance payment to the Contractor of the amounts stated in the PCC by the date stated in the PCC, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Employer in amounts and currencies equal to the advance payment. The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest shall not be charged on the advance payment.
	53.2	The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by

		supplying copies of invoices or other documents to the Project Manager.
	53.3	The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.
54. Securities	54.1	The Performance Security, and if so specified in the PCC an environmental and social (ES) performance security, shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount **specified in the PCC**, by a bank or surety acceptable to the Employer, and denominated in the types and proportions of the currencies in which the Contract Price is payable. The Performance Security shall be valid until a date 28 days from the date of issue of the Certificate of Completion in the case of a Bank Guarantee, and until one year from the date of issue of the Certificate of Completion in the case of a Performance Bond.
55. Day Works	55.1	If applicable, the Dayworks rates in the Contractor's Bid shall be used only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.
	55.2	All work to be paid for as Dayworks shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.
	55.3	The Contractor shall be paid for Dayworks subject to obtaining signed Dayworks forms.
56. Cost of Repairs	56.1	Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

E. FINISHING THE CONTRACT

57. Completion	57.1	The Contractor shall request the Project Manager to issue a Certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the whole of the Works is completed.
58. Taking Over	58.1	The Employer shall take over the Site and the Works within seven days of the Project Manager's issuing a Certificate of Completion.
59. Final Account	59.1	The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate.
60. Operating and Maintenance manuals	60.1	If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates **stated in the PCC.**
	60.2	If the Contractor does not supply the Drawings and/or manuals by the dates **stated in the PCC** pursuant to GCC Sub-Clause 60.1, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount **stated in the PCC** from payments due to the Contractor.
61. Termination	61.1	The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
	61.2	Fundamental breaches of Contract shall include, but shall not be limited to, the following: (a) the Contractor stops work for 28 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Project Manager; (b) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 28 days; (c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation; (d) a payment certified by the Project Manager is not paid by the Employer to the Contractor within 84 days of the date of the Project Manager's certificate; (e) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager; (f) the Contractor does not maintain a Security, which is required; (g) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as defined in the PCC; or (h) if the Contractor, in the judgment of the Employer has engaged in Fraud and Corruption, as defined in paragraph 2.2 a of the Appendix A to the GCC, in competing for or in executing the Contract, then the Employer may, after giving fourteen (14) days written notice to the Contractor, terminate the Contract and expel him from the Site.
	61.3	Notwithstanding the above, the Employer may terminate the Contract for convenience.
	61.4	If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.
	61.5	When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under GCC Sub-Clause 61.2 above, the Project Manager shall decide whether the breach is fundamental or not.
62. Payment upon Termination	62.1	If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value

		of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as specified in the PCC. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable to the Employer.
	62.2	If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Project Manager shall issue a certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate
63. Property	63.1	All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer if the Contract is terminated because of the Contractor's default.
64. Release from Performance	64.1	If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.
65. Suspension of Bank Loan or Credit	65.1	In the event that the Bank suspends the Loan or Credit to the Employer, from which part of the payments to the Contractor are being made: (a) The Employer is obligated to notify the Contractor of such suspension within 7 days of having received the Bank's suspension notice. (b) If the Contractor has not received sums due to it within the 28 days for payment provided for in GCC Sub-Clause 45.1, the Contractor may immediately issue a 14-day termination notice.

APPENDIX A
TO GENERAL CONDITIONS
Fraud and Corruption

1. Purposes 1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements 2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants/proposers), consultants, contractors, and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection, and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

2.2 To this end, the Bank:

a. Defines, for the purposes of this provision, the terms set forth below as follows:

i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;

ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;

iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;

iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;

v. "obstructive practice" is:

(a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

(b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.

b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;

c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;

d. Pursuant to the Bank's Anti- Corruption Guidelines and in accordance

with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;[1] (ii) to be a nominated[2] sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;

e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders(applicants/proposers), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect[3] all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

[1] For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i)applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.
[2] A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.
[3] Inspections in this context usually are investigative(i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

APPENDIX B
TO GENERAL CONDITIONS
Environmentaland Social (ES)
Metrics for Progress Reports

1. Metrics for Regular Reporting	1.1	*Metrics for regular reporting:* *a. environmental incidents or non-compliance 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 the 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 dealt 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:* 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 waterings/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 clean-ups, 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 C
TO GENERAL CONDITIONS

Sexual Exploitation and Abuse (SEA) and/or Sexual Harassment (SH) Performance Declaration for Subcontractors

SEA and/or SH Declaration

We:

¨ (a) have not been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations.

¨ (b) are subject to disqualification by the Bank for non-compliance with SEA/ SH obligations.

¨ (c) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations. An arbitral award on the disqualification case has been made in our favor.

¨ (d) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have subsequently demonstrated that we have adequate capacity and commitment to comply with SEA /SH obligations.

¨ (e) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have attached specific evidence demonstrating that we have adequate capacity and commitment to comply with SEA and SH obligations.

[*If (c) above is applicable, attach evidence of an arbitral award reversing the findings on the issues underlying the disqualification.]*

[If (d) or (e) above are applicable, provide the following information:]

Period of disqualification: From: _____ To: _____

If previously provided on another Bank financed works contract, details of evidence that demonstrated adequate capacity and commitment to comply with SEA/SH obligations (**as per (d) above)**

Name of Employer: _____

Name of Project: _____

Contract description: _____

Brief summary of evidence provided: _____

_____

Contact Information: (Tel, email, name of contact person): _____

_____

As an alternative to the evidence under (d), other evidence demonstrating adequate capacity and commitment to comply with SEA/SH obligations (**as per (e) above))** *[attach details as appropriate].*

_____

_____

Name of the Subcontractor

Name of the person duly authorized to sign onbehalf of the Subcontractor

Title of the person signing on behalf of the Subcontractor

Signature of the person named above

Date signed _____day of _____, _____

Counter signature of authorized representativeof the Contractor:

Signature:_____

SECTION IX: PARTICULAR CONDITIONS OF CONTRACT (PCC)

SECTION IX: PARTICULAR CONDITIONS OF CONTRACT

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

PCC Clause	Required Information/Data	GCC Clause	Data/Information to be supplied
			A. General
1.	Financing Institution	1.1(d)	The Financing Institutions is: World Bank
2.	Employer's details	1.1(r)	Employer Name: MTWARA - MIKINDANI MUNICIPAL COUNCIL Employer's Address: PO. BOX 92 MTWARA Employer's Authorized Representative: Municipal Director, Mtwara Mikindani Municipal Council
3.	Intended Completion Date	1.1(v)	The Intended Completion Date for the whole of the Works shall be 455 days after contract signing.
4.	Project Manager	1.1(y)	Name of Project Manager: TBD Address of the Project Manager: TBD
5.	Location of the Site	1.1(aa)	The Site is located at Mtwara Mikindani Municipality and is defined in drawings No. 2.
6.	Contract Start Date	1.1(dd)	The Contract Start Date shall be 21/05/2025 after contract signing.
7.	Summary of Works	1.1(hh)	Works consist of: 1. Upgrading of Roads i) Chuno Market Outer Road (1.8km) ii) Chuno Road 2 (0.4km) iii) Tokyo Road (0.55km) iv) Samia City access road (2.4km) v) Menyumenyu Road (0.63km) 2. Skoya Small Scale Industry and General Workshop 3. Construction of Chipuputa Main Bus Termina 4. Drainage system 5. Construction of Engineer’s Office Note: Procurement of the Works under this bid is advertised and will be executed concurrently with other 16 Packages bids under the TACTIC - Tier 2 Project namely Package 1 in Moshi Municipal, Package 1 and Package 2 in Tanga City, Package 1 in Korogwe Town, Package 1 in Musoma Municipality, Package 1 and Package 2 in Bukoba Municipality, Package 1 in Babati Town, Package 1 in Iringa Municipality, Package 1 in Kibaha Town, Package 1 in Lindi Municipal, Package 1 in Mpanda Municipality, Package 1 in Bariadi Town, Package 1 in Njombe Town, Package 1 in Singida Municipality and Package 1 in Shinyanga Municipality in Iringa Municipality. Hence, regarding Award Criteria for Multiple Contracts, the Employer will aggregate minimum requirements for respective packages/bids as specified under the following Evaluation and Qualification Criteria: (i) Access to Financial Resources (Sources of Fund), (ii) Average Annual Turnover, (iii) Specific Experience, (iv) General Experience in Key Activities. With regard to Key Personnel and Equipment, to be awarded multiple contracts, the bidder must present separate sets of Equipment and separate teams of Key Personnel for each Package and Lot.
8.	Sectional Completion of the Works	2.2	Not Applicable.

9.	Other Documents Forming the Contract	2.3(i)	Not Applicable.
10.	Language of Contract	3.1	Language of the contract is English
11.	Law of Contract	3.1	The Law that applies to the contract is the Law of Laws of Tanzania
12.	Delegation by Project Manager's Duties	5.1	Not Applicable
13.	Schedule of Other Contractors	8.1	Not Applicable
14.	Minimum Insurance covers	13.1	The minimum insurance amounts and deductibles shall be: a) For loss of or damage to the Works, Plant, and Materials The Tanzanian Shilling 796,000,000. b) For loss of or damage to Equipment The Tanzanian Shilling 114,000,000.00 c) For loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract The Tanzanian Shilling 227,000,000.00 d) For personal injury or death: i) of the contractor's employee The Tanzanian Shilling 136,000,000.00 ii) of other people The Tanzanian Shilling 136000000
15.	Site Data	14.1	The Site data are; Soil and Materials Report, Geotechnical Investigation Report
16.	Site Possession Date(s)	20.1	The Site Possession Date shall be within 28 days after submission of Performance Security in the form of Unconditional Bank Guarantee.
17.	Appointing Authority for the Adjudicator	23.1 & 23.2	Appointing Authority for the Adjudicator: National Construction Council (NCC).
18.	Adjudicator's Hourly Rate and Reimbursable fees	24.3	Adjudicator's Hourly rate shall be TZS. 200000 and types of reimbursable expenses to bepaid to the Adjudicator is/are 1. Cost Of Necessary Travel .
19.	Arbitration Procedures	24.4	"United Nations Commission on International Trade Law (UNCITRAL) Arbitration Rules: Any dispute, controversy, or claim arising out of or relating to this Contract, or breach, termination, or invalidity thereof, shall be settled by arbitration following the UNCITRAL Arbitration Rules as at present in force."

B. Time Control

20.	Program and Progress Reports	30.1	The Contractor shall submit for approval a Program for the Works within 28 days from the date of the Letter of Acceptance.
		30.3	The period between Program updates is 28 days. The amount to be withheld for late submission of an updated Program is The Tanzanian Shilling20,000,000.00. The period for submission of progress reports is 28 days.

C. Quality Control

21.	Corrections of Defects	38.1	The Defects Liability Period is 365 days.

D. Cost Control

22.	Value Engineering	42.7	Not Applicable
23.	Currency(ies) of payment	48.1	The currency of the Employer's Country is: The United States dollar and The Tanzanian Shilling.
24.	Price Adjustment	49.1	The Contract "is not" subject to price adjustment in accordance with GCC Clause 45, and the information regarding coefficients "does not" apply.
25.	Retention	50.1	The proportion of payments retained is 10 percentage.
26.	Liquidated Damages	51.1	The liquidated damages amount is 0.1 percent of Contract Price per day. The maximum amount of liquidated damages is 10 percent of Contract Price.
27.	Bonus	52.1	Not Applicable
28.	Advance Payment	53.1	The Advance Payments shall be: 15 percent and shall be paid to the Contractor no later than 56 days.
29.	Securities	54.1	The Performance Security will be in the form of a Performance Security - Bank Guarantee in the amount(s) of 8.00 percent of the Accepted Contract Amount and in the same currency (ies) of the Accepted Contract Amount.

E. Finishing the Contract

30.	Operating and Maintenance Manuals	60.1	The date by which operating, maintenance manuals, and "as built" drawings are required is Contractor is required to submit As Built drawings and operational manuals.
31.	Amount to be Withheld for Failure to Submit As-Built Drawings and Operating Manuals	60.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required in GCC Sub-Clause 60.1 is [insert amount in local currency] TZS 155000000. The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required in GCC Sub-Clause 60.1 is [insert amount in local currency] TZS 155000000.
32.	Number of Days for Maximum Liquidated Damage to be Paid	61.2(g)	The maximum number of days is 100 days
33.	Percentage to Apply (deduction) to the Value of Work not Completed	62.1	The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, is 40 percent.

SECTION X: CONTRACT FORMS

NOTICE OF INTENTION TO AWARD A CONTRACT

(This template is available in the system during the award of the contract)

LETTER OF ACCEPTANCE

(This template is available in the system during the award of the contract)

FORM OF AGREEMENT

THIS AGREEMENT made

the [insert: **number**] day of *[insert: month]*, *[insert: **year**]*.

BETWEEN

(1) *[insert complete name of Purchaser]*, a *[insert description of the type of legal entity, for example, an agency of the Ministry of the Government of [insert name of Country of Purchaser], or a corporation incorporated under the laws of [insert name of Country of Purchaser]]* and having its principal place of business at *[insertaddress of Purchaser]*(hereinafter called "the Purchaser"), of the one part, and

(2) *[insertname of Supplier**]***, a corporation incorporated under the laws of *[insert: country of Supplier**]*** and having its principal place of business at *[insert: address of Supplier]* (hereinafter called "the Supplier"), of the other part:

WHEREAS the Purchaser invited Bids for certain Goods and ancillary services, viz., *[insert a brief description of Goods and Services]*and has accepted a Bid by the Supplier for the supply of those Goods and Services

The Purchaser and the Supplier 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.

   (a) the Letter of Acceptance

   (b) the Letter of Bid

   (c) the Addenda Nos._____ (if any)

   (d) Special Conditions of Contract

   (e) General Conditions of Contract

   (f) the Specification (including Schedule of Requirements and Technical Specifications)

   (g) the completed Schedules (including Price Schedules)

   (h) any other document listed in GCC as forming part of the Contract

3. Inconsideration of the payments to be made by the Purchaser to the Supplier as specifiedin this Agreement, the Supplier hereby covenants with the Purchaser to providethe Goods and Services and to remedy defects therein in conformity in allrespects with the provisions of the Contract.

4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services 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 parties hereto have caused this Agreement to be executed inaccordance with the laws of *Tanzania* on the day, month and year indicated above.

SIGNED, SEALED AND DELIVERED FOR ANDON 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 BANK GUARANTEE [UNCONDITIONAL]

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

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

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

Date: *[insert date]*

PERFORMANCE GUARANTEENo.: *[insertPerformance Guarantee number]*

Wehave been informed that *[insert name ofContractor]* (hereinafter called "the Contractor") has beenawarded Contract No. *[insert referencenumber of the Contract]* dated *[insert date]* with you, for theexecution of *[insert name of Contract andbrief description of Works]* (hereinafter called "the Contract").

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

Atthe request of the Contractor, we *[insertname of Bank]* hereby irrevocably undertake to pay you any sum or sums notexceeding in total an amount of *[insertamount in figures]* (*[insert amount inwords])*, such sum being payable in the types and proportions of currenciesin which the Contract Price is payable, upon receipt by us of your first demandin writing accompanied by a written statement stating that the Contractor is inbreach of its obligation(s) under the Contract, without your needing to proveor to show grounds for your demand or the sum specified therein.

Thisguarantee shall expire no later than twenty-eight days from the date ofissuance of the Taking-Over Certificate, calculated based on a copy of suchCertificate which shall be provided to us, or on the *[insert number]* day of *[insert month],[insert year]*, whicheveroccurs first. Consequently, any demandfor payment under this guarantee must be received by us at this office on orbefore that date.

[signature(s) of an authorizedrepresentative(s) of the Bank]

[seal of the Bank]

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

PERFORMANCE BOND

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

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

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

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

(1) complete the Contract in accordance with itsterms and conditions; or

(2) obtain a Tender or Tenders from qualifiedTenderers for submission to the Employer for completing the Contract inaccordance with its terms and conditions, and upon determination by theEmployer and the Surety of the lowest responsive Tenderer, arrange for aContract between such Tenderer and Employer and make available as workprogresses (even though there should be a default or a succession of defaultsunder the Contract or Contracts of completion arranged under this paragraph)sufficient funds to pay the cost of completion less the balance of the ContractPrice; but not exceeding, including other costs and damages for which theSurety may be liable hereunder, the amount set forth in the first paragraphhereof. The term "Balance of theContract Price," as used in this paragraph, shall mean the total amount payableby the Employer to the Contractor under the Contract, less the amount properlypaid by the Employer to the Contractor; or

(3) pay the Employer the amount required by theEmployer to complete the Contract in accordance with its terms and conditionsup to a total not exceeding the amount of this Bond.

TheSurety shall not be liable for a greater sum than the specified penalty of thisBond.

Anysuit under this Bond must be instituted before the expiration of one year fromthe date of issuance of the Certificate of Completion.

Noright of action shall accrue on this Bond to or for the use of any person orcorporation other than the Employer named herein or the heirs, executors,administrators, successors, and assigns of the Employer.

Intestimony whereof, the Contractor has hereunto set its hand and affixed itsseal, and the Surety has caused these presents to be sealed with its corporateseal duly attested by the signature of its legal representative, this *[insert day]* day of *[insert month], [insertyear]*.

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 theApplicant, 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 theContract 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:

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[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 (cies) 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 CCClause 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 fora 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 theGuarantor before the expiry of the guarantee."

Advance Payment Security

Demand Guarantee

[Guarant or letterhead or SWIFT identifier code]
Beneficiary: *[Insert name and Address of Purchaser]*
Date: [Insert date of issue]
ADVANCE PAYMENT 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 Supplier, 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 [insert date] with the Beneficiary, for the execution of *[insert name of contract and brief description of Goods and related Services]* (hereinafter called"the Contract").
Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum [insert amount in figures] () [insert amount in words] is to be made against an advance payment 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 *[insertamount in figures]*
(_) [insert 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 either that the Applicant:

(a) has used the advance payment for purposes other than toward delivery of Goods; or

(b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

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 advance payment referred to above has been credited to the Applicant on its account number *[insert number]* at [insert name and address of Applicant’sbank].
The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Applicant as specified in copies of interim statements or paymentcertificates which shall be presented to us. This guarantee shall expire, atthe latest, upon our receipt of a copy of the interim payment certificateindicating that ninety (90) percent of the Accepted Contract Amount, has beencertified for payment, or on the *[insertday]* day of *[insert month]*, 2 [insert year], whichever is earlier. Consequently, any demand for paymentunder this guarantee mustbe received by us at this office on or before that date.
This guarantee is subject to theUniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No.758,except that the supporting statement under Article 15(a) is hereby excluded.
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_____
[signature(s)]

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 theadvance payment and denominated either in the currency(ies) of the advancepayment as specified in the Contract, or in a freely convertible currencyacceptable to the Purchaser.*