

**THE FEDERAL DEMOCRATIC REPUBLIC OF
ETHIOPIA**

ETHIOPIAN AIRLINES GROUP

**DESIGN REVIEW, BUILD, FINANCING AND
COMMISSIONING**

OF

**ETHIOPIAN AIRLINES GROUP HEAD QUARTERS
BUILDING**

AT BOLE INTERNATIONAL AIRPORT

BIDDING DOCUMENTS

DECEMBER, 2022

VOLUME 1- Tender Conditions, Procedures and Conditions of Contract

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Invitation for Tender

Ethiopian Airlines Group intends to invite qualified bidders for **Design Review, Build, Financing and Commissioning of Ethiopian Airlines Group Head Quarters Building Project on Turn-Key Basis**. Hence, ETG invites all interested and eligible Contractors who can meet the requirements stated hereunder: -

1. The design and construction of the works shall be completed within **915 calendar days** from the commencement of the work.
2. Renewed trade license for 2015 E.C/ 2022-2023 G.C
3. Renewed certificate of registration from authorized body as (GC/BC) of Grade one and valid licences for the year 2015 E.C/2022-2023 G.C to submit sealed tenders for the execution of **EAG Head Quarters Building Project** at Bole International Airport, Addis Ababa, Ethiopia.
4. Valid VAT registration certificate and Tax payer registration.
5. Tax clearance certificate stating the bidder is eligible to participate in any public tender and valid at least at the deadline for submission of bids.
6. Bidders shall bring finance (loan) for the project from well-known financial institutes.
7. Bidders should deposit non-refundable ETB 200.00 (Two Hundred Birr) to the nearby Commercial Bank of Ethiopia (CBE) branch referring this tender number **SSNT- T356** Ethiopian Airlines Group Account Number 1000006958277(E-99). Bidders shall email the scanned copy of the deposit slip to the below address and will get the Tender document by return Email.
8. Bidders shall furnish bid security in the form of CPO or unconditional and irrevocable bank guarantee with an amount of **USD 100,000.00** (One Hundred Thousand Dollar only) or equivalent amount in Ethiopian Birr in the name of Ethiopian Airlines Group. Any insurance guarantee shall not be accepted.
9. The sealed bid document must be submitted in separate envelopes i.e., the (Technical Proposal, Financial Offer, and Bid Security) and one outer envelope, duly marking the inner envelopes as **“ORIGINAL”** and **“COPIES”** document delivered to Ethiopian Airlines, Strategic Sourcing Non-Technical section before/on **January 26, 2023 at 3:00PM**. The bid will be opened on the same date at **3:30PM**, at Ethiopian Airlines Group Head office Addis Ababa, at presence of those interested bidders or their legal representatives.

For more information; please contact the below address.

Address: Ethiopian Airlines Group,
Procurement & Supplies Chain Management
Strategic Sourcing non-technical and CA office.
Email: HELENN@ethiopianairlines.com
Tel: +251 115 17 4028

10. Bids shall be valid for a period of **one hundred twenty (120) calendar days** after tender opening.
11. Ethiopian Airlines Group reserve the right to cancel or modify the tender partially or entirely.

1. INFORMATION FOR TENDERERS

1.1 TENDERS

1.1.1 Ethiopian Airlines Group (*The Employer*) invites tenderers for the Design and Construction of Ethiopian Airlines Head Quarters Building at Bole International Airport.

1.1.2 Tenderers are invited for a contract based on the Conditions of Contract for Engineering, Procurement and Construction/Turnkey Projects – First Edition 1999, published by the Federation Internationale des Ingenieurs - Conseils.

1.2 THE WORKS

1.2.1 Ethiopian Airlines Group is pursuing a growth plan in line with a 15 years strategic road map. To support its aggressive growth strategy, especially with the development of the required facilities in support of the fast growth, currently Ethiopian Airlines Group has built various infrastructures including Maintenance Hangars, Cargo Terminals, Inflight catering facility, Maintenance shops and ultra-modern Airport's New Terminal expansion, which makes it the largest airports in Africa.

The Ethiopian Airlines Group aims to develop its Head Quarter located at Bole International Airport. This package is for the design & construction of head quarter Building which is a set of multi story office buildings to accommodate various offices, conference halls, archive/storage units and parking spaces with all the technologies of modern date, for the effective and efficient operations of the head quarter facilities.

The full development of the Head Quarters Building aims to provide office spaces for more than 2,000 employees with adequate parking basements for more than 700 Vehicles. The full development will consist of 6 office blocks and additional 3 blocks for future expansion along with integrated lobby, sitework and landscape works there to.

The Contractor's scope is to design and execute all the works related to the Items summarized in the below table:

HEAD QUARTERS - SUMMARY TABLE		
Items	Units	Total
Land Area	m2	30,000
Office Blocks	No.	6
Parking Basements	No.	2
Foot Print of Parking Basement	m2	9,500
Total BUA of Offices	m2	21,000
Total BUA of Parking Basement	m2	19,000
Total No. of Parking Spaces	No.	700
Access Road to Ring road	Km.	0.35
Landscape area	m2	20,000

The Contractor shall dismantle and/or clear any obstructions above and below the ground from the proposed project site. On top of this, any underground/buried and

surface systems like sewer, electrical systems, telephone lines, data cable lines, etc. relocation to be considered as part of this bid.

In addition to the given drawings, a summary of the additional key facilities incorporated into this project to accommodate the strategy and requirements are summarised under Annex 1 (General requirement part) of the document.

The Works shall be complete, fully functional, fit for its purpose and as described under the Specification and the Tender Documents.

1.3 THE EMPLOYER AND EMPLOYER'S REPRESENTATIVE

1.3.1 The Employer is:

Ethiopian Airlines Group
Bole International Airport,
P.O. Box 1755, Addis Ababa,
Ethiopia

1.4 TENDER DOCUMENTS

1.4.1 Documents issued to tenderers comprise.

- Volume 1: Information for Tenderers, Tender Conditions and Procedures, Tender Forms, Conditions of Contract, Contract Agreement and Contract Guarantees.
- Annex 1 (General preliminaries, Design deliverables)/ Employers Requirements
- Annex 2 (Design Report, Specifications) / Employers Requirements
- Annex 3 (BOQ) / Employers Requirements
- Annex 4 (Drawings) / Employers Requirements

Note:

The awarded bidder is required to verify and adopt the design after revalidating the Toposurvey.

The awarded bidder is required to implement and accommodate Employer's and End-users requirement's during the Design Review stages.

2. TENDER CONDITIONS AND PROCEDURES

2.1. TENDER DOCUMENTS

2.1.1 DOCUMENTS COMPRISING THE TENDER:

The following documents comprise the Tender to be submitted by Tenderers:

Tender Conditions and Procedures and Annexure A

Letter of Tender and Appendix to Tender

Tender Security

Completed Tender Schedules

Conditions of Contract

General preliminaries, Design deliverables – Build (Annex 1) / Employers Requirements

Design Report, Specifications for Design – Build (Annex 2) / Employers Requirements

Bill of Quantities (Annex 3) / Employers Requirements

Drawings (Annex 4) / Employers Requirements

Information on eligibility and qualifications

Notices and Addenda issued during the Tender period initialed and stamped by the Tenderer

Power of Attorney of signatory of the Tender

and any other information required to be submitted in accordance with the Tender Conditions and Procedures.

2.1.2 DETAILS TO BE CONFIDENTIAL: The Tenderer shall treat the Tender Documents as private and confidential (except as may be necessary for the purpose of Tendering) and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere. The Tender Documents shall not be used for any purpose other than that for which they are intended.

2.1.3 EXAMINATION OF DOCUMENTS: The Tenderer shall examine all documents for completeness and clarity. If any part is missing or indistinct he shall inform the Employer.

- 2.1.4 **DISCREPANCIES:** If the Tenderer finds any ambiguities in the documents or discrepancies between documents or any other matters that are unclear, he shall inform the Employer, who will respond with an addendum.
- 2.1.5 **CLARIFICATION:** If the Tenderer requires any clarification of the Tender Documents he shall notify the Employer in writing. The Employer will respond in writing to any request for clarification he receives earlier than fourteen (14) days prior to the date for submission of Tenders. Copies of the Employer's response (including a description of the enquiry but without identifying its source) will be sent to all Tenderers.
- 2.1.6 **AMENDMENT:** At any time prior to the original or extended date for submission of Tenders, the Employer may, whether at his own initiative or in response to a clarification requested by a Tenderer, modify the Tender Documents by the issue of addenda.
- 2.1.7 **NOTICES AND ADDENDA** will be in writing and will be sent to all Tenderers and will be binding upon them. Tenderers shall promptly acknowledge receipt thereof in writing to the Employer.
- 2.1.8 **FINANCE:** The Tenderer should bring a Financer on Board to cover 65% of the Project amount. The Financer will have a separate agreement with the Employer upon project award. An MOU (Memorandum of Understanding) between the financing agency and the Tenderer should be submitted with the Tender (Tender Schedule 3.3.14). 35% of the Project amount will be covered by the Employer.
- 2.2 **ELIGIBILITY AND QUALIFICATIONS OF TENDERERS**
- 2.2.1 **EVIDENCE OF QUALIFICATION:** The Tenderer shall provide evidence of his capability and adequacy of resources to carry out the Contract. Tenderers shall refer to Annexure A to these procedures on the Tender Evaluation and Qualification Criteria and the distribution of Technical scores. To this effect, the Tender shall include and satisfy the following information:
- a) Copies of original documents defining the constitution or legal status, place of commercial registration and principal place of business, type of organization (Corporation/LLC, Partnership/Proprietorship) of the Tenderer's company, firm or partnership or, if the Tenderer is a joint venture, of each party thereto, Power of Attorney of authorised signatory, (Tender Schedule 3.3.1).
 - b) Details of Main activity, Construction Experience and past performance of the Tenderer (or of each party to a joint venture) on works of a similar nature within the past five years, details of work in progress and other contractual commitments (Tender Schedule 3.3.2).
 - c) Preliminary Programme of works (Tender Schedule 3.3.3).
 - d) Details of Quality Assurance, Health, Safety And Environment (QHSE) of the Tenderer- QHSE Manual and Certificates (Tender Schedule 3.3.4).

- e) Qualifications and experience of Key Personnel proposed for administration and execution of the Contract, both on and off Site including proposed personnel to undertake the design/engineering for the project (Consultant) (Tender Schedule 3.3.5).
- f) Major items of Contractor's Equipment proposed for use in carrying out the Contract (Tender Schedule 3.3.6).
- g) List of proposed principal Subcontractors (Tender Schedule 3.3.7), total shall not exceed 30% of the total Contract Value. It is to be noted that Subcontractors experiences and qualifications are not evaluated.
- h) List of proposed manufacturers/suppliers of principal items of Materials and Plant (Tender Schedule 3.3.8).
- i) Reports on the financial standing of the Tenderer, including profit and loss statement, balance sheets, and auditor's reports for the past five years (Tender Schedule 3.3.9).
- j) Dispute record of Tenderer (or of each party to a joint venture) for the past 5 years (Tender Schedule 3.3.10)
- k) Breakdown of Unit Rates and BOQ Items (Tender Schedule 3.3.11).
- l) Tender Drawings (Tender Schedule 3.3.12)
- m) Tender Specifications and Standards (Tender Schedule 3.3.13).
- n) Financing MOU (Tender Schedule 3.3.14)
- o) Tenderer's statement of Site Visit (Tender Schedule 3.3.16).

2.2.2 JOINT VENTURES: **Join Venture is Not Applicable**

2.3 SITE VISITS

- 2.3.1 SITE VISIT: The Tenderer is advised to visit and examine the Site of the Works and its surroundings and obtain for himself all information that may be necessary for preparing the Tender and entering into the Contract. The site visit is to be made by prior appointment with the Employer. Tenderers will be given permission to visit the Site entirely at their own risk. The Employer shall not be responsible for any loss, damage or injury arising from the site visit, howsoever caused.

The Tenderer shall carry out his own investigations, inspections and examination of the Site including the form and nature of the sub-surface and the topographic survey of the Site in addition to the Site surroundings, as well as the existing works, construction and utilities previously executed by others and constituting part of the Works, and obtain for himself all information in connection therewith and satisfy himself before submitting his Tender. The Tenderer should obtain all necessary information and make due allowance in his Tender for risks, contingencies and all

other matters and circumstances which may influence or affect his Tender and the carrying out and proper execution of the Works.

The Tenderer should note that the scope also includes demolition of an existing structure. The demolished/dismantled material to be disposed off mentioned in the Tender Documents are indicative and should be verified by the Tenderer. The Lump Sum price shall include all the necessary demolition/dismantling, including all material to be transported and stored at the Employer's facilities as directed by the Employer or disposed off as per local rules and regulations to prepare and clear the Site and make it ready for the Works.

The Tenderer must also, before submitting a Tender, satisfy himself as to the nature of the existing roads or other means of communication and access to and from the Site and loading and unloading facilities at Site, docks ... etc.

The Tenderer must also satisfy themselves as to the sources of supply, sufficiency and means of obtaining and delivering all materials, water, fuel, power and other matters or things required for the Works and they must examine and consider all other matters and all possible and probable contingencies and generally must obtain their own information on all matters affecting the Works and all matters which may influence them in preparing their Tender and determining the rates to be entered into the Bill of Quantities.

The Tenderer shall submit the signed statement of his Site visit in accordance with Tender Schedule 3.3.16 included in the Tender Documents.

2.4 PREPARATION AND COMPLETION OF TENDER

2.4.1 COMPLETE TENDER: The Tender must be for the whole of the Works, fully in accordance with the Tender Documents. A partial Tender will not be considered.

2.4.2 COSTS: The Tenderer shall bear all costs associated with the preparation and submission of his Tender and the Employer will in no case be responsible for such costs, regardless of the conduct or outcome of the Tendering process.

2.4.3 LANGUAGE: The Tender and all correspondence and documents relating to the Tender must be prepared and submitted in English. Supporting documents and printed literature furnished by the Tenderer with the Tender may be in other languages provided they are accompanied by an appropriate translation of the pertinent passages into English.

2.4.4 COMPLETION OF TENDER DOCUMENTS: The Letter of Tender, Appendix to Tender, Tender Schedules, and any other document requiring completion shall be completed. The originals of all Tender Documents, and any copies required to be submitted, shall be completed in indelible ink or type writing.

2.4.5 ALTERATIONS: The completed Tender Documents shall be without alterations, additions or erasures, except those made to accord with instructions issued to Tenderers by the Employer or the Employer during the Tender period. Any

other alteration, addition or erasure will be disregarded in the evaluation of Tenders and will be deemed to have no effect.

- 2.4.6 **CORRECTION OF ERRORS:** Any correction of errors made by the Tenderer must be initialed by the person signing the Tender.
- 2.4.7 **SIGNING OF TENDER:** The Letter of Tender shall be signed by a person authorised to bind the Tenderer to the Contract. Proof of authorisation shall be provided in the form of a power of attorney which shall accompany the Tender.
- 2.4.8 **EXAMINING TENDER DOCUMENTS:** Tenderers are advised to examine and thoroughly acquaint themselves with the contents of the Tender Documents and to take all further steps necessary to ascertain for themselves, entirely at their own expense, any additional information necessary for submitting a Tender and executing the Works.

Tenderers are required to check against the relevant index/contents list to ensure and satisfy themselves that they are in possession of each and every page, drawing and schedule, etc. of the Tender Documents as no claim based on the lack or incompetence of the Tender Documents will be admitted after the date and time fixed for the submission of Tenders.

Tenderers are reminded that this is an EPC/design-build contract where the Contractor has to check, review and validate any Tender Documents he is provided with and any other information that he will use for his design development of the Head Quarters Building and related works in order to meet the required performance and other Employer's requirements and take full responsibility thereof, taking into consideration all the project constraints and covering all necessary Systems/items which are needed to deliver a fully functional and fit for the purpose facility.

Tenderers are reminded that their Tender must be lump-sum firm price and will not be liable to adjustment in the event of their failure to ascertain all information and to check and satisfy themselves as aforesaid.

Submission of Tender shall be deemed to indicate that the Tenderer has satisfied himself regarding, and undertakes to accept and comply with, all the obligations, liabilities, responsibilities and risks imposed upon him by these Tender Documents.

2.5 TENDER PRICE AND CURRENCY

- 2.5.1 **CURRENCY OF TENDER:** The Tender and all rates and prices inserted in the Bill of Quantities shall be expressed in United States Dollars (USD).
- 2.5.2 **FIXED PRICE:** The rates and prices quoted by the Tenderer shall be fixed for the duration of the Contract and shall not be subject to adjustment for changes in cost of labour, materials etc. except as stated in the Conditions of Contract.
- 2.5.3 **DUTIES, TAXES ETC.:** The rates and prices inserted in the Bill of Quantities shall include for all import duties, taxes and other levies payable by law on materials, goods and services at a date 28 days prior to the date set for submission of Tenders.

However, bidders are advised to consider Ethiopian Airlines Group duty free privilege for material imported from abroad and integrated permanently on the main work while developing his unit rate.

- 2.5.4 **LUMP SUM CONTRACT FIXED PRICE:** This Contract will be deemed to include all costs of the whole of the works, which are described in, or shown in, or implied by the Drawings, the Specification, Bill of Quantities and other Contract Documents or any works deemed to be necessary for the completion, execution, and proper operation of the Work.

All matters missing from the documents, which may be inferred to be obviously necessary for the efficiency, stability completion of the works and any requirements for fully functional and fit for the purpose works, shall be deemed to be included in the Lump Sum Contract Price.

The Tenderer shall be deemed to have checked the Bill of Quantities issued in the Tender documents and to be responsible for the submission of a revised priced BOQ that the Tenderer shall develop including any adjustment to the quantities or the items which he considers necessary, noting that the quantities contained in the Bill of Quantities will not form part of the Contract.

The Lump Sum Contract Price shall not be adjusted or altered in any way whatsoever except in accordance with the express provisions of the Conditions of Contract.

The Tenderers' are advised that the successful Tenderer will be expected to execute all the works indicated in and implied from the Tender documents even if not measured or indicated in the Bill of Quantities.

- 2.5.5 **ANALYSIS OF PRICES:** The Tenderer shall provide an analysis of prices for items which has more than 10% of the total project cost contained in the Bill of Quantities, in accordance with Tender Schedule 3.3.11

- a) a break down of unit rates and prices contained in the priced Bill of Quantities showing
 - i) direct cost of labour
 - ii) direct cost of Materials or Plant (including transport to Site)
 - iii) direct cost of Contractor's Equipment (if not priced elsewhere in the Bill of Quantities) and Profit
 - iv) overhead charges off-site and on Site (if not priced elsewhere in the Bill of Quantities) and profit
 - v) any other on-costs.
- b) a break down of lump sums items included in the Tender, as (a) above.

The Employer shall have the right to request, and the Contractor shall provide a further breakdown of all unit rates and prices, including a detailed breakdown of "other charges".

2.6 DEVIATIONS FROM TENDER DOCUMENTS

2.6.1 **QUALIFICATION:** The Tender is to be strictly in accordance with the Conditions for Tender and the Tender Documents. Any qualification of a Tender or alteration to the Tender Documents, will be deemed to be null and void unless sanctioned in writing by the Employer prior to submission of the Tender.

2.6.2 **ALTERNATIVES:** Not Used.

2.7 TENDER VALIDITY AND SECURITY

2.7.1 **PERIOD OF TENDER VALIDITY:** The Tender shall remain valid and open for acceptance for a period of 120 days from the latest date fixed for receiving Tenders.

2.7.2 **EXTENSION OF PERIOD OF TENDER VALIDITY:** In exceptional circumstances, prior to expiry of the original Tender validity period, the Employer may request the Tenderer for a specified extension of the period of validity. A Tenderer may refuse the request without forfeiting his Tender security. A Tenderer agreeing to the request will not be required or permitted to modify his Tender. The provision regarding discharge and forfeiture of Tender security shall continue to apply during the extended period of Tender validity.

2.7.3 **TENDER SECURITY:** The Tenderer shall furnish a Tender security in the amount **USD 100,000.00 (One Hundred Thousand)** or Equivalent ETB, in the form of CPO or unconditional and irrevocable bank guarantee in the name of Ethiopian Airlines Group. Any insurance guarantee shall not be accepted. The Tender security shall be from a bank located in Ethiopia or a foreign bank which has been determined by the Tenderer to be acceptable to the Employer. The format of the bank guarantee shall be in accordance with the sample form of Tender Security included in the Tender Documents.

2.7.4 **REJECTION OF TENDER:** Any Tender not accompanied by an acceptable Tender Security will be rejected by the Employer.

2.7.5 **UNSUCCESSFUL TENDERERS:** The Tender Securities of unsuccessful Tenderers will be discharged/returned as promptly as possible, but not later than thirty (30) days after the expiry of the period of Tender validity.

2.7.6 **SUCCESSFUL TENDERER:** The Tender Security of the successful Tenderer will be discharged when the Tenderer has signed the Contract Agreement and furnished the required Performance Security.

2.7.7 **FORFEITURE OF TENDER SECURITY:** The Tender Security may be forfeited if a Tenderer withdraws his Tender during the period of Tender validity or, in the case of the successful Tenderer, if he fails within the specified time limit, to sign the Contract Agreement or furnish the required Performance Security.

2.8 SUBMISSION OF TENDER

- 2.8.1 **DOCUMENT TO BE SUBMITTED:** The Tenderer shall prepare one **"ORIGINAL"** and one **COPY** of the Documents comprising the Tender and they shall be signed, dated, priced and completed and returned as described in Tender Conditions and Procedures, together with all information listed in Section 2.1 Item 2.1.1.
- 2.8.2 **DELIVERY OF TENDERS:** Each set of the Tender Documents (signed, stamped and dated) shall be assembled and delivered in two (2) identical packages marked **"ORIGINAL"** and **COPY**. Each package shall be sealed and shall contain two (2) sealed inner envelopes marked "ENVELOPE NO. 1" and "ENVELOPE NO. 2". The above two (2) packages shall be contained inside one sealed outer package which shall be delivered to the address mentioned in the Invitation to Tender letter and shall bear the following identification.:

TENDER DOCUMENTS FOR

Design Review, Build, Financing and Commissioning of EAG Head Quarters Building at Bole International Airport

and the words

DO NOT OPEN WITHOUT AUTHORITY

The inner Envelopes Nos. 1 and No. 2 shall bear the name and address of the tenderer but the outer package shall not bear any marking which could identify the tenderer.

The Tender Security, **ORIGINAL** and the **COPY**, shall be delivered in separate envelopes attached to Envelopes Nos. 1 and No. 2 respectively.

- a) The inner Envelope No. 1 shall bear the following clear identification:

- ENVELOPE NO. 1 "TECHNICAL PROPOSAL"
- Name of Tenderer
- Address of Tenderer

And shall contain:

1. Information for Tenderers, Tender Conditions and Procedures together with all information and supporting documents.
2. Delegated Authority of signatory to Tender Documents.
3. Tender Security in the amount ofin the form of Bank Guarantee in accordance with sample form of Tender Security included in the Tender Forms.
4. All information listed in Sub-Section 2.2 Eligibility and Qualifications of Tenderers except the following Tender Schedules:
 - i) The preliminary cash flow requested part of Tender Schedule 3.3.3 (cash flow to be part of Financial Proposal as noted below).

- ii) Breakdown of Unit Rates and BOQ Items (Tender Schedule 3.3.11).
- iii) Tender Drawings (Tender Schedule 3.3.12)
- iv) Tender Specifications and Standards (Tender Schedule 3.3.13)

b) The Inner ENVELOPE NO. 2 “FINANCIAL PROPOSAL”

- ENVELOPE NO. 2 “FINANCIAL PROPOSAL”
- Name of Tenderer
- Address of Tenderer

And shall contain:

1. Conditions of Contract, Contract Agreement, Contract Guarantees.
2. Priced “Letter of Tender”
3. A copy of all Notices and Addenda issued by the Employer during the Tender period.
4. Annex 1: General preliminaries, Design deliverables
5. Annex 2: Design report, Specifications
6. Annex 3: Priced Bill of Quantities
7. Programme, including preliminary cash flow as specified under Tender Schedule 3.3.3
8. Breakdown of Unit Rates and BOQ Items (Tender Schedule 3.3.11)
9. Tender Drawings (Tender Schedule 3.3.12)
10. Tender Specifications and Standards (Tender Schedule 3.3.13)
10. Annex 4: Tender original Drawings .

2.8.3 **TIME LIMIT FOR SUBMISSION OF TENDERS:** The Tender must be received by the Employer at the address stated above not later than 2:30pm local time on the date mentioned in the Invitation to Tender.

2.8.4 **EXTENSION OF TIME LIMIT:** The Employer may, at his discretion, extend the time limit for the submission of Tenders by issuing an amendment, in which case all rights and obligations of the Employer and the Tenderer previously subject to the original time limit shall thereafter be subject to the new time limit as extended.

2.8.5 **LATE TENDERS:** A Tender received by the Employer after the prescribed time limit for submission of Tenders will be returned unopened to the Tenderer.

2.8.6 **MODIFICATION AND WITHDRAWAL OF TENDER:** Subject to Section 2.9, Clause 2.9.3 hereof, no Tender may be modified subsequent to the time limit for submission of Tenders. Withdrawal of a Tender during the interval between the time

limit for submission of Tenders and expiry of the period of Tender validity may result in the forfeiture of the Tender Security.

2.9 OPENING AND EVALUATION OF TENDERS AND AWARD OF CONTRACT

2.9.1 TENDER OPENING: Tenders will be opened in the presence of the interested Tenderers at a time and place to be notified by the Employer.

Technical documents of Tenderers shall be opened in front of Tenderers and Bid evaluation committee members. Tenderers who are technically responsive and qualified shall be considering for financial evaluation. Financial document of bidders shall be opened in front of Tenderers and Bid evaluation committee members but the amount will not be read out to Tenderers.

Ethiopian Airlines Group after completing the financial evaluation shall call the best evaluated Tenderers for further negotiations and the invitation for negotiations to the Tenderers will be at the sole discretion of the Employer.

Those Tenderers who give the best & the lowest financial offer will be called for further negotiation. After the negotiation a Tenderer who gives the lowest price offer shall be called for contract negotiation.

All Tenderers shall be notified for the bid result, and they can file their concern within 5 days.

2.9.2 CLARIFICATION OF TENDER: To assist in the examination, evaluation and comparison of Tenders, the Tenderer may be asked for clarification of his Tender, including breakdown of unit rates, but no change in the price or substance of the Tender shall be sought, offered, or permitted, except as required to confirm the correction of arithmetical errors discovered during the evaluation of Tenders.

2.9.3 CORRECTION OF ERRORS: The Tender will be checked for any arithmetical error in computation and summation. Errors will be corrected as follows:

Where there is any arithmetic errors in the Bill of Quantities, or where the total shown on the summary page of the Bill of Quantities differs from the lump sum amount stated in the Letter of Tender, a proportional adjustment shall be made to the rates of all items in the Bill of Quantities to compensate for any such errors or discrepancies so that the total amount derived from the multiplication of the resulting unit rates and the corresponding quantities is the same as the lump sum amount stated in the Letter of Tender.

The amount stated in the Letter of Tender will be adjusted in accordance with the above procedure for the correction of errors and shall be considered as binding upon the Tenderer. If the Tenderer does not accept the corrected amount of Tender, his Tender will be rejected, and the Tender security will be forfeited.

2.9.4 EMPLOYER'S RIGHT TO ACCEPT ANY TENDER AND TO REJECT ANY OR ALL TENDERS: The Employer reserves the right to accept or reject any Tender, and

to annul the Tendering process and reject all Tenders, at any time prior to award of the Contract, without thereby incurring any liability to the affected Tenderers or any obligation to inform any affected Tenderer of the grounds for the Employer's action.

- 2.9.5 NOTIFICATION OF AWARD: Prior to expiry of the period of Tender validity, the Employer will notify the successful Tenderer by sending the Letter of Acceptance.
- 2.9.6 SIGNING OF THE CONTRACT AGREEMENT: at the same time as the notification of the award the Employer shall send the Contract Agreement to the successful Tenderer for signature. The successful Tenderer shall return the signed Contract Agreement together with the furnishing of the Performance Security and thereafter the Employer shall return the Tender Security to the Contractor.
- 2.9.7 AWARD OF CONTRACT: The award of the Contract, following a favourable assessment of the Tender shall not imply approval of any designer, sub-contractor, supplier, or proposed manufacturer so named by the Tenderers in his submission.

The award of Contract shall not imply approval of any design submitted, but a no objection on the principle subject to submission of the full design documentation with supporting calculations, and subject to this design meeting all the Employer's Requirements. After award, the Contractor shall be required to submit design in accordance with the specified design stages for review and approval by the Employer or the entity appointed on his behalf for the review.

3. TENDER FORMS

3.1 LETTER OF TENDER FOR THE DESIGN REVIEW, BUILD, FINANCING AND COMMISSIONING OF ETHIOPIAN AIRLINES HEAD QUARTERS BUILDING

To: Ethiopian Airlines Group
Bole International Airport,
P.O. Box 1755, Addis Ababa, Ethiopia

1. We have examined the Tender and Contract Documents for the above-named Works, comprising the Information for Tenderers, Tender Conditions and Procedures, Conditions of Contract, Contract Guarantees, Specifications, Drawings, Bill of Quantities and Tender Schedules, the attached Appendix to Tender, Notices Nos. and Addenda Nos. We have examined, understood, and checked these documents and have ascertained that they contain no errors or defects. We accordingly offer to design, execute, and complete the Works and remedy any defects therein in conformity with this Tender and the above-named documents for the Lump-Sum of United States Dollars (USD) or such other sum as may be determined in accordance with the Contract.
2. We agree to abide by this Tender for *tender validity period* of 120 days after receipt by you, that is until and it shall remain binding on us and may be accepted by you at any time before that date.
3. We acknowledge that the Appendix to Tender forms part of this Tender.
4. If this offer is accepted, we will provide the specified Performance Security, commence the Works as soon as is reasonably practicable after the Commencement Date, and complete the Works in accordance with above-named documents within the Time for Completion,
5. Unless and until a formal Agreement is prepared and executed, this Letter of Tender, together with your written acceptance thereof, shall constitute a binding Contract between us.
6. We understand that you are not bound to accept the lowest or any tender you may receive.

Signature

In the capacity of

Authorized to sign tenders for and on behalf of

.....

Address

Date

3.2 **APPENDIX TO TENDER**

Note: apart from the items for which the Employer's requirements have been inserted, the following must be completed before the Tender is submitted.

Sub-Clause	Item	Data
1.1.2.2 & 1.3	Employer's name and address	Ethiopian Airlines Group, Bole International Airport P.O. Box 1755, Addis Ababa Ethiopia
1.1.2.3 & 1.3	Contractor's name and address
1.1.3.3	Time for Completion of the Works	915 calendar days
	Final Design Completion days	90 calendar days out of the 915 calendar days
1.1.3.7	Defects Notification Period	730 calendar days
1.3	Electronic transmission systems	Emails to be confirmed in writing
1.4	Governing Law	Laws of the Federal Democratic Republic of Ethiopia
1.4	Ruling Language	English
1.4	Language for communications	English
2.1	Time for access to the Site	As provided under "Notice to Proceed"
4.2	Amount of Performance Security	Ten percent (10%) of the Accepted Contract Amount, in the currencies and proportions in which the Contract Price is payable.

5.1	Period for notifying unforeseeable errors, faults, and defects in the Employer's Requirements	7 days
6.5	Normal working hours	In accordance with the laws of the Employer's country, or as approved by the Employer.
8.7 & 14.15	Delay damages for the Works	0.10% (one-tenth per cent) per day, in the currencies and proportions in which the Contract Price is payable.
8.7	Maximum amount of delay damages	Ten percent (10%) of the Contract Price
13.3	Addition for overheads and other Charges	35% of the Direct Cost.
14.2	Total advance payment	Twenty percent (20%) of the Accepted Contract Amount, in the currencies and proportions in which the Contract Price is payable.
14.9	Percentage of retention	Five percent (5%)
14.9	Limit of Retention Money	Five percent (5%) of the Final Contract Price
14.6	Minimum amount of Interim Payment Certificates	5% of the Accepted Contract Amount
14.15	Currency (ies) of payment	Ethiopian Birr (ETB) for local purchase and US Dollars (USD) for imported Items. The Tenderer shall fill in the table (below) the value of the Work Division in local currency and foreign currency.
18.2 (d)	Maximum amount of deductibles for insurance of the Employer's risks	10,000 USD
18.3	Minimum amount of third-party insurance	1,500,000 USD for any one occurrence, number of occurrences unlimited.
18.5	Professional Indemnity Insurance	1,000,000 USD

Table - Currency Proportions

<i>Division</i>	<i>Local Currency (ETB)</i>		<i>Foreign Currency (USD)</i>	
	(%)	Amount	(%)	Amount
TOTAL:				

3.3 **TENDER SCHEDULES**

The Tender Schedules form part of the Tender. They are intended as a guide to the tenderer, who may adapt them to suit his tender design. The tenderer may provide the information required by the schedules on separate sheets in a similar format and having the same reference members. The submitted schedules must contain, as a minimum, the information stated, and they shall be accompanied by any required additional documents.

3.3.1 ELIGIBILITY AND TRADE LICENCE

Tenderer shall provide copies of original documents defining the constitution or legal status, place of commercial registration, valid trade license or business organization registration certificate issued by the country of establishment, and principal place of business, type of organization (Corporation/LLC, Partnership/Proprietorship) of the tenderer's company, firm, or partnership.

3.3.2 CONSTRUCTION EXPERIENCE

3.3.2.1. MAIN ACTIVITY: Indicate the type of construction work which constitutes the company's main activity:

.....

.....

.....

3.3.2.2. RECENT EXPERIENCE: Indicate below the various percentages related to the different types of works carried out by the company during the last five (5) years (*Value of projects in each category below to the total workload during the overall period, i.e., from 2017 to 2021*):

- Industrial Projects (with Structural Steel) %
- Building Projects %
- Road Projects %
- Other %

3.3.2.3. COUNTRY EXPERIENCE:

Summarize the experience of the company in Ethiopia for all projects undertaken during the past five (5) years.

Project ():

Description:

Contract Price:

Years: From to

Delays:

Project ():

Description:

Contract Price:

Years: From to

Delays:

Note: To add other projects, please use copies of this form

3.3.2.3. SIMILAR EXPERIENCE:

Indicate below all information for relevant projects executed by the company over the past five (5) years, and which are most similar in nature to the project:

Project No. ()	
Country	
Employer	
Description of Work	
Was the Project Design-Build?	
Contract Price (USD)	
Start & Finish Dates	
Delay (days)	
Type & Percentages of Work Directly Executed by Firm	
Type and Percentages of Subcontracted Work, Reason for Subcontract, Name & Country of Subcontractor	

3.3.2.4. WORK IN PROGRESS:

Indicate below all information for all projects in progress, including those where the company has received a letter of intent, but a formal contract has not yet been awarded:

Project No. ()	
Country	
Employer	
Description of Work	
Contract Price (USD)	
Start Dates	
Payment Certified to Date (USD)	
Percentage Completion	
Current Delay (days)	
Expected Completion Date	
Type & Percentages of Work Directly Executed by Firm	
Type and Percentages of Subcontracted Work, Reason for Subcontract, Name & Country of Subcontractor	

3.3.3 PROGRAMME

The Tenderer shall provide a preliminary programme for the Works to indicate his proposals for execution and completion of the Works within the Time for Completion. The programme shall be in bar chart form and shall show periods for preliminary and final design, procurement of Plant, erection, testing and commissioning.

It shall be accompanied by a preliminary method statement to show the tenderer's proposed methods and should include the following:

- Project approach and methodology to undertake the works
- Safety and protective measures for workman, employer's staffs, existing structures, equipment, and the works, in general.
- Compliance with the protection of environment, health and safety of workers and train workers with respect to occupational health and safety behaviour and basic level of environmental awareness.
- Ensure for the proper area of storage for both raw material and waste material by clearly marked and by demarcation.
- Establish circulation plan to promote traffic safety and minimize disturbance on the on-going activities and on the existing facilities.
- Planned work schedules for all activities supported with projected preliminary cash flow over the entire Programme period including Defects Notification Period.
- Material delivery plan and procurement process.
- Manpower and equipment utilization plan, including site utilization for stores, workshop, equipment, etc.

Submission of the detailed programme and method statement, and the Engineer's agreement thereto, shall be in accordance with Sub-Clause 8.3 of the Conditions of Contract and the relevant sections of the General Requirements.

3.3.4. QUALITY ASSURANCE, HEALTH, SAFETY AND ENVIRONMENT - QHSE:

3.3.4.1. Is your company BS EN ISO 9001 or OHSAS 18001 registered? If yes, indicate by whom. Give a brief description of the quality assurance system followed by the company (ISO or otherwise) and append the latest valid certificate if any.

.....
.....
.....
.....

3.3.4.2. Does your company have experience with project specific quality plans prepared for similar projects? Provide typical of a project specific quality plan.

.....
.....
.....

3.3.4.3. On similar projects does your company perform internal quality audits at site with qualified auditors? Provide evidence of such audits.

.....

.....

.....

3.3.4.4 Do you have a written health and safety policy? If yes, outline details of your organization, roles and responsibilities, risk assessment system, training and emergency preparedness, workplace inspection and audit etc. for health and safety.

.....

.....

.....

3.3.4.5 Do you employ a competent safety advisor? And what arrangements does your company have for provision and upkeep of protective equipment and clothing, both standard issue, and that required for specialized activities?

.....

.....

3.3.4.6 OHSE performance monitoring and review including accident statistics for the last 3 years.

.....

.....

.....

3.3.5 KEY STAFF

The Tenderer shall state below or on a separate sheet the key administrative, design and supervisory staff that he intends to deploy for the Contract and shall attach their CVs. Also, submit Project Organization Chart with names of the personnel who would be assigned for the execution of the project and Company Organization Chart.

Details shall be given, as a minimum, for the following staff.

For Design					
Position	Minimum Educational Qualifications	Names	General Experience [years]	Specific Exp. in proposed Positions [years]	Points Allocated
Chief Project Design Engineer	MSc in Architecture		20	15	16
Professional Senior Architect	BSc Degree in Architecture		15	8	10
Professional Senior Structural Engineer	BSc Degree in Civil Engineering		15	8	10
Professional Pavement/foundation Engineer	BSc Degree in Civil Engineering		15	8	10
Professional Senior Mechanical Engineer	BSc Degree in Mechanical Engineering		15	8	10
Professional Senior Electrical Engineer	BSc Degree in Electrical Engineering		15	8	10
Professional Senior Sanitary Engineer	BSc Degree in Hydraulics Engineering		15	8	10
Landscape designer	BSc Degree in Landscape architecture		8	5	8
Interior designer	BSc Degree in Interior design		10	7	8
Artist	Degree in Art and Sculpture		10	7	8
Total Points					100

For Construction

Position	Minimum Educational Qualifications	Names	General Experience [years]	Specific Exp. in proposed Positions [years]	Points Allocated
Project Manager	MSc in Construction Management/Civil Engineering		20	15	10
Ass. Project Manager	BSc Degree in Civil Engineering		15	10	8
Senior Construction Engineer	BSc Degree in Civil Engineering		15	8	7
Senior Quantity Surveyor	BSc Degree in Civil Engineering		12	7	6
Senior Planning Engineer	BSc Degree in Civil Engineering/related fields		12	7	6
Health & Safety Officer	BSc Degree in HSE/related fields		10	6	6
Land Surveyors	Diploma in Surveying		10	6	6
Structural Inspectors	BSc Degree in Civil Engineering		12	7	6
Mechanical Inspector	BSc Degree in Mechanical Engineering		12	7	6
Electrical Inspector	BSc Degree in Electrical Engineering		12	7	6
Sanitary Inspector	BSc Degree in Hydraulics Engineering		12	7	6
Contract Admin	BSc Degree in Civil Engineering		12	7	6
Landscape designer	BSc Degree in Landscape architecture		8	5	7
Interior designer	BSc Degree in Interior design		10	7	7
Artist	Degree in Art and Sculpture		10	7	7
Total Points					100

The Distributions of the above points for Total Experience and Specific Experience are:

- General Experience--40%
 - Specific Experience--60%.
- The bidder must have suitably qualified personnel to fill the following positions and should submit copies of educational testimonial and recommendation of work experience from previous employers and renewed professional license evidence including recently signed CVs by the professional & certified by the bidder. No evaluation points will be given without the supporting evidence.
- If the project is awarded changing the proposed personnel with equivalent qualification and experience shall be under the approval of the Employer.

3.3.6 MAJOR ITEMS OF CONTRACTOR'S EQUIPMENT

The Tenderer must demonstrate that it will have the required equipment and machinery mentioned below for the execution of the Project. Also, the Tenderer may propose any additional equipment and machinery he intends to deploy on Site for the execution of the Works.

Name of Equipment	Quantity	Capacity	Point allocated	Owned / Leased (Evidence of ownership title shall be attached)
Dump Trucks	8	16 m ³	10	
Excavator/Loader	4	0.5m ³ /1.5m ³ and above	10	
Mobile Crane	2	Sufficient height	9	
Steel formwork & scaffolding	20,000m ²	Sufficient area	10	
Concrete truck mixer	3pcs	500lit. and above	10	
Pick-up truck	5pcs	4seats	10	
Tower crane	1pcs	Sufficient height and arm	12	
Different types of compactors	5pcs		10	
Concrete batching plant	1pcs complete plant		10	
Generator for full construction work	2set		9	
Total Point	100			

3.3.7 PRINCIPAL SUBCONTRACTORS

The tenderer shall state below or on separate sheets, the principal Subcontractors that he intends to employ for the Works. Submission of full details of the subcontract work and the subcontractors, and the Engineer's approval thereof, shall be in accordance with Sub-Clause 4.4 of the Conditions of Contract.

Type of Work	Subcontractor's Name and Address	Relevant Experience (Projects Undertaken, Value & Type of Work)	Approximate value of Subcontract work

3.3.8 PRINCIPAL MANUFACTURERS/SUPPLIERS

The tenderer shall state below or on separate sheets the manufacturers/suppliers that he intends to use for design (if appropriate), manufacturer and supply of principal Materials and items of Plant, and on which he has based his Tender. Submission of full details of the items and the manufacturers/suppliers, and the Engineer's approval thereof, shall be in accordance with Sub-Clause 4.4 of the Conditions of Contract and the relevant sections of the General Requirements.

Description of Goods

**Name and address of
Manufacturers/Supplier**

3.3.9. FINANCIAL POSITION:

3.3.9.1. BANKING AND SURETY: Indicate names and addresses of bankers from whom references can be obtained:

Name:

Address:

.....

Name:

Address:

.....

3.3.9.2. AUDITORS: Indicate names and addresses of company auditors:

Name:

Address:

.....

Name:

Address:

.....

3.3.9.3. COMPANY ACCOUNTS:

Append audited company accounts (audited by certified auditor or revenue agency), including balance sheets and profit and loss accounts (in English) for the last ten (10) years, plus all notes explaining the major items in the financial statements.

The Tenderer must demonstrate access to or availability of financial resources such as cash on hand or unconditional bank loan other than any contractual advance payments to meet cash flow requirement of minimum of USD 5 Million.

Attach copy of document showing the company's capital.

Clearly show the following with cross reference to the balance sheets with necessary notes (all amounts to be filled in USD):

Capital	Amount	Authorized		Issued	
Value of Work-in-Progress					
Capacity Annual Value of Work					
Solvency					
Total Assets:					
Total Liabilities (less Equity):					
Current Assets:					
Current Liabilities:					
Stock:					
Equity:					
Debt:					
Net Profit (before tax):					

3.3.10. 10. DISPUTE RECORD:

Applicants should provide information on any history of litigation or arbitration resulting from contracts executed in the last five (5) years or currently under execution.

Project	Employer	Dispute Year	Dispute Brief (Cause and Matter in Dispute)	Means of Resolution: Litigation/ Arbitration/ Mediation	Disputed Amount (USD)	Award (For/ Against)	Status of Dispute (Pending/ Settled)

3.3.11 BREAKDOWN OF UNIT RATES AND BOQ ITEMS

The Tenderer shall submit a fully priced Bill of Quantities based on the unpriced Bill of Quantities provided by the Employer and following the Method of Measurement attached to it, revised as necessary to meet his expected design. The Bill of Quantities must also include the following as separate items:

Design Review for the Works

- Preliminary Design
- Final Design/Detail Design

The tenderer shall also submit a detailed breakdown of the unit rates and prices included in the Bill of Quantities which shall include, as appropriate, the manufacture, supply, shipment and delivery of the Goods, Materials and Plant; labours; Contractor's Equipment and Temporary Works for erection; testing and commissioning on Site; all other costs of complying with the Contractor's obligations under the Contract:

Each page is to be stamped, initialled, and dated by the Tenderer.

			UNIT RATE OR PRICE BREAKDOWN ANALYSIS (USD)					
Item	Bill of Quantities Item (section, page, item reference)	Unit Rate or Price (USD)	Labors	Materials	Plant	Contractor Equipment	Overhead and Profit	Any Other on Cost

3.3.12 TENDER DRAWINGS

The Tenderer shall provide a list of Tender stage drawings, prepared by him, which he has used as the basis for his Tender.

The Tenderer shall include in his list all drawings he used as basis for his Tender, whether these drawings were provided to him by Employer or otherwise.

All drawings incorporated in this list are deemed drawings adopted by the Tenderer as if prepared by him and under his responsibility and full liability.

3.3.13 TENDER SPECIFICATIONS AND STANDARDS

The Tenderer shall provide descriptions of his outline proposals for design and execution of the Works and shall indicate how they comply with the Tender Documents. Such descriptions shall include, to the fullest extent possible, specifications of constructional techniques and materials and components, manufacturers/suppliers of major components, principal subcontractors and recognized standards and design criteria to be adopted. The Tenderer shall highlight all deviations from the criteria and Specifications provided to him with this Tender.

3.3.14 MEMORANDUM OF UNDERSTANDING WITH FINANCER

The Tenderer should attach an MOU between him and the financing agency who is interested to finance 65% of the Project amount.

3.3.15 JOINT VENTURE AGREEMENT- Joint Venture is not allowed.

3.3.16 TENDERER'S STATEMENT OF SITE VISIT

We [Tenderer's name] hereby confirm that we have visited the Site of Bid for Design, Build, Financing and Commissioning of Ethiopian Airlines Head Quarter Building, at Bole International Airport, Addis Ababa, on .../.../... [date] and we have inspected and examined the Site of the Works and its surroundings, and obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Tender or Works and that we have no queries/comments concerning the Tender in connection with prevailing Site conditions and levels.

We acknowledge that the information related to the Design-Build Works that have been presented by the Employer and all other available data, not limited to those listed in Sub-Clause 4.10 of the Conditions of Contract, are sufficient for preparing the Tender and entering the Contract the Works.

We acknowledge that the Employer shall not be responsible for any loss, damage or injury arising from the Site visit, howsoever caused.

Signature

Tenderer:

Date

3.3.17 COMPANY PROFILE OF THE DESIGNER

Tenderer shall submit company profile of the proposed Designer for the Project design review and update along with Memorandum of Understanding. The Designer must have an experience on designing a famous corporate office design and requires to submit a testemoney for same.

3.4 **TENDER SECURITY**

(Specimen to be completed on Bank headed paper)

Brief description of Contract: Bid for Design, Build, Financing and Commissioning of Ethiopian Airlines Head Quarters Building at Bole International Airport, Addis Ababa, Ethiopia.

Name and address of Beneficiary
..... (Whom the tender documents define as the Employer).

We have been informed that (Hereinafter called the "Principal") is submitting an offer for such Contract in response to your invitation, and that the conditions of your invitation, which are set out in a document entitled Tender Conditions and Procedures, require his offer to be supported by a tender security.

At the request of the Principal, we (name of bank) hereby irrevocably undertake to pay you, the Beneficiary/Employer, any sum or sums not exceeding in total the amount of (say:) upon receipt by us of your demand in writing and your written statement (in the demand) stating that:

1. the Principal has, without your agreement, withdrawn his offer after the latest time specified for its submission and before the expiry of its period of validity, or
2. the Principal has refused to accept the correction of errors in his offer in accordance with such Tender Conditions and Procedures, or
3. you awarded the Contract to the Principal and he has failed to comply with Sub- Clause 1.6 of the Conditions of the Contract, or
4. you awarded the Contract to the Principal and he has failed to comply with Sub- Clause 4.2 of the Conditions of the Contract.

Any demand for payment must contain your signature (s) which must be authenticated by your bankers or by a notary public. The authenticated demand and statement must be received by us at this office on or before *(the date 30 days after the expiry of the validity of the Letter of Tender)* *(the expiry date)* when this guarantee shall expire and shall be returned to us.

We have been informed that the Beneficiary may require the Principal to extend this guarantee if a contract has not been awarded prior to such expiry date. We undertake to extend this guarantee accordingly, notice of such extension to the Bank being hereby waived.

This guarantee is subject to the Uniform Rules for Demand Guarantees, published as number 458 by the International Chamber of Commerce, except as stated above.

Date Signature (s)

4. CONDITIONS OF CONTRACT

4.1 EXPLANATORY NOTES

4.1.1 GENERAL CONDITIONS: The General Conditions of Contract shall be the Conditions of Contract for EPC/Turnkey Projects (first edition 1999/silver book), published by the Federation Internationale des Ingenieurs - Conseils (FIDIC). The Contractor is deemed to have full knowledge of the General Conditions.

A contract based on the FIDIC Conditions of Contract for EPC/Turnkey Projects (first edition 1999/silver book), published by the Federation Internationale des Ingenieurs - Conseils.

4.1.2 PARTICULAR CONDITIONS: The General Conditions are amended and supplemented by the Particular Conditions, which follow. In the event of any conflict between the General Conditions, and the Particular Conditions, the latter shall govern.

4.1.3 AMENDMENTS: The Particular Conditions amend the following Sub-Clauses of the General Conditions:

1.1, 1.2, 1.5, 1.6, 2.3, 3.1, 4.2, 4.4, 4.6, 4.10, 4.12, 4.21, 6.3, 7.4, 8.1, 8.3,
8.4, 8.7, 10.1, 11.3, 11.10, 14.1, 14.2, 14.8, 17.3, 17.4, 18.1, 18.2, 18.3,
18.4, 20.1, 20.2 to 20.8

4.1.4 ADDITIONS: The Particular Conditions contain the following additional Sub-Clauses:

3.6, 4.25, 6.12 to 6.19, 8.13, 14.16 to 14.19, 18.5, 21.

4.2 PARTICULAR CONDITIONS

1. GENERAL PROVISIONS

1.1 DEFINITIONS

Insert the following definitions in lieu of or in addition to (as appropriate) the definitions in Sub-Clause 1.1.

1.1.1.5 'Employer's Requirements' means Annex 1 (General preliminaries, Design deliverables), Annex 2 (Design report, Specifications), Annex 3 (Bill of quantities), Annex 4 (Drawings), and any additions and modifications thereto in accordance with the Contract.

1.1.1.8 'Tender' means the Letter of Tender and all other documents submitted by the Contractor with the Letter of Tender, as accepted by the Employer. The words 'Tender' and 'Bid' are synonymous.

1.1.1.11 'General Requirements' means Division 1 of the Specification.

1.2 INTERPRETATION

Add sub-paragraph (e) as follows:

(e) Where these Conditions include the expression 'Cost plus reasonable profit', the profit shall be five per cent (5%) of the Cost.

1.5 PRIORITY OF DOCUMENTS

Delete Sub-Clause 1.5 and replace with the following:

The documents forming the Contract are to be taken as mutually explanatory of one another. If there is an ambiguity or discrepancy in the documents, the Engineer shall issue any necessary clarification or instruction to the Contractor, and the priority of the documents shall be as follows:

- a) The Contract Agreement
- b) The Letter of Acceptance dated.....
- c) The Employer's Requirements (Annex 1 – 4 (inclusive))
- d) The Priced Letter of Tender dated.....and Appendix to Tender
- e) Any Addenda and Notices to the Tender issued before signature of the Agreement
- f) The Particular Conditions
- g) The General Conditions

- h) The Documents forming part of Volumes 1, Annexes 1 – 4 (inclusive) and any other documents forming part of the Contract, in each case other than those documents specified in Sub-Clauses 1.5 (a) - 1.5 (g) (inclusive); and
- i) The Contractor's Proposal.

1.6 CONTRACT AGREEMENT

Delete the last sentence and replace with the following:

The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Contractor.

2 THE EMPLOYER

2.3 EMPLOYER'S PERSONNEL

Add the following paragraph at the end of Sub-Clause 2.3:

In the event that other contractors are working for the Employer on the Site, then their contracts will include similar clauses for co-operation and compliance to provide safety procedures, and the Employer shall notify the Contractor of the presence of such other contractors.

3 THE ENGINEER

3.1 ENGINEER'S DUTIES AND AUTHORITY

Add the following at the end of Sub-Clause 3.1:

The Engineer shall obtain the specific approval of the Employer before taking action under the following Sub-Clauses of these Conditions:

Sub-Clause 8 . 8

Sub-Clause 1 3

3.6 LIMITATIONS ON ENGINEER'S RESPONSIBILITIES

Add New Sub-Clause 3.6 as follows:

- (a) The Engineer shall not be responsible for the Contractor's operational techniques and procedures nor for the safety and stability of Temporary Works and Contractor's Equipment nor for measures for the safety, health, and welfare of any persons on the site.
- (b) Neither the Engineer nor any member of the Engineer's staff shall be in any way

personally liable to the Contractor for any acts or obligations performed in the course of the Engineer's duties under the Contract nor be answerable for any default or omission on the part of the Employer.

4. THE CONTRACTOR

4.2 PERFORMANCE SECURITY

Delete the second sentence of the second paragraph and substitute the following:

The Performance Security shall be a bank guarantee in the form annexed to the Particular Conditions and shall be issued by a bank acceptable to the Employer which is located in the Country or a foreign bank.

4.4 SUBCONTRACTORS

Add the following at the end of Sub-Clause 4.4:

In addition to obtaining the Engineer's consent pursuant to Sub-Clause 4.4, the Contractor shall:

- (a) notify the Engineer within 14 days of signing the Contract, and before commencing work on Site, of any parts of the Works he intends to subcontract for which approval of the Engineer is required under Sub-Clause 4.4. For each subcontract the following shall be provided:
 - (i) the name, address and contact details of the Subcontractor;
 - (ii) the nature and scope of the work to be subcontracted;
 - (iii) information on the Subcontractor's experience of similar work and details of the Subcontractor's site supervision, sources of labour and equipment and financial capabilities, in sufficient detail to enable the Engineer to determine if the Subcontractor is able to undertake and complete the subcontract work within the time and to the standards required by the Contract;
 - (iv) the approximate value of the subcontract works based on the Contract prices;
 - (v) confirmation that the subcontract includes terms and conditions and all obligations and responsibilities contained in the Contract, in so far as these apply to the subcontract;
- (b) notify the Engineer, at least 21 days prior to the date that the Contractor requires approval from the Engineer, of any proposed change to the Subcontractors notified under (a) above and of any additional parts of the Works he proposes to subcontract. Similar information to that listed under (a) above shall be given for each subcontract;
- (c) include in his monthly reports to the Engineer, details of all subcontracts entered into, the names of the Subcontractors and the numbers of staff and labor for each Subcontractor on Site during the month; provide, if requested by the Engineer, copies of documents such as wage sheets and details of the names and employment references for site staff and labor, invoices for the supply of materials, etc.;
- (d) include conditions and requirements in subcontracts similar to those in the Contract

regarding assignment and sub-subcontracting the whole or part of the subcontract works including requirements similar to those under (a) to (d) above. Any approval by the Contractor to a Subcontractor regarding such assignment or sub-subcontracting shall be subject to the prior approval of the Engineer.

- (e) provide a copy of the subcontract to the Engineer, including prices for the subcontract works.
- (f) if the Contractor subcontracts any part of the Works on the Site in contravention of this Sub-Clause 4.4, or if a Subcontractor assigns or subcontracts the whole or part of the subcontracted work, the Engineer may, subject to the prior consent of the Employer, take action in respect of either or both of the following:
- (g) instruct the Contractor to dismiss and remove immediately, or within such other time as may be specified in the instruction, the Subcontractor or the Sub-Subcontractor from the Site;

The Contractor shall not be entitled to any extension of time for completion under Sub-Clause 8.4 (*Extensions of Time for Completion*) arising out of any delay caused by the dismissal and removal of the Sub-contractor or Sub-Subcontractor from the Site.

4.6 COOPERATION

Add after the first two paragraphs of Sub-Clause 4.6:

The Contractor shall, if so instructed by the Engineer or if specified in the Contract, provide any of the following services for the Employer's workmen or any other contractor or authority carrying out work on or near the Site:

- (i) use of roads or tracks which the Contractor is responsible to maintain
- (ii) use of the Contractor's Temporary Works or Equipment
- (iii) any other services instructed by the Engineer.

4.10 SITE DATA

Add the following at the end of Sub-Clause 4.10:

The limits of the Site shall be as shown on the Drawings. If the Contractor requires land beyond this Site, he shall obtain it entirely at his own cost and, before taking possession, shall supply the Engineer with a copy of all necessary permits.

- 4.12 UNFORESEEABLE PHYSICAL CONDITIONS Add the following at the end of the fifth paragraph:

If the Contractor fails to give timely notice of unforeseeable physical conditions in accordance with this Sub-Clause, his rights under sub-paragraphs (a) and (b) will be forfeited.

4.21 PROGRESS REPORTS

Add new sub-paragraph (i) at the end of Sub-Clause 4.21, as follows:

- (i) All other information specified in the Employer's Requirements.

4.25 TEMPORARY FACILITIES AND SERVICES FOR THE ENGINEER

Add New Sub-Clause 4.25 as follows:

If the Contractor fails to provide and maintain any of the Temporary facilities and services required for the use of the Employer's/Engineer's Personnel, then the Employer shall be entitled to provide and maintain such Temporary facilities and services and shall be entitled to recover from the Contractor the cost plus 10% (Administrative Fees) thereof or may deduct the same from any monies due or that become due to the Contractor.

6 STAFF AND LABOUR

6.3 PERSONS IN THE SERVICE OF EMPLOYER

Add the words "OR ENGINEER" to the title of this Sub-Clause.

Add the words "or Engineer's" after "Employer's" in the second line.

Add new Sub-Clauses 6.12 to 6.19 as follows:

6.12 VISAS, RESIDENCE PERMITS ETC.

The Contractor shall obtain all visas, residence permits and other permissions required for the employment of expatriate personnel. The Employer will provide assistance in obtaining such visas, residence permits etc. but without thereby incurring any liability towards the Contractor.

6.13 REPATRIATION OF LABOUR

The Contractor shall be responsible for the return to the place where they were recruited, or to their domicile, of all persons that he has recruited and employed for the purposes of or in connection with the Contract and shall maintain such persons as are to be so returned in a suitable manner until they have left the Site or, in the case of persons who are not nationals of and have been recruited outside the Country, until they have left the Country.

6.14 MEASURES AGAINST INSECT AND PEST NUISANCE

The Contractor shall always take the necessary precautions to protect all staff and labor employed on the Site from insect nuisance, rats, and other pests and reduce

the dangers to health and the general nuisance caused by the same. If necessary, the Contractor shall provide his staff and labor with suitable prophylactics for the prevention of malaria and take steps to prevent the formation of stagnant pools of water. He shall comply with all the regulations of the local health authorities in these respects and shall in particular arrange to spray thoroughly with approved insecticide all buildings erected on the site. Such treatment shall be carried out at least once a year or as instructed by the Engineer. The Contractor shall warn his staff and labor of the dangers of local hazards.

6.15 EPIDEMICS

In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government, or the local medical or sanitary authorities, for the purpose of dealing with and overcoming the same.

6.16 BURIAL OF THE DEAD

The Contractor shall make any necessary arrangements for the transport, to any place required for burial, of any of his expatriate employees or members of their families who may die in the Country. The Contractor shall also be responsible for making any arrangements with regard to burial of any of his local employees who may die while engaged upon the works.

6.17 FESTIVALS AND RELIGIOUS CUSTOMS

The Contractor shall in all dealings with his staff and labor have due regard to all recognized festivals, days of rest and religious or other customs.

6.18 ALCOHOLIC LIQUOR OR DRUGS

The Contractor shall not sell or give to any person nor allow the importation on to the Site or to any accommodation provided for his labor, of alcoholic liquor or narcotic drugs.

6.19 ARMS AND AMMUNITION

The Contractor shall not bring to the site or use on it, any arms, ammunition or explosive materials prohibited by law, and shall prevent his Personnel agents, employees, servants or any of his sub-contractor's workmen and servants from having or using such arms and ammunitions on Site.

7. PLANT, MATERIALS AND WORKMANSHIP

7.4 TESTING

Add the following at the end of Sub-Clause 7.4:

To clarify what is stated in this Sub-Clause, the Contractor shall bear the costs of tests stated in the Contract included in the Specifications and applicable standards.

The Contractor shall provide and install the laboratories required by Specifications or by any other Contract Document.

The Contractor shall give the Employer and the Engineer a 21-day notice before the dates of tests that may be held outside the country of project.

8 COMMENCEMENT, DELAYS AND SUSPENSION

8.1 COMMENCEMENT OF WORK

Add the words 'but not exceeding 28 days' after the words 'as soon as is reasonably practicable' in the second paragraph.

8.3 PROGRAMME

Add new subparagraph (e) at the end of the first paragraph, as follows:

- (e) a cash flow schedule showing the anticipated payments by the Employer during the contract period.

8.4 EXTENSION OF TIME FOR COMPLETION

Add the following paragraph at the end of Sub-Clause 8.4:

In determining any extension to the Time for Completion under this Sub-Clause, the Engineer shall be entitled to take into account the effect of work omitted by any Variation issued by him pursuant to Sub-Clause 13.1 (*Right to Vary*) but he shall have no power to reduce the Time for Completion stated in the Appendix to Tender.

8.7 DELAY DAMAGES

Add the following words in line 2 of the second, paragraph, after the words 'other than':

'Engineer's additional supervision fees that shall become payable under Sub-Clause 8.13 (*Engineer's Additional Supervision Fees*) and damages payable'.

8.13 ENGINEER'S ADDITIONAL SUPERVISION FEES

Add New Sub-Clause 8.13 as follows:

If, by reason of any delay for which the Employer is entitled to payment of delay damages under Sub-Clause 8.7 (*Delay Damages*), the Employer is obliged to pay additional fees for the Engineer's supervisory staff on site, the Employer shall be entitled to recover the amount of such additional fees from the Contractor in a manner similar to that set out for the recovery of delay damages under Sub-Clause 8.7.

10 EMPLOYER'S TAKING OVER

10.1 TAKING OVER OF THE WORKS AND SECTIONS

Add before 'the matters described in Sub-Clause 8.2' in line 3, the words 'provision of as-built drawings and operation and maintenance manuals described and other requirements described in the Employer's Requirements, and'.

11 DEFECTS LIABILITY

11.3 EXTENSION OF DEFECTS NOTIFICATION PERIOD

Add the following paragraph at the end of Sub-Clause 11.3:

If two or more Sections or parts of the Works are taken-over separately, then with respect to defects appearing after the interconnection of such Sections or parts, the Contractor's responsibility under this Clause shall continue for all interconnected Sections or parts until the latest of the Defects Notification Periods have expired.

11.10 UNFULFILLED OBLIGATIONS

Add the words '(including all obligations imposed by the Laws of the Country)' after the word 'obligations' in line 3.

14 CONTRACT PRICE AND PAYMENT

14.1 THE CONTRACT PRICE

Delete the subparagraphs 14.1 (c) and 14.1 (d) and replace with the following

- (c) The Contractor shall be exempted from customs and other import duties for all Goods imported for sole purposes of execution of the Works, provided that such Goods are imported in the name of the Employer.
- (d) All imported Goods for the Works, which are not incorporated in or expended in connection with the Works shall be exported on completion of the Works by the Contractor at its cost or if it fails to do so, by the Employer at the Contractor's cost.

If not exported, the Goods will be assessed for duties as applicable to the Goods involved in accordance with the laws of Ethiopia and the Contractor shall be responsible for payment of such duties.

The Contract lump sum price shall include for all the scope of Works described in drawings, stated in Specifications, or any other Contract Documents, or any Schedules as necessary to render the Works fit for the Contract purposes, and irrespective to having such scope mentioned in the Bill of Quantity items or not.

Any quantities which may be set out in the Bill of Quantities or any Schedule are estimated quantities and are not to be taken as the actual and correct quantities of the Works which the Contractor is required to execute and the Contractor shall be deemed to have checked the quantities and satisfied himself concerning their accuracy.

The Bill of Quantities shall only be used for the purposes of valuing Variations as set out in Sub-Clause 13.3 [*Variation Procedure*] and for the assessment of the estimated contract value of the Works executed in the Contractor's Documents produced for the purposes of making payments pursuant to this Sub-Clause 14.3 (a).

The Contract Price shall not be subject to any adjustment:

- i. On account of the quantities of any Goods or Works being more or less than specified in the Bill of Quantities; or
- ii. On account of any Goods or Works not being provided for in the Bill of Quantities.

14.2 ADVANCE PAYMENT

Delete Sub-Clause 14.2 and substitute the following:

- (a) Upon receipt of confirmation from the Contractor that the following matters have been carried out by him:
 - (i) submittal of Performance Security in accordance with Sub-Clause 4.2;
 - (ii) application for the Advance payment has been made;
 - (iii) provision of an approved bank guarantee for the advance payment in the full amount of the advance payment issued by a bank located in Ethiopia or a foreign bank, in terms similar to the form annexed to the Tender and Contract Particulars,

The Engineer shall certify and the Employer shall pay, in accordance with Sub-Clauses 14.6 and 14.7, the advance payment amount stated in the Appendix to Tender. The advance payment shall be made in the currencies and proportions in which the Contract Price is payable and shall not be subject to deduction of retention.

Advance payment shall be made by depositing it in the Contract account at the bank specified by the Contractor in one installment as follows:

- The first (1st) once Contractor satisfies requirements set out in this Clause.

The Advance payment shall be repaid through percentage deductions at a rate of 25% from the Interim payments certified by the Engineer in accordance with this Sub-Clause until such time as the advance payment has been fully repaid; always provided that the advance payment shall be completely repaid prior to a time when 80 percent of the Contract Price has been certified for payment.

Provided that upon issue of the Taking Over Certificate for the whole of the Works or upon termination under Clauses 15 or 16, the whole of the balance then outstanding shall immediately become due and payable by the Contractor to the Employer. The amount of the advance payment guarantee shall be progressively reduced as the advance payment is repaid.

- (b) The advance payment shall be used by the Contractor exclusively for the Works including among others mobilization expenditures, including the acquisition of Equipment, Plant and Materials in connection with the Works. The Equipment and Plant supplied to the Site shall be in good condition and suitable for use and of such type, size, and capacity appropriate for carrying out the Works, and must be insured in accordance with the Conditions of the Contract.

Should the Contractor misappropriate any portion of the advance loan, the Employer shall have the right to confiscate the Advance Payment Guarantee notwithstanding any objection on the part of the Contractor.

14.8 DELAYED PAYMENT

Delete the second and third paragraphs and substitute the following:

The financing charges shall be calculated at the discount rate set by the Central Bank of the country of the currency of payment and shall be paid in the currency as specified in the Appendix to Tender.

The Contractor shall notify the Employer of any delayed payment as soon as practicable after the date for payment, together with a statement of the current applicable discount rate. The Contractor shall be entitled to payment without certification and without prejudice to any other right or remedy.

Add new Sub-Clauses 14.16 to 14.19 as follows:

14.16 FOREIGN TAXATION

The Accepted Contract Amount shall be deemed to include for all taxes, duties and other charges imposed outside the Country on the production, manufacture, sale and transport of Materials, Plant and Contractor's Equipment to be used in or furnished under the Contract and on the services performed under the Contract.

14.17 LOCAL TAXES AND DUTIES

The Accepted Contract Amount shall be deemed to include all customs duties and charges, import duties, business taxes, income and other taxes that may be levied in accordance with the Laws and regulations in being at the Base Data in the Country on Materials and Plant (permanent, temporary and consumable) to be used or furnished under the Contract and on the services performed under the Contract.

14.18 IMPORT DUTIES ON CONTRACTOR'S EQUIPMENT

The Contractor shall observe all Laws and regulations concerning the importation and export of Contractor's Equipment and Temporary Works brought into the Country for the Works. He shall pay any import duties and other charges or provide such bonds or guarantees as may be demanded by the relevant authorities.

14.19 INCOME TAX ON STAFF

The Contractor's staff, personnel and labor will be liable to pay personal income tax in respect of such of their salaries and wages as are chargeable under the Laws and regulations for the time being in force in Country, and the Contractor shall perform such duties regarding deductions of such taxes as may be imposed on him by such Laws and regulations.

17 RISK AND RESPONSIBILITY

17.3 EMPLOYER'S RISKS

Delete Sub-Clause 17.3 and substitute the following:

The risks referred to in Sub-clause 17.4 below are:

- (a) insofar as they occur in the Country and directly affect the execution of the Works

in the Country.

- i war and hostilities (whether war be declared or not), invasion, act of foreign enemies;
 - ii rebellion, terrorism revolution, insurrection, or military or usurped power, or civil war;
 - iii munitions of war, explosives ionizing radiation, or contamination by radioactivity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radioactive toxic, explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof;
 - iv pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds;
 - v riot, commotion or disorder, unless solely restricted to the employees of the Contractor or of his Subcontractors and arising from the conduct of the Works;
- (b) loss or damage due to the use or occupation by the Employer of any Section or part of the Permanent works, except as may be provided for in the Contract;
- (c) loss or damage to the extent that it is due to the design of the Works, other than any part of the design provided by the Contractor or for which the Contractor is responsible; and
- (d) any operation of the forces of nature (insofar as it occurs on the Site) which an experienced Contractor:
- i could not have reasonably foreseen, or
 - ii could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures:
 - a. prevent loss or damage to physical property from occurring by taking appropriate measures, or
 - b. insure against such loss or damage.

17.4 CONSEQUENCES OF EMPLOYER'S RISKS

Insert the words '(excluding Contractor's Equipment)' after 'Goods' in line 2 of the first paragraph.

18 INSURANCE

18.1 GENERAL REQUIREMENTS FOR INSURANCES

Insert at the end of the second paragraph:

The Contractor shall be the insuring party, and the insurance policy shall include provisions for cross-liabilities between the Employer and the Contractor as two separate entities in the insurance policies.

Delete the sixth paragraph of Sub-Clause 18.1 from “The relevant insuring Party.....to the other Party” and substitute the following:

Before commencing work on Site, the insuring Party shall provide evidence to the other Party that the insurances required to be provided have been effected and, not later than 30 days after the date of the Letter of Acceptance, the insuring Party shall

provide copies of the policies to the other Party and shall notify the Engineer accordingly.

Add at the end of the sixth paragraph after item (b) new item “(c) a statement from the insurer/ insurance company that the various insurance requirements clauses of the Contract have been complied with and are fully covered by the policy issued”.

Add at the end of the seventh paragraph after ‘Engineer’ the words “and the Contractor shall supply the Engineer with original of such evidence or policies. The insurer shall keep the Engineer informed of all modifications introduced to the policy post issuance by direct communication. The Contractor shall not modify the approved policy without the prior approval of the Employer and Engineer”.

18.2 INSURANCE FOR WORKS AND CONTRACTOR'S EQUIPMENT

Delete ‘.... and profit’ from line 3 of the first paragraph.

Delete from the fourth line of the first paragraph the words 'date by which evidence is to be submitted under sub-paragraph (a) of Sub-Clause 18.1 (*General Requirements for Insurances*)' and replace with 'the date on which the Contractor is given possession of the Site or any part thereof'.

Delete from the third line of sub-paragraph (d) the phrase "(c), (g) and (h)" and replace with "(a)v, (c) and (d)".

Delete sub-paragraph (e)(iv) and insert new sub-paragraph (f) as follows:

- (f) shall, in respect of Goods shipped but not delivered to the Site, be effected by the Contractor, irrespective of whether such Goods are subject to Sub-Clause 14.5 or not.

Add new Sub-Paragraph 18.2 (g) as follows:

In case of any damage to the Works or any materials or Plant or Temporary Works due to Risks covered by the insurance policies, the Contractor shall, as soon as possible, carry out the repairs and the making good of the defects. If the value of the compensation is greater than the amounts paid by the Contractor, then these amounts shall be paid to the Contractor; and if it is less than the cost of repair, then the difference shall be borne by the party responsible for the loss.

The replacement value and the additions on it shall be equal to 115% of such replacement cost.

Add at the end of Sub-Clause 18.2:

The insurance shall be effective from the Commencement Date and until the date of issue of the Performance Certificate (Final Acceptance Certificate). The Contractor shall bear responsibility for all deductibles in the policy.

18.3 INSURANCE AGAINST INJURY TO PERSONS AND DAMAGE TO PROPERTY

Add the following at the end of Sub-Clause 18.3:

All deductibles shall be borne by the Contractor.

18.4 INSURANCE FOR CONTRACTOR'S PERSONNEL

Add the following at the end of Sub-Clause 18.4:

The Contractor shall immediately notify the Engineer in writing about any accident which occurs on Site if it results in an injury to any of the laborers or employees or damage to property, and he shall provide him with the details and the affidavits of witnesses.

Also, the Contractor shall inform the concerned authorities about such accidents when and if the laws and regulations so require.

Add new Sub-Clause 18.5 as follows:

18.5 PROFESSIONAL INDEMNITY INSURANCE

The Contractor shall take out and maintain Professional Indemnity Insurance covering all his design liability under the Contract with reputable insurers acceptable to the Employer and without unusual or onerous conditions attached to it in the amount set out in the Appendix to Tender for any one occurrence or series of occurrences arising out of any one event for a period beginning from the commencement of the design and manufacture of the Works and continuing up to ten (10) years from the issue of Taking-Over Certificate of the whole of the Works.

All excess and deductibles shall be borne by the Contractor.

20 CLAIM DISPUTES AND ARBITRATION

20.1 CONTRACTOR'S CLAIMS

Delete the last sentence of the last paragraph and substitute:

Notwithstanding any other provision of the Contract, including without limitation the provisions of Sub-Clause 14.14 (*Cessation of Employer's Liability*) of the Conditions of Contract, if the Contractor fails to comply with any of the provisions of the Contract, including without limitation the provisions of Sub-Clauses 1.9, 4.7, 4.12, 4.24, 7.4, 8.4, 8.5, 8.9, 9.2, 10.3, 13.7 and 20.1 of the Conditions of Contract, in respect of any act, event or omission of whatever nature which in the opinion of the Contractor should result in an increase in the Contract Price and/or an extension of the Time for Completion, such failure shall constitute on the part of the Contractor a definitive and irrevocable waiver of, and release of the Engineer and the Employer from, any and all claims arising from any such act, event or omission and the Contractor shall be irrevocably stopped from raising any claims arising from any such act, event or omission thereafter.

Delete Sub-Clauses from 20.2 to 20.8 (inclusive) and replace with the following new Sub-Clause 20.2:

20.2 JURISDICTION

“Notwithstanding anything to the contrary under the Contract, any and all disputes arising out of or in relation to the Contract shall first be resolved through mutual discussions between the Contractor and the Employer. If no resolution is obtained within thirty days from the date of the start of these discussions, the dispute shall be submitted to the competent courts of Ethiopia. Notwithstanding anything to the contrary, the Employer shall have the right to institute proceedings against the Contractor at any appropriate jurisdiction.

21. DETAILS TO BE CONFIDENTIAL

Add New Clause 21 as follows:

The Contractor shall treat the Contract Documents and details of the Contract as private and confidential and save in so far as may be necessary for the purposes of the Contract, shall not disclose the same or any particulars thereof to any person, nor publish any particulars thereof in any trade or technical paper, publicity material or elsewhere without the consent of the Employer. All documents provided to the Contractor shall be used only for the purposes of the Contract.

5. CONTRACT AGREEMENT

This Agreement made the [insert day] of [Insert year] between (Name of Employer) of (Address of Employer) (hereinafter called 'the Employer') of the one part and (Name of Contractor) of (Address of Contractor) (hereinafter called "the Contractor") of the other part.

Whereas, the Employer desires that the Works known as “Bid for Design Review, Build, Financing and Commissioning of Ethiopian Airlines Head Quarter Building”, should be executed by the Contractor, and has accepted a Fixed Lump Sum Tender by the Contractor for the design, execution and completion of these Works and the remedying of any defects therein,

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The documents forming the Contract are to be taken as mutually explanatory of one another. If there is an ambiguity or discrepancy in the documents, the Engineer shall issue any necessary clarification or instruction to the Contractor, and the priority of the documents shall be as follows:
 - a) The Contract Agreement
 - b) The Letter of Acceptance dated.....
 - c) The Employer’s Requirements (Annex 1 – 4 (inclusive))
 - d) The Priced Letter of Tender dated.....and Appendix to Tender
 - e) Any Addenda and Notices to the Tender issued before signature of the Agreement
 - f) The Particular Conditions
 - g) The General Condition
 - h) The Documents forming part of this Bid Document, Annex 1 – 4 (inclusive) and any other documents forming part of the Contract, in each case other than those documents specified in Sub-Clauses 2 (a) - 2 (g) (inclusive); and
 - i) The Contractor’s Proposal
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein, in conformity with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor, in consideration of the execution and completion of the Works and the remedying of defects therein, the lump Sum Contract Price of
-
-
-*US Dollars (USD)*
- at the times and in the manner prescribed in the Contract.

In Witness whereof the Parties hereto have caused this Agreement to be executed the day and year first before written in accordance with their respective laws.

SIGNED by:

SIGNED by:

for and on behalf of the Employer in the
presence of

for and on behalf of the Contractor in
the presence of

Witness:

Witness:

Name:

Name:

Address:

Address:

Date:

Date:

6. CONTRACT GUARANTEES

6.1 PERFORMANCE BANK GUARANTEE (UNCONDITIONAL)

FOR

To:

WHEREAS (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. dated to execute (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of US Dollars (USD) (being not less than Ten (10) percent of the Contractor's price stated in his tender), such sum being payable in the types and proportions of currencies in which the Contract Sum is payable, and we undertake to pay you, upon your first written demand in writing stating that the Contractor is in breach of his obligation (s) and without cavil or argument, any sum or sums within the limits of as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein and notwithstanding any objection from the Contractor and without any need for notarial warning and judicial proceeding.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until the date of issue of the Performance Certificate.

Signature and Seal of the Guarantor:

Name of Bank:

Address:

Date:

6.2 FORM OF ADVANCE PAYMENT GUARANTEE
(UNCONDITIONAL)

To Messrs:

We have the pleasure to inform you that our bank,
.....
has guaranteed by a financial guarantee the Contractor, Messrs
.....
for the sum of US Dollars (USD).....
payable in US Dollars (USD) as an Advance Payment Guarantee for Tender No.
..... pertaining to the Project of
..... to ensure the obligations of the Contractor for repayment
of the advance payment in accordance with the Conditions of Contract.

We undertake to deposit with you the said amount mentioned above or the remaining amount due upon your first written demand without warning or reservation or any other condition, and notwithstanding any objection on the part of the Contractor.

This Guarantee shall remain valid from the date of its issuance and until the repayment of the full amount of the advance payment, and shall be renewed until complete recovery of the advance payment installments.

Issued at:

Signature of Guarantor/Bank:

Name of Authorized Signatory:

..... Date:

.....

Annexure - A to Tender Conditions and Procedures. Evaluation and Qualification Criteria

This annexure, read in conjunction with Section 2 Tender Conditions and Procedures contains all the factors, methods and criteria that the Employer shall use to evaluate the Tender and determine whether a Tenderer has the required qualifications. No other factors, methods or criteria shall be used.

Tender and Bid, Tendering and Bidding and Tenderers and Bidders are synonymous.

1. Minimum Qualification Criteria

Technical Evaluation Criteria: -

Technical evaluation will be in accordance with the following evaluation points: -

- a. Registration Certificates, type of organization – Mandatory, no score
- b. Construction Experience: **30%**
 - Annual volume of construction work at 10%.
 - Experience in similar nature of work at 10%
 - Fulfilling designer requirements 5%
 - Work in progress at 5%
- c. Programme and proposed Construction Methodology at **20%**
- d. Quality Assurance, Health, Safety and Environment (QHSE) at **10%**
- e. Key personnel with total **20 %**. Qualification and Experience will have equal weight. Required personnel are not limited to the list provided under Tender Schedule 3.3.5. Proportion for design to construction personnel shall be 30 to 70%.
- f. Equipment with **10%**. All essential equipment shall be stated. Especially those to keep safety of the workmen.
- g. Principal Subcontractors and Principal Manufacturers/suppliers at **5%**
- h. Financial Position at **5%**
- i. Liquid assets and/or credit facilities, net of other contractual commitments and exclusive of any advance payments which may be made under the Contract, of no less than USD 5,000,000.00 or Equivalent ETB.

The passing mark of the technical evaluation to be eligible for financial evaluation shall be **80%**.

To qualify for award of the Contract, in accordance with Tender Conditions and Procedures Sub-Clause 2.2, Tenderers shall meet the minimum qualifying criteria (a), (b) & (c) as specified below:

- (a) Average annual volumes (annual turnover) of construction work over the past **10** years of at least **USD 50,000,000** and above or Equivalent ETB. The submitted value shall be accepted only if it is verified with supporting evidence.
- (b) Experience in the construction of any building project with a project cost of at least **USD 40,000,000** and above or Equivalent ETB, over the last **10** years. To comply with this requirement, works cited should be at least 100 percent complete. Supporting evidence for satisfactory performance from the employer which clearly

specifies the project amount is required.

- (c) Experience in similar works must be in the construction of **at least two Office Buildings** or any equivalent facilities with a project cost of each at least **USD 30,000,000** and above or Equivalent ETB, over the last **10** years. To comply with this requirement, works cited should be at least 100 percent complete. Supporting evidence for satisfactory performance from the employer which clearly specifies the project amount is required.
- (d) Proposed Construction Methodology

Based on the preceding general facts, the Specifications, Drawing and Bill of Quantities of the project attached herewith together with findings of the Site visit the Tenderer shall, elaborate on the methods it would employ to execute these works safely.

The Method Statement, together with contingent equipment, machineries to execute these works would form and play a major role in analysing the Contractor's capability to undertake a project of such magnitude and complexity.

Methodology would also cover the following construction method statements.

- Project approach and methodology to undertake the works
 - Design approach.
 - Safety and protective measures for workman, employer's staffs, existing structures, equipment and the works, in general.
 - Compliance with the protection of environment, health and safety of workers and train workers with respect to occupational health and safety behaviour and basic level of environmental awareness.
 - Ensure for the proper area of storage for both raw material and waste material by clearly marking on plan and by demarcation.
 - Establish circulation plan to promote traffic safety and minimize disturbance on the on-going activities and on the existing facilities.
 - Planned work schedule for all activities supported with finance plan.
 - Material delivery plan and procurement process.
 - Manpower and equipment utilization plan, including site utilization for stores, workshop, equipment, etc.
- (e) Proposals for the timely acquisition (own, lease, hire, etc.) of the essential equipment assigned for the work. The equipment shall be deployed in the actual execution. Evidence of ownership title shall be attached. See the evaluation table 1.1, Point no. 3.6 for requirement.
- (f) Personnel with the following minimum qualifications and experience but not limited to this shall be assigned for the work. They shall be deployed in the execution. See the evaluation Table 1.1 for requirement.
- Relevant Evidences of Qualification and experience of personnel listed must be attached. No evaluation points will be given without the supporting evidences.
 - Tenderers are expected to mention the particular name of the personnel planned to be assigned for the project. Recently signed CVs, copy of degree and diplomas shall be attached with evidence for the work experience.
 - In case of failure of the Tenderer on assigning of nominated personnel, during construction, substitution can be instructed by the Employer for professionals at equivalent level.

- The Tenderer must have suitably qualified personnel to fill the following positions (refer Tender Schedule 3.3.5), and should submit copies of educational testimonial and recommendation of work experience from previous employers and renewed professional license evidence including recently signed CVs by the professional & certified by the Tenderer. No evaluation points will be given without the supporting evidences.
 - If the project is awarded changing the proposed personnel with equivalent qualification and experience shall be under the approval of the Employer.
 - Subcontractors' experience and resources will not be taken into account in determining the Tenderer's compliance with the qualifying criteria.
- (g) A consistent history of litigation or arbitration awards with the applicant or any partner of a Joint Venture may result in disqualification.

Financial Evaluation Criteria

The guide line for evaluation of bids allows the following:

The best evaluated bids will be **lowest evaluated price** of the responsive bid proposal **after high level negotiation**. In evaluating bids, the Employer will implement the following evaluation and disqualification criterion:

- I. Making any correction for errors in accordance with Sub-Clause 2.9.3 of the Tender Conditions and Procedures.
- II. The Contract is a **Lump Sum Contract** as stated under Sub-Clause 2.5.4 of the Tender Conditions and Procedures. Tenderers are expected to show indicative quantities in detail. If there are any additional cost incur due to negligence or without understanding of the work, it will be Tenderer's responsibility to cover the price.
- III. Tenderers are expected to give the shortest possible time to complete the construction works of the project. The Maximum time for completion of the project is not more than **915 calendar days**. The completion date shall be determined from the Commencement Date.
- IV. After high level negotiation, least evaluated Tenderer shall be awarded for the work. Negotiation can be made with best evaluated Tenderer or Tenderers.

Detail evaluation

1. Qualification Criteria

To qualify for award of the Contract, in accordance with Tender Conditions and Procedures Sub-Clause 2.2, Tenderers shall meet the minimum qualifying criteria presented as follows:

STAGE – I PRIMARY EVALUATION

Prior to the detailed technical evaluation for responsiveness of the Tender document, the Employer will determine based on Tender Conditions and Procedures whether each Tenderer meets the eligibility criteria defined in the Tendering document and is responsive to the requirements of the Tender documents. In case of non-compliance, the Tenderer's submission would be rejected and not considered for further qualification;

Offers that have scored non-responsive in any one of the items specified in the preliminary evaluation criteria below (Table 1.1) shall be REJECTED and their financial proposals will be returned unopened.

Table 1.1

FACTOR	CRITERIA		
	Requirement	Bidder Single Entity	Documentation Required
1. Legal Qualification of the Bidder (Eligibility and Trade Licence)			
1.1 Valid trade license or business organization registration certificate	Copies of original documents defining the constitution or legal status, place of commercial registration and principal place of business, type of organization (Corporation/LLC, Partnership/Proprietorship) of the Tenderer's company, firm or partnership or, if the Tenderer is a joint venture, of each party thereto, accordance with Sub-Clause 2.2.1 (a)	Must meet requirement	Tender Schedule 3.3.1 with attachments
1.2 Valid tax clearance certificate	Having been submitted valid tax clearance certificate issued by the tax authority.	Must meet requirement	Tender Schedule 3.3.1 with attachments

2. Professional Qualifications and capability of the Bidder			
2.1 Key Staff	Among the staff mentioned in Tender Schedule 3.3.5 Tenderer must demonstrate that it will have the personnel for the key positions that meet the requirements stated under the Table in Tender Schedule 3.3.5.	Must meet requirement Average 90% of the requirements must meet/	Tender Schedule 3.3.5 with attachment of freshly signed cv, renewed professional license, credential and testimonies.

3. Technical Qualifications, Competence, and Experience of the Bidder			
3.4 History of non-performing 3.1 contract General Experience	Non-performance of a contract did not occur within the last five years prior to the deadline for tender submission based on project information on fully settled disputes 40 mitigation. A fully settled E.T.B in dispute for litigation is one that has been resolved 100% in accordance with the Dispute Resolution Mechanism/under the respective contract and where all appeals instances available to the Tenderer have been exhausted. Tenderer should submit evidence supportive performance. Subcontract experience will not be considered for evaluation.	Must meet requirement	Tenderer Certification of Compliance with Tender Schedule 3.3.1.0 with Attachments (written) as per Tender Schedule 3.3.2.1. The document to be attached for these criteria should also be certified by the appropriate Client and also should disclose the date year within which the work is done, the total project cost, copies of payment certificates need to be attached.
3.5 Pending litigation experience	All pending litigation shall in total not represent more than 30 percent of the Tenderer's net worth and shall be treated as resolved against the Bidder. USD 30million or Equivalent E.T.B within the last ten years that have been 100% successfully completed projects on the	Must meet requirement	Tenderer should submit the Compliance (Provisional Acceptance) as per Tender Schedule 3.3.2.1. The justification by Tenderer for these criteria should also be certified by the appropriate Client and also should disclose the date year within which the work is done, the total project cost, copies of payment certificates need to be attached.
	Office building and/or any similar facilities. Sub-contract experience will not be considered for evaluation.		

3.6 Equipment for the implementation of the contract	The Tenderer must demonstrate that it will have the required equipment and machinery for the implantation of the contract available. The Tenderer has to specify which machinery/equipment he intends to use for the job and what extend this is readily available to him.	Must meet requirement at least 80% of the requirement	Technical proposal with attachment. Renewed ownership certificate /All authorized bodies' certification/ Leased or Hired agreement confirmation. Any equipment that is not renewed for the current physical year and have no appropriate evidence shall not be considered during the evaluation process.
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FACTOR	CRITERIA		
	Requirement	Bidder Single Entity	Documentation Required
1. Financial Standing of the Bidder			
4.1 Historical Financial Performance	Submission of audited balance sheets and other financial statements as required Tender Schedule 3.3.9, for the last five years to demonstrate the current soundness of the Tenderer's financial position and its prospective long-term profitability. As a minimum a Tenderer's net worth calculated as the difference between total assets and liabilities should be positive.	Must meet requirement	Tenderer Certification of Compliance with Tender Schedule 3.3.9 with attachments such as copy of External auditor renewed trade license and auditor summary report and detail audited document (Balance sheet, profit & loss statement). The audit Report shall be valid if only the income tax is paid prior to Tender submission date.

<p>4.2 Average Annual Turnover</p>	<p>The average annual construction turnover calculated as total certified payments received for contracts in progress or completed within the last ten years must equal or exceed:- USD 50Million or Equivalent ETB:</p> <p>The submitted value shall be accepted only if it is verified with supporting evidence by character certified auditor or revenue agency</p>	<p>Must meet requirement</p>	<p>The document to be attached for these criteria should also be certified by the appropriate employer or consultant and also should disclose the date year within which the work is done & the total project cost. The same should clearly substitute with Audit report of external Auditor to be considered for evaluation. Tenderer certification of compliance with Tender Schedule 3.3.9 with attachments.</p>
<p>4.3 Financial Resources</p>	<p>The Tenderer must demonstrate access to or availability of financial resources such as cash on hand or unconditional bank loan other than any contractual advance payments to meet cash flow requirement minimum of USD 5million.</p>	<p>Must meet requirement</p>	<p>Tenderer Certification of compliance with attachments. Original letter from bank.</p>

STAGE –II- DETAIL TECHNICAL EVALUATION

Only technical offer which pass first stage and comply to all requirements under stage – I evaluation will be evaluated for stage II detail technical evaluation accordingly.

The minimum pass mark for this **stage-II** evaluation for construction works shall be **80**. Those Tenderers who scored 80 and above will be evaluated in detail for technical responsiveness and ranked accordingly.

Priority	Name of Criteria	Points
1	Construction Experience (Tender Schedule 3.3.2)	30
	Annual Volume of construction work	10
	Experience in similar nature of work	10
	Fulfilling designer requirements Submission of design firm subcontract agreement with renewed legal license, Consultant grade to be of Class-I , with minimum 8 years of related experience on modern office buildings design and list of professionals attached.	5
	Work in Progress	5
	Total points for Construction Experience (Tender Schedule 3.3.2): (A)	30
2	Adequacy of Technical proposal in responding to the schedule of Requirements (Programme and preliminary method statement): Tender Schedule 3.3.3 (a) Tender Document presentation. (1pts) (b) Site Visit and understanding of the project (1pts) (c) Technical approach and methodology (5pts) (d) Work plan and scheduling (Time, man power equipment, personnel) (3pts) (e) Organization and staffing (2pts) (f) Construction procedures (2pts) (g) Project handling Methods (2pts) (h) Proposal for construction Techniques followed considering the non-interruption of normal working time and service of client (2pts) (i) Methods of protection for built in client property (2pts) Note:- Tenderer should have to prepare the detail work methodology and show their Approaches to specific work	20
	Total points for Programme (Tender Schedule 3.3.3): (B)	20
3	Quality Assurance, Health, Safety and Environment – QHSE (Tender Schedule 3.3.4): (C)	10
4	Key Staff (Tender Schedule 3.3.5): (D)	20
5	Major Items of Contractor's Equipment (Tender Schedule 3.3.6): (E)	10

Priority	Name of Criteria	Points
6	Principal Subcontractors and Principal Manufactures/Suppliers (Tender Schedules 3.3.7 & 3.3.8): (F)	5
7	Financial Position (Tender Schedule 3.3.9): (G)	5
	Total points for all Criteria (A+B+C+D+E+F+G)	100

STAGE – III RESPONSIVENESS & FINANCIAL EVALUATION

Tenderers' who pass **Stage-II evaluation** will be categorized as technically responsive or not according to the evaluation criteria set out above. Technical responsiveness of the offer shall be marked as follows.

1. Non Responsive (NR) bid the one who fail to satisfy the technical requirements indicated in the evaluation criteria. Tenderer's offer, which didn't submit or didn't include technical details about the project as per the Tender Documents, shall be considered Non Responsive.

Offers which have scored non-responsiveness in any one of the items specified in the technical evaluation criteria under Stage -I (Primary Evaluation) will be **REJECTED** as Non-Responsive.

2. Substantially responsive (SR) Tender is the one that partly conforms to specifications of the Tender documents without major material deviation or reservation so that by any means offered material shall not affect the quality & performance of the project.
If a Tender is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.
3. Responsive (R) Tender is the one that fully conforms to all the terms, conditions, and specifications of the Tender documents without material deviation or reservation.

A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works; (b) which limits in any way, inconsistent with the Tender documents, the Employer's rights or the Tenderer's obligations under the contract; or (c) whose rectification would affect unfairly the competitive position of other Tenderers presenting substantially responsive Tenders.

In case there appear differences between the evaluation point and technical specification included in the tender document, the statement or requirement included in the Technical Specification shall prevail.

Those Tenderers who comply with all requirements under **Stage-II** will be evaluated for financial proposal.

Those Tenderers who do not comply in any one of the items specified in the evaluation **Stage-I and** got less than 80 under **Stage-II** shall be REJECTED.

Tenderers who pass **Stage-I** and scored the pass mark under **Stage-II** and offered the lowest financial proposal (after conducting high level negotiation with the recommended best evaluated Tenderers) for the project will be awarded for the execution of the project.

ANNEXTURE

[Please refer Annex 1-4 attached separately]

ANNEX 1 TO VOLUME 1

DIVISION 1 GENERAL PRELIMINARIES

DIVISION 8 DESIGN DELIVERABLES

These Divisions 1 and 8 shall form part of the Employer's Requirements

DIVISION 1 GENERAL PRELIMINARIES

1.1 INTRODUCTION AND PROJECT BACKGROUND

Ethiopian Airlines Group (Ethiopian) is the fastest growing Airline in Africa. In its seven decades of operation, Ethiopian has become one of the continent's leading carriers, unrivalled in efficiency and operational success. Ethiopian commands the lion's share of the pan-African passenger and cargo network operating the youngest and most modern fleet to more than 100 international destinations across five continents.

Hence, to further complement our steady growth and attain our goal in remaining to be the leading service provider in Africa, we have been making massive infrastructure development projects to modernize and expand existing facilities to enhance our capability, to cope up with the 21st century new aviation developments and offer excellent third-party services.

Accordingly, Ethiopian has planned to construct a Head Quarters Building facility to meet different functional requirements. The proposed site is located inside the Ethiopian Airlines Bole International Airport compound. On the recommended project location, the EPC/turn-key contractor is expected to evaluate the fulfilment for all aviation safety requirements. (Figure 1.1).



Figure 1.1 Plausible Location of the EAG Head Quarters Building Facility

This tender, therefore, calls for selection of a contractor to conduct the feasibility study, the environmental impact assessment, to make the design revision & update along with the detail design, supply all materials, equipment, labour, construct the Head Quarters Buildings, bring project financier and hand over the completed project with an as built drawings to Ethiopian Airlines Group. The design and construction of this Head Quarter is intended to be done by a prospective competitive contractor on a turn-key basis.

1.2 SCOPE OF WORK

1.2.1 GENERAL

The scope of the project is to conduct design revision & update along with the detail design & undertake construction of the Head Quarters Building Compound based on the features below:

Design & Construct Head Quarters Buildings

The headquarters facility will be built to accommodate various employees as per the estimated head count stipulated in this document.

This headquarters will contain six blocks namely Human Resource, Commercial, ICT, Conference, Customer Services and Executive's office blocks with an additional three blocks sub-structure works for future expansion considerations.

The full development of the Head Quarters Building aims to provide office spaces for more than 2,000 employees with adequate parking basements for more than 700 Vehicles. The full development will consist of 6 office blocks and additional 3 blocks sub-structure works for future expansion along with integrated lobby, sitework and landscape works there to.

The Contractor's scope is to design and execute all the works related to the Items summarized in the below table:

HEAD QUARTERS - SUMMARY TABLE		
Items	Units	Total
Land Area	m2	30,000
Office Blocks	No.	6
Parking Basements	No.	2
Foot Print of Parking Basement	m2	9,500
Total BUA of Offices	m2	21,000
Total BUA of Parking Basement	m2	19,000
Total No. of Parking Spaces	No.	700
Access Road to Ring road	Km.	0.35
Landscape area	m2	20,000

Table 1.1 General information on Head Quarters Building space

The Contractor shall dismantle and/or clear any obstructions above and below the ground from the proposed project site. On top of this, any underground/buried and surface systems like sewer, electrical systems, telephone lines, data cable lines, etc. relocation to be considered as part of this bid.

In addition to the given drawings, a summary of the additional key facilities incorporated into this project to accommodate the strategy and requirements are summarised in the points below.

1.2.2 List of additional Employers Requirement

- All EMP units are to be positioned and relocated to basement floor from the designed Ground floors of all blocks so that the areas can serve for office purposes.

- Upon the design update and review based on the given drawings, latest/modern date facilities which are mandatory for the effective and efficient operation of the headquarters are required to be well incorporated.
- The abovementioned includes but not limited to provision of audio-visual facilities for the offices & conference rooms, KABA system integration, CCTV camera based Security facilities along with a central control room, pool office partitioning layout and functional requirements provision, passenger lift vertical transport, office and conference hall floorings, electrical and sanitary fixtures, fresh air supply and exhaust air-conditioning units etc. are to be designed as per the latest technology advancement and/or in adoption of facilities at other leading airport headquarters in the aviation industry.
- Building façade and claddings must be given due attention, hence the Contractor must do the external finishing works to be expressive of the logo of Ethiopian. Moreover, aluminum frame works must be of frameless type and provided with tampered glazing of adequate thickness, curtainwall cladding to be coherent with the façade cladding material. Additionally, the lobby circulation on Ground and 1st floor along with the floating effect of the blocks must come to realization upon completion of the project construction.
- A modern and aesthetically coherent evacuation/ emergency fire exit staircase mechanism must be provided leading to a common assembly point in case of any threat. Moreover, the fire alarm system, manual call point beacon, different signage's, smoke detectors as well as fire hydrant reel and/or dry powder fire extinguisher appliances must be functional enough and also of best quality. As for the basement the same applies but sprinkler based fire extinguisher shall be provided.
- An additional one floor is to be uniformly provided on all the given head quarter blocks so as a head count of more than 2,000 employees can be entertained accordingly.
- The Executive's office block i.e., Block 6 shall be widened by around 7m to make similar with the other blocks width and to give adequate office spaces, Conference rooms and good circulation advantages, these also applies on IT block.
- The two-basement floors are to be constructed over the entire stretch of the head quarter buildings serving as a common foundation for all the given blocks. In this accord, adequate parking space for more than 700 Vehicles of the headquarters employees as well as rooms for MEP equipment and other support facilities can be facilitated.
- An access road to connect the Head Quarters with the Ring Road is to be provided for an estimated chainage of 0.35Km from the headquarters, along with the necessary Gates, digitalized security check points, car scanning, and security control rooms well furnished with CCTV camera and latest audio-visual provisions.
- Overall Road survey, Existing Asphalt roadway major renovation, Lane Widening works, drainage network, pedestrian walkway provision along with Street light facilitation for the Existing Asphalt from Traffic gate to Newly proposed Head quarter and existing perimeter road around the New Head quarter (i.e. Flights operation, Inflight catering, MRO entrance gate area, etc.). Scope includes relocation of any underlaying utility items. Tenderers must undertake Traffic load/count analysis for the determination

of size of road, walk ways, utilities and other design parameters there to, for both new and renovation roads.

- An estimated 150ml Fence work to the existing Motor pool/Bus parking area similar to the existing one in type and height is to be Constructed. And an estimated area of 2,000m² Paving works for future additional bus parking expansion behind the Concrete reservoir area or HR building rear side, along with the necessary relocation of existing facilities to an appropriate tip.
- In addition to the landscape works of the new head quarter plot compound, the Contractor is expected to do an estimated area of 13,500m² landscape design and implementation work around motor pool side, radio antenna/tower area adjacent to the headquarters, flight operation area, side of the existing headquarter i.e. ET Head quarter compound, so as an overall uniform vicinity and attractive scenery is acquired.
- All the assumptions and architectural values of the baseline/concept design by the original designer are to be maintained. But the contractor can propose for a better technology of the modern date to keep the basics the same and modernize the overall harmony of the headquarters unit.
- To make sure of the abovementioned concern, the Contractor is expected to engage the original designer during the design stage and throughout the construction period, for such a provisional lump sum amount is specified here below. In addition, the contractor is expected to engage his own designer for the detail design of all disciplines. The original designer has the responsibility of ensuring the design concept is in place, recommends construction material to meet the required standard along with over all supervision of the project. Further the original designer will have a dual reporting to the turn-key contractor and to the Employer.

Description of Lump Sum items	Amount
Total of Lump Sum price for EPC	
Involvement of the Original Designer-Provisional sum	\$ 400,000.00
Grand Total Provisional Sum	

- The prices of the Breakdown of the Lump-sum Price include all incidental and contingent expenses and risks of every kind necessary to construct, complete and maintain the whole of the works in accordance with the contract. Unless separate items are provided in the Breakdown of the Lump-sum Price, prices include all costs involved in the various items of the Breakdown.
- The Contractor shall demolish the existing Headquarters facility and provide a standard football field facility on the existing headquarters location or any other appropriate areas to be proposed at the end of the project.
- The Contractor shall re-design and re-model the steel structure cladding and roofing to the existing HR building, demolishing and replacement by HCB wall along with all the necessary plastering and painting finishing works there to.

- The head Quarter facilities complete with security check points, guard house complete with CCTV camera and compound light facilities.
- The building must be decorated to reflect both Ethiopian & African culture with local artist original paint/sculptures/artworks and Tenderer must come with a known local artist, and it is mandatory passing point.
- Development of Water well with water treatment plant for Toilets, Car wash, firefighting systems etc.
- Construction of Waste treatment plant to recycle and disinfect waste coming out of the building and dispose a safe and non-toxic fluid to the environment.
- Assumption is to be made that, utilities like electric, data and tele incoming points are to be provided within 20m of site boundary by the client.
- The attached Drawing, BOQ item descriptions and quantities only serve for the Tenderers reference. Tenderers are required to update all drawings with the additional employers requirements, undergo design revision with provision of latest construction and technologies and prepare detailed BOQ on the basis of the revised drawings/design.

1.2.3 List of Head Quarters head count

- The full development of the Head Quarters Building aims to provide office spaces for more than 2,000 employees. This is based on the head count listed here under as of October 31, 2022 and also additional forecast considerations.

Division/Group	Total Employees
Group CEO Office	3
CCO Office	8
COO Office	4
ET Holiday (PR, Digital Marketing ,Sales promotion, Et holiday, Sales Svs App Dvt, QMS & SMS, Group integrated Mkt & Communication)	169
Group Customer Services (Inflight product dvt, Inflight performance, CBT,CRM,CS&OP QMS SMS, Ground handling HR and Finance)	114
Group Marketing (Customer loyalty, Dist GSA admin, Mkt research and route mgt, offline pricing, Passenger charter/ Lease OP, Passenger schedule, Pricing and concessions, Rm and strategy)	112
Group CFO (Cargo accounting, District finance, cost control, Disbursement, Finance and Risk mgt, General Accounting, General Purchase, Insurance Fuel and taxes, Inventory controll, Cash and currency controll, Treasury, Passenger revenu accounting)	332

Group Internal Audit, QMS,SMS, Compliance and Business Suitability (Ethics & Liaison unit, Group business sustainability, Fraud and risk, Int audit, QMS,SMS, QMS compliance & ACE, AMA & ERP)	65
Group IT (B2B app Dvt, BI, Business transformation , cargo system support, commercial app support, EA- system support, Group info technology, IT security, Service desk, IT system design, network design, network support, On site it support, Operation app support, PMO, SAP system support)	243
Group Legal Counsel & Secretariat	18
Group Strategic Planning & Alliances (Aerospace Manufacturing, Alliance & cimmercial cooperation, Bus Dvt and Equity Part, Fleet and Equipment Planning,Infrastructure planning & Dvt, Network planning, Stratagic planning & Alliances, Stratagic planning & Govt aff)	42
Group Business Devt & Inn Hub	17
Group HCM (HCD & Industrial Relation, HCD & Tallent Mgt, HCM, Industrial Relation & HC, Organizational Dev't & HC, Recruitment and placement, Group security, Employee rewards & Svs, Employee engagement & change Mgt)	121
ADD Sales (Bill & collection,Passenger sales, Travel Port Ethiopia)	30
ET Express and Regional Airports	16
ET International Services	55
Total Head Count of Employees	1,349
Forecast Consideration	656
Grand Total Employee Head Count	2,005

Table 1.1 Summary of Total Head Count

1.3 Valid Standards and Codes

The execution of the Works shall conform to the standards indicated in the Specifications. If no specific indication of standards is given for any work, then it shall be assumed that the applicable equivalent latest British Standards (B.S.) or equivalent DIN, ISO or ASTM shall be the governing standard for such work.

The Contractor shall provide the Employer's Representative with an original copy of the specified or accepted Standards and Codes, and all amendments thereto, for the Employer's Representative's use and reference.

Electrical equipment shall fulfil the IEC-norms, and in compliance with the available voltage system in Ethiopia.

If "or similar" is added to the description of execution of work or to a material, this means that the Contractor has the right to suggest an alternative which in his opinion is similar in quality, function, and capacity. If the Contractor wishes to use another alternative, he shall in advance and in each separate case submit all necessary information regarding the suggested alternative to the Employer's Representative. The Employer's Representative alone shall judge the similarity.

All costs, including modification of drawings and design calculations, caused by the use of alternative material and/or design shall be borne by the Contractor.

1.4 Other Contractors and Construction Activities

Other construction contracts and construction activities might be proceeding in the Contract Area apart from those associated with the works. The Contractor is warned that other construction works may be carried during the course of this contract.

If the case is such, The Employer's Representative has the right to issue to the Contractor instructions for changes in the work schedule or to take temporary measures to facilitate other Contractors' works, namely when the Contractor of the other package is concerned.

1.5 Contractor's Obligations

The Contractor shall be responsible for making necessary corrections to materials and equipment that he supplies in order to conform with contract requirements whether such corrections are required as a result of review of shop drawings, subsequent to release of drawings, data, and information mentioned hereinbefore, or required after fabrication and shipment of materials and equipment to the site of the works.

Unless a separate pay item is clearly allocated in the Bill of Quantities, all costs involved for the fulfilment of the following Contractor's obligations shall be deemed to be included in the other unit rates of the contract.

1.5.1 Setting - Out of Works

The Contractor shall establish accurate benchmarks and reference points with respect to survey information given by the Employer's Representative. Main setting-out data shall be recorded and given to the Employer's Representative for his inspection.

1.5.2 Quality Guarantees

Where relevant, guarantee documents for the different materials and equipment shall be handed over to the Employer's Representative by the time of completion of Inspection at the latest. This refers to the different materials and equipment for which special guarantees are required as mentioned in the Technical Specification.

1.5.3 Diary

The Contractor shall keep a diary which shall contain numbered pages. Every day, the Employer's Representative shall be kept informed about the contents of this diary by receiving copies of the numbered pages. The diary shall contain information about:

1. Name and location of the site
2. Responsible work leader
3. New or revised drawings which have been received
4. Results of executed supervision and tests
5. Number of workers
6. Commencement and finalization of important work phases
7. Number and category of plant and equipment on the site.
8. Guiding principles or instructions concerning the Contract, e.g. changes, additions, etc., given by the Employer's Representative
9. Weather conditions
10. Loss or damage to materials or work due to prevailing weather conditions, accidents, thefts, fire, damage or insufficient care
11. Obstacles and/or obstructions to work progress.
12. Other circumstances of importance

1.5.4 Photographs

The Contractor shall be responsible for the production of photographs during the progress of the works as provided herein. The Employer's Representative shall designate the subject of each photograph.

An additional set of photographs shall be made each month throughout the progress of the work at such times as requested by the Employer's Representative and submitted with Contractor's applications for progress payments.

All photographs shall be approved by the Employer's Representative and shall be coloured photographs of professional quality.

The Soft Copy of the photographs shall be the property of the Employer's Representative and no prints from these copies may be supplied to any person unless under the authority of the Employer's Representative.

All costs involved for delivery of the photographs as described above shall be borne by the Contractor and be included in the contract unit rates.

1.5.5 Temporary Facilities

The Contractor shall provide offices at the site of work to the extent he finds necessary for his personnel and sub-contractors and for the proper execution of the work. All temporary facilities shall be so erected as to ensure proper and safe progress of the work.

The Contractor shall also provide yards and sheds for the proper storage of his own and his sub-contractors' materials including such materials which shall not be left

exposed to weather. Storage facilities shall be such that they give proper protection and possibilities for inspection of the stored materials.

The location proposed for all temporary facilities shall be notified to the Employer's Representative so as to obtain approval as soon as possible before commencement of the use of such facilities. All temporary facilities shall be submitted for approval by the Employer's Representative prior to their construction.

The Contractor shall maintain on the Site, adequate sanitary accommodation for the Employer's Representative's staffs, his staff workmen and his sub-Contractors. This sanitary accommodation shall be kept in a clean and orderly condition to the approval of the Public Health Authority and the Employer's Representative to ensure that no nuisance is caused. The sanitary accommodation shall be removed at completion of the works and all trenches shall be chemically treated and completely backfilled to the satisfaction of the Employer's Representative.

All temporary offices etc. shall be situated in approved positions, and as directed by the Employer's Representative.

The Contractor shall also provide the following site facilities and temporary buildings:

1.5.5.1 Employer's Representative/Employer's Office

The Contractor shall immediately after receiving the Employer's Representative's order to commence provide and install on the site where required by the Employer's Representative suitable and adequate prefabricated demountable office accommodation for the Employer's Representative/Employer staff. The area used for erection of such offices shall be provided by the Employer at no cost to the Contractor. Such office, furnishing and equipment shall be approved by the Employer's Representative and shall become available in full working order 2 weeks from the Contract Commencement Date. The Contractor shall provide port-a-cabins offices for 1 Chief RE, 1 Project Coordinator, 1 Senior QS, 1 Senior Contract Administrator, 1 Senior Structural Engineer, 1 Senior Architect, 1 Senior Mechanical Engineer, 1 Senior Electrical Engineer, 1 Senior Sanitary & Plumbing Engineer, 1 Landscape designer, 1 interior designer, 1 Meeting Room and 1 secretary, with a kitchenette and toilet. The Contractor shall furnish, equip service, and maintain these offices.

The Contractors shall provide port-a-cabins offices for:
Structural Engineer (1), Structural Inspectors (2) and Land surveyors (2)
Architect (1) and Architectural Inspectors (2)
Landscape designer and Interior designer (2)
Mechanical Engineer (1) and Mechanical Inspectors (2)
Electrical Engineer (1) and Electrical Inspectors (2)
Infrastructure Inspectors (1)
Toilets

The Contractors shall furnish, equip service, and maintain these offices.

The prefabricated mobile office building shall be of sound construction burglar-proof, mosquito-proof and weather-proof and shall be complete with water, sanitary, electrical and telephone services with internal and external lighting.

At the end of the Defects Liability Period the prefabricated offices, furniture and equipment shall remain the property of the Contractor.

- 1.5.5.2 General: All temporary facilities provided for the Employer's Representative's and/or Employer's staff shall remain available until three months from the start of the Defects Liability Period. These facilities shall be used by the Employer's Representative's staff to manage and quality control of the Works.
- 1.5.5.3 Provide and maintain all necessary and required services to offices and facilities, including but not necessarily limited to the following new furniture and equipment:
- a. electric lighting and power.
 - b. water supply.
 - c. potable water supply including bottled water.
 - d. drainage and sewage systems.
 - e. fire fighting appliances.
 - f. cleaning facilities and services and general attendance.
 - g. telephone/communication services.
 - h. stationery paper and office supplies.
 - i. all ducting, cabling and installation requirements to connect the office computer network.
- 1.5.5.4 Site Offices for the Employer's Representative/Employer: Provide, furnish, equip, service and maintain site offices and facilities comprising the following:
1. Each office shall be furnished as follows:
 - a. 2 desks (180 x 90 cm) with lockable drawers and swivel chairs.
 - b. 1 lockable steel filing cabinets.
 - c. 2 office chairs.
 - d. 1 lockable drawing hanger for 10 sets.
 - e. 1 shelf units.
 - f. 1 pin boards (8 m2)
 - g. 1 wastepaper baskets.
 - h. 1 layout reference table.
 - i. armchairs.
 2. 1 Secretary's/Admin. Assistant Office, shall be furnished as follows:
 - a. 1 desk with lockable drawers 180 x 90 cm.
 - b. 1 secretary's desk and 1 swivel chair.
 - c. 1 large lockable steel filing cabinets.
 - d. 1 layout reference tables.
 - e. 2 office chairs.
 - f. 1 shelf units.
 - g. 1 pin boards.
 - h. 1 wastepaper baskets.

3. 1 Conference Room, sized to accommodate meetings for 8 people: with:
 - a. 1 conference table to seat 8 people.
 - b. armchairs of the swivel types.
 - c. 2 shelf units.
 - d. 2 pin boards.
 - e. 1 whiteboard with erasable ink pens supply.
 - f. 2 wastepaper baskets.
4. 1 Storeroom with:
 - a. heavy duty shelf racking units.
 - b. drawing hangers and racks.
5. Toilet; as per the building layout plan
 - a. WC suite.
 - b. Bidet.
 - c. toilet roll holder
 - d. lavatory basin.
 - e. mirror and shelf.
 - f. paper towel dispenser.
 - g. waste bin with cover.

Service and maintain and clean toilets on a daily basis; provide all associated consumables and supplies as and when requested.

Service, maintain and clean the Site offices on a daily basis; provide all associated consumables and supplies as and when requested, including drinking water and stocks for making tea, coffee, and beverages. Provide 1 office boy for cleaning, catering and general assistance during normal and extended working hours throughout the duration of the Contract.

- 1.5.5.5 Computers for the Employer's Representative: The Contractor shall provide for the exclusive use of the Employer's Representative's staff, new PC computer equipment and peripheral hardware together with all associated accessories, necessary cabling and workstation desking. Submit detailed proposals to the Employer's Representative and obtain approval prior to purchase and delivery to the Site.

Computers provided for the Employer's Representative are to remain the property of the Employer. At or prior to the expiration of the Defects Liability Period as directed, service all equipment, pack and deliver to the Employer.

Locate and install in Employer's Representative's site offices, connect and configure computers and peripheral equipment to provide complete and fully operational system installations to the approval of the Employer's Representative, comprising the following:

The Contractor shall provide 10 laptops to the requirement of the Employer's representative.

- 1.2.1.1 Laser Printer: Similar to HEWLETT PACKARD "HP LaserJet 9000", with A3/A4 paper cassettes.
- 1.2.1.2 UPS Equipment: Similar to MERLIN GERIN.
- 1.2.1.3 Software: Original, latest Arabic/English version, multi-user licensed copies of the following software programs for specified operating system, together with user manuals:
 - 1.2.1.3.1 "Microsoft Professional Office", including 'Word', 'Excel', 'Power Point', 'Access' and 'Outlook'.
 - 1.2.1.3.2 "Microsoft Internet Explorer".
 - 1.2.1.3.3 "Primavera Project Planner".
 - 1.2.1.3.4 "AutoDesk AutoCAD".
 - 1.2.1.3.5 "Norton AntiVirus".
- 1.2.1.4 Internet: Multi-user subscription and connection to approved, local, Internet service provider.
- 1.2.1.5 Computer Workstation, comprising:
 - 1.2.1.5.1 Desking with wire management; to accommodate PC, monitor, keyboard, and mouse.
 - 1.2.1.5.2 Operator's swivel chair.

Service and maintain computer equipment regularly and provide all associated consumables, stationery, paper supplies and ink as and when requested.

Provide Office Equipment as follows:

- 1 photocopy machine with A3/A4 enlargement/reduction facility with automatic document feeder, RADF, ADU, electronic sorter, finisher, drawer base unit and printer kit, similar to KONICA 7030 digital input-output station.
- 1 plain paper fax machine.

Service and maintain office machines and equipment regularly and provide all associated consumables, stationery, and paper supplies as and when requested.

1.5.5.6 Telephone Facilities for the Employer's Representative/Employer:

The Contractor shall maintain for the exclusive use of the Employer's Representative's and/or Employer's staff, appropriate and adequate telephone facilities, and services to the approval of the Employer's Representative

The Contractor shall pay for all connection, service and user charges and costs arising in connection with the provision of telephone facilities for the Employer's Representative. Cost of International calls other than those in connection with the Works shall be reimbursed to the Contractor.

1.5.5.7 Vehicles for the Employer's Representative: The Contractor shall provide, service and maintain for the exclusive use of the Employer's Representative's staff, fully equipped brand-new vehicles with air conditioning. Submit detailed proposals to the Employer's Representative and obtain approval prior to purchase and delivery

to the Employer's Representative.

Deliver vehicles to the Employer's Representative within 15 days of the Commencement Date, together with spare keys, registration papers, insurance certificate and other related documentation, and as follows:

1. Two new four-wheel drive SUVs, power steering air conditioned fully equipped field vehicle, long wheelbase, hardtop, 5 seatings, 3500 cc engine capacity.

Arrange for, provide, and pay all charges and costs arising in connection with the delivery, maintenance and running of the vehicles, including but not limited to:

- a. delivery charges, licence fees, road taxes and certificates.
- b. fully comprehensive insurance cover for any driver at all times in line with the Contract insurance clauses requirements for bodily injury and death.
- c. regular service maintenance and repairs as necessary to keep the vehicles at all times in good roadworthy condition.
- d. supply of fuel, lubricants, replacement parts and other consumables.

Provide an equivalent replacement vehicle during any period that a vehicle is unavailable for any reason, including maintenance or repair.

2. Provide Two (2) drivers to operate the vehicles during office and overtime hours including commutation time from and to Site. Supply all fuel and lubricants. Repair and maintain as required to keep the vehicles in a very good roadworthy condition at all times. The average use per car per week is expected to be in the order of 300 km.
3. All vehicles shall be made available to the Employer's Representative with full servicing and maintenance until the issue of the Taking-Over Certificate and/or the end of the Defects Liability Period.

1.5.5.8 Temporary Laboratory for Testing of Material

The Contractor shall supply within 3 weeks of commencement order a site laboratory for tests to be carried out by the Employer's Representative. The Contractor can propose an external Temporary Laboratory, for Employer's Representative/ Employer's review and approval.

The site laboratory shall be located in the site office building and shall be supplied with pressurized water system, adequate and reliable electrical supply system to enable operation of required testing equipment, heaters, sinks, drains, cabinets, etc..

All supplied equipment shall be new, unused and shall not be inferior to that of other well-known brands. The Contractor shall supply calibration certificates every six months or as directed by the Employer's Representative in addition to validity certificates for this equipment. The equipment, apparatus, and supply of materials

supplied shall permit the execution of the standardized procedures specifically required for the following tests or their equivalents as specified.

T-11	Amount of Material Finer than 75 mm Sieve in Aggregate
T-19	Unit Weight and Voids in Aggregate. (ASTM Designation C29)
T-21	Organic Impurities (ASTM Designation C 40)
T-22	Compressive Strength of Cylindrical Concrete Specimens. (ASTM Designation C39)
T-23	Making and Curing of Concrete Test Specimens in the field. (ASTM Designation C-39)
T-231	Capping Cylindrical Concrete Specimens
T-26	Quality of Water to be Used in Concrete.
T-27	Sieve Analysis of Fine and Coarse Aggregate
T-84	Specific Gravity and Absorption of Fine Aggregate
T-85	Specific Gravity and Absorption of Coarse Aggregate
T-87	Dry Preparation of Disturbed Soil and Soil Aggregate Samples for Test
T-88	Particle Size Analysis of Soils
T-89	Determining Liquid Limit of Soils
T-90	Determining of Plastic Limit and Plasticity Index of Soils
T-96	Resistance to Abrasion of Coarse Aggregate by Use of Los Angeles Machine
T-100	Specific Gravity of Soils
T-104	Soundness of Aggregates by use of Sodium Sulphate or Magnesium Sulphate
T-119	Slump of Portland Cement Concrete
T-126	Making or Curing of Concrete Test Specimens in the Laboratory
T-176	Plastic Fines in Graded Aggregates and Soils by Use of Sand Equivalent Test
T-180	Moisture – Density of Relations of Soils Using a 10 lb (4.54 Kg) Rammer and an 18 in. (457 mm) Drop.
T-191	Density of Soils In-Place by Sand Cone Method
T-193	The California Bearing Ratio
BS-812	Determination of Flakiness Index
BS-812	Determination of Elongation Index.

In addition to the equipment, apparatus, materials, and supplies needed to perform the above-mentioned tests, the following shall be furnished if required.

1. U.S. Standard 12 in. (30 cm) diameter brass sieves in sizes 3", 2 ½", 2", 1½", 1", brass pan and brass cover.
2. Two No. U.S. Standard 8-inch (20 cm) diameter brass sieves in sizes 1", ¾", ½", 3/8", No. 4, No. 8, No. 10, No. 16, No. 30, No. 40, No. 50, No. 80, No. 100, brass pan, and brass cover.
3. Four No. U.S. Standard 8-inch (20 cm) diameter brass sieves No. 200 in size.
4. One loading machine with proving rings having 30 and 60 KN capacities and penetration piston for CBR test. Six moulds with perforated base and upper plates and spacer discs. Twelve surcharge weights of 2.27 Kg each.
5. Three complete sets for field density tests by Sand Cone Method, calibrated Ottawa sand or equivalent, and 15 plastic field cans (20 liters capacity) with covers.
6. Sample ejector (extruder jack) and reaction plate.

7. Two complete sets for Proctor Compaction Test.
8. Two standard liquid limit apparatus and plastic limit sets.
9. Water bath thermostatically controlled for curing concrete cylindrical samples.
10. 30-cylinder moulds 30 cm height and 15 cm diameter.
11. 4 No. slump cone test apparatus complete.
12. Two capping sets for concrete compression strength test.
13. Power operated concrete compression machine having a capacity up to 300 KN
14. Soil and concrete testing thermometers from -70°C to 60°C, 2 No.
15. Soil and concrete testing thermometers from 70°C to 100°C, 2 No.
16. Electronic balance, self calibrated (accuracy 0.01 gm) capacity 3.6 Kg with a hook.
17. Electronic balance, self-calibrated (accuracy 0.1 gm) capacity 12 Kg.
18. Triple beam balance with a minimum of 20 Kg capacity and 1 gm sensitivity.
19. 2 sets each for specific gravity and absorption of fine and coarse aggregates.
20. Motorized concrete diamond core drill powered and equipped to take 4- and 6-inch concrete samples.
21. One drying oven, fan convected with a minimum 400 L capacity thermostatically controlled and having a temperature range up to 300°C with a temperature indicator gauge.
22. 3 No. sample splitters having openings of 3", 1" and ½".
23. Chemicals, solvents, chemicals for capping compounds, distilled water, pH indicators, paper books and others shall be furnished in ample quantities and proportional to the size of the works.
24. Lab supplies and accessories as may be required to perform all the above test.

The Contractor shall provide enough sample bags, thermometers, graduated glass beakers, mixing pans, moisture pans, evaporating dishes, laboratory tongs, metric (vernier) callipers, French curves, sieve brushes, scoops, dial gauges, wash bottles, asbestos gloves, tin sample boxes and plastic containers, graduated and ungraduated cylinders, hammers, chisels, steel rulers, etc...

The Contractor shall provide pressure gauges to the extent required, for the Employer's Representative's staff for monitoring of hydraulic field pressure testing.

In the case that a specific test which cannot be performed in the Site laboratory, the Contractor may at the approval of the Employer's Representative carry out the required tests in an approved laboratory at his own expense. Approved Laboratory implies the approval of the Employer's Representative.

The supply of the above shall not be considered for direct payment but shall be deemed to be included in the Contract prices. Contractor shall provide two (2) skilled laboratory laborers for assistance in field and laboratory works.

At the end of the Defects Liability Period the site laboratory furniture and equipment shall become the property of the Contractor.

1.5.6 Survey Works

1.5.6.1 Permanent Benchmarks

The Contractor shall keep the Employer's Representative informed, a reasonable time in advance, of the times and places at which he intends to do work, in order that lines and grades may be established and necessary measurements for record on payment made with a minimum of inconvenience to the Employer's Representative or delay to the Contractor. The Contractor shall have no claim for damages or extension of time for delays in the giving of lines and grades, making record measurements or destruction of such marks and the consequent necessity for replacement.

The Employer's Representative will furnish the Contractor with such basic lines and grades as he, (the Employer's Representative) deems necessary for the location and control of the works. It shall be the Contractor's responsibility before commencing any section of the work to locate the benchmarks and traverse points to be used. The Contractor shall obtain the approval of the Employer's Representative to the use of these benchmarks and shall then refer all temporary benchmarks thereto.

1.5.6.2 Setting-Out Survey

The Contractor shall be responsible for the setting out survey for construction purposes and the replacement of monuments and property markers disturbed for the work. The survey shall proceed in advance of the construction at a rate satisfactory to the Employer's Representative. The Contractor shall keep the Employer's Representative fully informed as to the progress of the setting-out survey.

The exact position of all works shall be established from traverse points and benchmarks which are given or modified by the Employer's Representative. Any error, apparent discrepancy or omission in the data shown or required for accuracy, accomplishing the setting-out survey shall be referred to the Employer's Representative who shall take whatsoever corrective measures he deems necessary.

The Contractor shall be responsible for the accuracy of his work and shall maintain all reference marks throughout the contract. Damaged, destroyed, or inaccessible reference marks and benchmarks shall be replaced by the Contractor. Existing or new control points that are destroyed during construction shall be re-established by the Contractor and all reference ties recorded and furnished to the Employer's Representative. All setting-out survey work shall be referenced to the permanent benchmarks approved by the Employer's Representative.

1.5.6.3 Survey Records

All computations necessary to establish the exact position of the works from control points shall be made and reserved by the Contractor. All computation, survey notes other records necessary to accomplish the works shall be neatly prepared and made available to the Employer's Representative upon request or furnished upon contract completion.

The Employer's Representative will check the setting-out survey work or notes made by the Contractor and any necessary correction to the work shall be immediately made. Such checking by the Employer's Representative shall not relieve the Contractor of any responsibilities for the accuracy or completeness of his work.

1.5.6.4 Survey Marks

All marks shall be of a type approved by the Employer's Representative, clearly and permanently marked so as to be legible at all times. It shall be the Contractor's responsibility to maintain these marks in their proper position and location at all times. Any existing markers defining property lines and survey monuments which may be disturbed must be accurately reset in their proper position upon completion of the works.

1.5.6.5 Coordination of Survey

The Contractor shall liaise, if necessary, with other Contractors through the Employer's Representative to ensure that all survey is carried out to a common datum and that there are no discrepancies at contract boundaries.

1.5.6.6 Coordination of Other Data

Where two or more Contractors are employed, then each shall liaise with the Employer's Representative to ensure that information of mutual concern is accurately and promptly made available.

1.5.6.7 Costs of Survey Works

All costs involved for the execution of works as described above shall be deemed included in the respective unit rates of the contract.

1.5.6.8 Technical Surveying Equipment

The Contractor shall provide before commencement of Works Technical Surveying instruments for his use and the use of the Employer's Representative, as to the requirement to the Employer's representative.

This equipment shall be repaired, serviced maintained, and calibrated by the Contractor as necessary throughout the construction period and until the completion of the Contract.

The Contractor shall provide the Employer's Representative on regular basis with chainmen to assist in the carrying out of the daily checking activities throughout the duration of the Contract or to the extent requested.

After completion of the Contract or at the instruction of the Employer's Representative, the equipment shall revert to the Contractor.

1.5.7 Sign Boards

One temporary painted sign shall be provided at each site of the work within one week of commencement of work on site. The site of works refers to any permanent site that will be in operation for the duration of the contract i.e.: main office complex, stock yard etc.

1.5.8 Security and Safety

Provide guards and other security protection of materials and equipment stored at the site, installed or to be installed as part of the temporary or permanent works until issuance of the "Certificate of Completion" of the works.

The Contractor shall be solely responsible for initiating and monitoring of safety precautions and programmes in connection with the works. In that regard the Contractor shall appoint one of his permanent field staff whose responsibility shall be to promote safe working procedures and to comply with applicable laws ordinances, and regulations of any authority having jurisdiction.

Site security & safety plan shall be developed by the Contractor and security company shall be hired by Contractor. All plans shall be coordinated and approved by the Employer.

1.5.9 Traffic Regulations

In carrying out this responsibility for maintenance, control, and the safeguarding of traffic within an immediately abutting the project, the Contractor shall:

- a. Erect and maintain reasonable safeguards for safety and guidance of pedestrians and vehicular traffic including posting of warning signs, barricades, shores, and other protections against hazard.
- b. Provide appropriate lighting, signs, and flagmen where Contractor's activities involve crossing or entering public highways.
- c. The Contractor shall provide the required signage in the Airport facility as per regulation of the Civil Aviation Authority.

1.5.10 Dust Palliation and Mud Control

- (i) Throughout the construction period, the Contractor shall effectively palliate dust in the working area on dirt roads used in operations with sufficient frequency to satisfactorily allay dust during hours that work is being performed.

- (ii) When mud conditions develop, make provisions as necessary for controlling the mud and proceeding with the work. Such control may include temporary drainage provisions, installing granular material "working blanket: soil treatment, or other means to effectively deal with mud. Work delays due to muddy ground will not be recognized as valid reasons for time extensions.

1.5.11 Water Supply and Electricity

The Contractor shall make his own arrangements at his own expense for obtaining the electrical energy, gasoline, fuel oil, and water supply necessary for construction and testing purposes unless otherwise specified in the specifications.

1.5.12 Submittals

1.5.12.1 General

- (i) Submittal requirements are listed in each numbered section of the specifications.
- (ii) In addition to those contained in the Conditions of Contract, the Contractor shall submit for approval 3 copies of each of the following:
 - a. Construction programme and monthly updates.
 - b. Material specification of all components that are part of the permanent works.
 - c. Test reports and certificates required for quality control of the works.
 - d. Certification of completion of works, request for inspection for substantial completion.
 - e. Monthly report of inspection during period of maintenance.
 - f. Construction shop drawings.

1.5.12.2 CPM-Type Construction Programme

- (i) Establish activities at approximately uniform level of detail. Typical activity shall not be less than 5 days and not more than 21 days.
- (ii) Indicate delivery times for major construction equipment, Contractor's plant construction, and administrative activities required to complete the works.
- (iii) Calibrate the duration estimate for each activity in calendar days. It shall be the single best estimate considering the scope of the work and resources planned for the activity with due regard to local holidays.
- (iv) Show logical interrelationship and sequencing of activities and identify the critical chain of events on which timely completion of the works depends.

- (v) Provide a tabulated listing of all activities on the schedule in sequential order indicating activity duration, early start, late finish, and available float.
- (vi) Show estimated monetary value of each activity and cumulative value of work performed each month and progress as percent of value of work in place and projected cash flow. Compare this on a plotted curve with the percentage of progress scheduled for each month.
- (vii) Provide an initial programme as required in general obligations Clause 14 and in the Instruction for Tenderers, including programme for electrical and mechanical works.
- (viii) Provide Critical Path Method (CPM) network analysis schedule showing overall organization of the works for the monthly update of the construction programme.
- (ix) A schedule of submission of all required shop and erection drawings, as well as proposed dates of shipment and site delivery of items of Contractor's plant and related customs document and letter credit preparation dates.

1.5.12.3 Monthly Reports

Submit to the Employer's Representative on the first day of each month or such other day as the Employer's Representative may prescribe a duplicate report in such detail as the Employer's Representative may require for the preceding period showing:

- (i) The progress on excavation, foundation preparation, concrete placement, and other important items of the works.
- (ii) Particulars of the supervisory staff employed on the contract.
- (iii) Size and composition of the Labour force, equipment and resources including its distribution on the various sections of the works on a daily basis.
- (iv) Particulars of temporary work including the location and state of each item of temporary work and the section of the works on which each item has been employed.
- (v) Particulars of materials and other resources delivered on site and used for the works.
- (vi) Listing of activities of the CPM on bar chart for each location indicating percentage of progress attained for each line item.
- (vii) Updated status report of shop drawings submittals and purchase orders for materials and equipment, indicating the scheduled vs., revised vs. actual dates.

- (viii) Narrative report as may be necessary to clarify problem areas, anticipated delays, and impact on schedules.

The reports will be also in video form to capture the project history.

In addition, all parties involved in the project will monitor the project's progress and take proactive actions accordingly.

1.5.12.4 Shop Drawings

The schedule for the preparation of construction shop drawings shall be approved by the Employer's Representative according to the works performance schedule established by the works Contractor. Generally approved shop drawing for any part of the works shall be available with Contractor 3 weeks prior to commencement of construction.

After the performance of the surveys necessary on the site to check the elevations indicated on the construction drawings, construction drawings are likely to require some amendments to meet exact field conditions.

The Contractor shall prepare and submit to the Employer's Representative's approval shop drawing for all the permanent works under the Contract. These shall incorporate the setting out and survey data carried out by the Contractor as well as any modification necessitated by site conditions. The Contractor shall modify the Contract Drawings as necessary to produce the Shop Drawings.

No additional payment shall be made for the preparation of shop drawings. The cost of these is deemed to be included in the rate of the Bill of Quantities.

1.5.12.5 Documents to be provided after Construction Works are completed

Within 1 week after the acceptance of the works, the Contractor shall submit complete electronic files, two hard copies and two transparent documents of all as-built drawings to the Employer's Representative of the following:

a. Slides and Posters

Two copies of coloured slides representing the various stages of the project (minimum 20 slides). Three copies of coloured posters (minimum A1 size).

All of the drawings shall be complete and printed using AutoCAD system. Full details of elevation and any indications to facilitate fast, accurate identification of system components shall be perfectly legible. Each drawing shall bear:

- ◆ the name of the Contractor,
- ◆ the name of the Employer's Representative,
- ◆ the name of the installation,
- ◆ the scale of plans and drawings,

The establishment of the above listed documents shall not generate any extra payment for the Works Contractor since the prices in the Bill of Quantities are considered inclusive of the corresponding costs.

Warrantees

Warrantees shall be issued in the name of the Employer as per the industry standards.

1.7 Miscellaneous Provisions

1.7.1 Name-boards

Provide, erect, and maintain two name-boards at locations assigned by the Employer's Representative bearing the Employer's and Consultant's name, the name of the Project, the Contractor's name, and such other names and information as the Employer's Representative may direct to be inserted upon it. The name-board shall not be less than 2.50 m x 1.75 m lettered in English. Remove the name-boards from the Site upon completion of the Works.

1.7.2 Protective Equipment and Clothing

Provide and maintain all necessary protective and safety equipment and clothing for the operatives and Site staff to the Employer's Representative's satisfaction.

1.7.3 Temporary Stormwater Drainage

Ensure that the whole of the Site is kept free from the risk of stormwater flooding and provide such temporary ditches, gullies, and the like as may be necessary and, at completion of the Works backfill such excavation and make good all work disturbed.

1.7.4 Extermination of Pests

Allow for effectively destroying all vermin and pests to the whole area of the Site and taking all necessary preventive measures to maintain the Site in a clean and sanitary condition throughout the duration of the Contract to the satisfaction of the Employer's Representative.

1.7.5 Temporary Roads

Provide all temporary sleeper tracks, temporary roads, crossings, gangways, staging's, hardstanding's etc. over existing roads, streams, or unstable ground for forming access to and on the Site, alter and adapt and clear away at completion of the Works.

1.7.6 Temporary Provision of Plant and Tools

Provide and install all necessary hoists, ladders, scaffolding, staging, tackles, tarpaulins, tools, vehicles, and other plant (mechanical and otherwise) related to the execution of the work, and allow for altering, adapting, and maintaining them in good condition as necessary, and eventually removing them from Site and making good.

1.7.7 Existing Services

Ascertain the position of all existing services including, water supply pipes, irrigation pipes, electricity lines, telephone lines, irrigation channels drainage channels and any other service liable to be affected by the Works whether such services are visible or not. Take full responsibility for such services and take all measures as are necessary or as instructed by the Employer's Representative to protect them from damage and to support them so as to ensure their uninterrupted working. If any damage occurs to such services immediately inform the Employer's Representative and the owner or the statutory body concerned and carry out repairs as instructed by the Employer's Representative.

1.7.8 Materials Found on the Site

Sand, gravel, earth filling and rock found on the site may be used free of charge in the works, subject to its meeting the specification and being approved by the Employer's Representative, and provided that it is obtained from excavation related to the works. The Contractor will not be allowed to excavate elsewhere on site for the purpose of procuring materials.

1.7.9 Materials and Equipment Furnished by the Contractor

The Contractor shall furnish all materials and equipment that will be incorporated in the Works and all other materials and equipment needed during construction. He shall also furnish such constructional plant and equipment as in the opinion of the Employer's Representative, is necessary and adequate to perform all work within the scheduled time for completion.

The Tenderer shall state in the Schedules provided in Vol.1, the trade name of materials and equipment he intends to incorporate in the Works as well as the name of the manufacturer and his full address. The Contractor shall be bound as a minimum to use the same materials and equipment quoted in his Tender.

The Contractor shall ensure that all material supplied conform fully to the contract specifications, shall submit to the Employer's Representative the specification of all material to be incorporated in the permanent works, and shall modify any material order to incorporate the Employer's Representative's comments.

At least 30 days prior to date of shipment from shipping point the Contractor shall notify the Employer's Representative of the type of transportation to be used for shipment, and the approximate quantities of shipped materials or equipment.

The Contractor shall, within 30 days after receipt of the Order to Commence, submit to the Employer's Representative in triplicate certified copies of the unpriced agreements with the manufacturers of the materials and equipment to be used in the Works. Such agreements shall embody all the appropriate Specification clauses including testing and inspection and shall state delivery periods.

The Contractor shall be responsible for assuring the conformity of the procurement of all equipment and materials to the rules, regulations, and stipulations (if any) set forth by the financing agency.

Materials and equipment furnished by the Contractor shall be new and of the type and quality described in the Specification. The Contractor shall procure all materials and equipment, whether specified or substituted, from eligible source countries. Where, because of Employer's priorities or other causes, materials or equipment required by the specification become unavailable, substitute materials or equipment may be used provided that no substitute materials or equipment shall be used without the written approval of the Employer's Representative. This written approval shall state the amount of the adjustment, if any, to be made in favour of the Employer.

The Employer's Representative's decision as to whether substitution shall be permitted and as to what substitute materials or equipment may be used shall be final and conclusive. If the approved substitute materials or equipment are of less value to the Employer or involve less cost to the Contractor than those specified, adjustment shall be made in favour of the Employer, and where the amount involved or the importance of the substitution warrants, a Variation Order as covered by the Conditions of Contract will be issued; otherwise the adjustment will be handed by deduction from payments to the Contractor on the basis of prices stated in the written approval. No payments in excess of prices bid in the Bill of Quantities will be made because of substitution of one material or equipment for another, or because of the use of one alternative material or equipment in place of another.

Similarly, where a material or equipment has been specified by a manufacturer's trade name, the product of another manufacturer will be accepted provided that, in the opinion of the Employer's Representative, it is in all respects of equivalent or higher quality.

The major equipment shall be supplied from international companies that can supply relevant documents and certificates from corresponding international certifying bodies.

1.7.10 Inspection of Materials and Equipment

Materials and equipment furnished by the Contractor which will become part of the permanent Works shall be subject to inspection at any one or more of the following locations as determined by the Employer's Representative, at the place of production or manufacture, at the shipping point, or at the Site. All equipment shall be tested fully and calibrated to the approved standard. Material samples shall be submitted in good number and administrative lead time along with detailed specifications and/or test report which are in compliance with the design specification. Likewise, for the equipment. The Client reserves the right to test selected and/or suspicious materials at the local materials testing laboratories or at the overseas, as it deemed to be appropriate.

To allow sufficient time to provide for inspection, the Contractor shall submit to the Employer's Representative, at the time of issuance, copies in triplicate of purchase orders, including drawings and other pertinent information, covering materials and equipment on which inspection will be made as advised by the Employer's

Representative, or shall submit other evidence in the event such purchase orders are issued verbally or by letter. The inspection of materials and equipment or the waiving of the inspection thereof shall in no way relieve the Contractor of the responsibility for furnishing materials and equipment meeting the requirements of the Specification.

The transportation means and access to the inspection location or material samples shall be provided by the contractors to the inspector or inspection team as instructed by the Employer's Representative.

1.7.11 Approved Manufacturer's Instructions

The Contractor shall supply the equipment, materials or other items from the approved manufacturers listed or equal and approved.

All equipment or materials shall be delivered to the Site in the manufacturers' original unopened containers with the manufacturers' brand and name clearly marked on.

All equipment or materials shall be assembled, mixed, fixed, applied installed or otherwise incorporated in the Works in accordance with the printed instructions of the manufacturer of the equipment or materials and/or the relevant standards as specified.

The Contractor shall provide the Employer's Representative with triplicate copies of all manufacturer's instructions relevant to the operation and maintenance of the equipment incorporated in the Works as well as of all guarantees issued by the manufacturer(s) and relevant thereto.

1.7.12 Workmanship

All workmanship shall be the best of its particular kind and shall meet the requirements of the Employer's Representative. Any shortage of skilled labour shall not constitute grounds for unsatisfactory workmanship.

The Contractor shall deploy foreign professionals and skilled manpower in sufficient trade and number to meet or exceed the Contract requirements and the expected delivery standard. In addition, the key Architects shall remain mobilised on Site throughout the Construction process.

Mock-up room complete with MEP and interior fit out shall be completed prior to formal fitting out works, once accepted it shall be kept for reference.

1.7.13 Notice of Operations

No Permanent Works shall be carried out without the consent in writing of the Employer's Representative or his representative. Full and complete notice, in writing, shall be given to the Employer's Representative or his representative sufficiently in advance of the time of the operation to enable him to make such arrangements as he may deem necessary for its inspection.

1.7.14 Responsibility of the Contractor

Where the approval of the Employer's Representative is required under the Specification such approval shall not relieve the Contractor of his duties or responsibilities under the Contract.

The Contractor is to propose new technology for construction, to the Employer's Representative's approval.

Training of Employer's Staff

Sufficient in-depth training for the Employer's staff shall be arranged by the Contractor, for operation and maintenance purposes.

1.7.15 Orders to Assistants or Foremen

Whenever the Contractor's Project Manager or his Site Engineer (if so appointed) is not present on any part of the Work when the Employer or his Representative may desire to give orders or directions, they shall be received by his assistant, foreman or person who may be in charge of the work. Such orders shall be fully complied with and shall be deemed to be orders given to the Contractor.

1.7.16 Manufacturing Defects Guarantee

The manufacturing defects guarantee shall be in compliance with the Conditions of Contract.

1.7.17 Permits and Approval

If any, all associated fees/ related costs shall be borne by him.

DIVISION 8 DESIGN DELIVERABLES

The Development of the design shall take place in accordance with the design criteria in the Preliminary Design (Employer's Requirements) and shall be in 2 stages: Design Development and Detailed (Final).

The scope shall include any re-design task resulting from design errors that affect the execution of the design on site or that are generated from site findings or construction conditions that could have not been foreseen or detected during the consolidation of data collection, preparatory works, and design processes and stages.

The scope shall include attaining the approval on the Preliminary Design prepared by the Employer from the local authorities and any design or re-design task and execution resulting from authorities' regulations and requirements. The Contractor shall hence be responsible to be fully familiar and acquainted with the authorities' regulations and requirements in Ethiopia.

Design Development Stage:

The Design Development Stage Shall commence after the Contractor's verification of the Drawings provided by the Employer as part of the Contract. The submissions shall include – but not limited to – the followings:

- Architectural Schematic Design: Site Plan, Key Plan, Floor Plans, Roof Plans, Area Calculation, Sections, Elevations, Ceiling and Finishes, Updated 3D CGIs Perspectives and overall aerial perspectives, Preliminary Doors and Windows Schedule, Alternative Schemes for Cladding, Preliminary Signage and Wayfinding, Outline Architectural Specifications.
- Structural Design: Structural Framing plans showing structural elements sizes, opening sizes and typical details for selected structural system, Load Map Plan, Structural General Notes, and outline specifications.
- Mechanical Design: Mechanical Single line drawing for HVAC, Plumbing, Drainage and Fire Fighting for selected systems Schematic Equipment Schedule. Preliminary calculation for heating/cooling loads, ventilations, domestic and fire-water storage and pumping, gas demand, foul sewer, storm/surface water drainage and outline specifications.
- Electrical Design: Electrical Single Line drawing for Power, Low-Voltage - Schematic Lighting Schedule, Electrical Load list tie-ins Schematic Design for TELECOM/IT/ELV Diagrams Security systems. Preliminary calculations for lighting, power. Indication for electrical equipment location and outline specifications.
- Infra Design: Schematic Civil Drawings within the limit of plot area (Gridding and Levelling, Surface/Storm Water Potable Water, Fore thinking, Power and LC distribution network, 11 kV power network, communication system, irrigation system, parking layout, road design, street lighting).
- Contractor will liaise with the local authorities; prepare all required submittal for all necessary approval.

Detailed Design Stage:

The Contractor's designer shall commence the Detailed Design Stage after the Employer's approval of the Schematic Design, the Contractor's submission will include and not limited to the following:

- Architectural Detailed Design: (Final site Plan, Detailed Plans, Sections, Elevations, Wall Sections, Wet area/enlarged plans, Door and Windows schedule, Reflected Ceiling, Details and Finishes, Stairs, Final Perspectives.
- Structural Detailed Design, Foundation Plans, Sections and Details - Structural Reinforced Plans, Sections and Details – Stair's reinforcement details, Columns and RC walls layout, Sections and Details Reinforcement Schedule for Beams and details – Structural details (i.e., expansion joints, water stops, special openings in slabs and beams, water proofing, etc.), Structural General Notes and Typical Details – complete structural calculations.
- Mechanical Detailed Design: Mechanical Detailed Calculations for Portable and fire-water storage, cold and hot water, water supply. Detailed plans, profiles and typical details for surface drainage, sewer drainage, equipment sizing, rating, performance, and schedules. Updated single line diagrams. Standard details and general notes. Site plan for water supply, firefighting, combustion gas, foul sewer, and surface water, detailed of tie-ins with public utilities. Pumping floor plans, domestic water, hot water distribution, sanitary drainage, and rain/surface water drainage. Enlarged details of wet areas – plants/machines.
- HVAC Detailed Design: Mechanical Detailed Calculations for heating/cooling load, ventilations. Detailed plans, profiles and typical details for HVAC equipment, ductwork, air conditioning pipework, equipment sizing, rating, performance, and schedules. Riser diagrams for ventilation ducting, air conditioning, chilled water piping, and condensate drain piping. Enlarged details of plant machine room. Typical details and general notes.
- Electrical Detailed Design: Detailed lighting calculations for voltage drop, diversity factor/maximum demand, cable riser sizing, prospective short circuit current analysis and discrimination, earthing and lighting protection, illumination level. Site plan electrical power layout, all plant rooms, interior lighting layouts for floors and reflected ceiling, exterior lighting layout, and details. Layout for power distribution on floor/reflected ceiling. Electrical power provision drawings for swimming pools and water features. Electrical floor plans for containments/cable pathways. Main, Sub-main and final distribution boards schedule. Updated single line diagrams for all electrical systems lighting control, power, lighting and fire detection and alarm. Earthing and lighting protection system diagrams, layout, and details.
- Infra Detailed Design: Parking areas, details, section and car parking numbers, Portable water details, Foul, Potable water, Irrigation systems details, etc. Road

plans, profiles, sections, and details.

- Detailed Signage & Wayfinding, ELV Design, ICT infrastructure

The Contractor shall submit with his detailed design full detailed specifications that fully comply with the Employer's Requirements.

The Contractor shall submit with his detailed design an updated detailed Bill of Quantities matching the detailed design and summing up to the total Contract Lump Sum Price.

The Contractor shall update his detailed work methodology at each stage of the design and shall resubmit for review of the Employer's Representative.

ANNEX 2 TO VOLUME 1

Design Report and Specification

The given design reports and specifications are for the Tenderers reference. Exhaustive, detailed and recent day documents are required to be submitted by the Tenderers.

These shall form part of the Employer's Requirements

ANNEX 3 TO VOLUME 1

Bill of Quantities (BOQ)

The given BOQ item descriptions and quantities only serves for the Tenderers reference.
the Tenderers are expected to prepare a detailed BOQ of their own.

These shall form part of the Employer's Requirements

ANNEX 4 TO VOLUME 1

Drawings

The given Drawing Sets are for the Tenderers reference. Following review, Tenderers are required to update all drawings with the additional employers requirements and undergo design with provision of latest construction facilities and technologies

These shall form part of the Employer's Requirements