

INVITATION TO BID FOR LARGE WORKS – ITB

Ref: JAK/ITB/20/ED/001

(Please quote this UNESCO reference in all correspondence)

Date 1 December 2020

You are invited to submit a bid for the construction of Girls' Educational Center (GEC) based on the building design for a complete fully functioning two-storey building structure located inside the compound of the DepEd Regional Office 8 in Brgy. Candahug, Palo, Leyte in accordance with the present solicitation document.

The Invitation to Bid (ITB) consists of this cover page and the following Annexes:

Part 1	Bidding Procedures
Annex I	Instructions to Bidders
Annex II	Bid Data Sheet
Annex III	Bid Submission Form
Annex IV	Intention To Bid Form
Annex V	Bidder Information Form
Part 2	Supply Requirements
Annex VI	Scope of Works
Annex VII	Bill of Quantities
Annex VIII	Technical Specification Form
Annex IX	Drawings (if applicable)
Part 3	Contract
Annex X	General Terms and Conditions
Annex XI	Special Contract Conditions
Annex XII	Models of Security Forms

Your bid, submitted in a sealed envelope, should reach the following address **no later than 24 January 2021 and at 12:00 Noon Jakarta Time, 13:00 noon Philippines Time.**

For ITB issued by established offices outside HQ:

UNESCO - Office of the Director

Jalan Galuh II No. 5, Kebayoran Baru, Jakarta 12110

SEALED TENDER - DO NOT OPEN

ITB Ref: JAK/ITB/20/ED/001

Closing Date and Time 24.01.2021 & 12:00 noon Jakarta time & 13:00 noon Philippines time.

This letter is not to be construed in any way as an offer of contract. Your bid could, however, form the basis for a contract between your company and UNESCO.

Bidders are kindly requested to acknowledge the receipt of the ITB using the Intention to Bid Form on Annex IV.

**For and on behalf of UNESCO:
Shahbaz Khan, Director and Representative, UNESCO Jakarta**

ANNEX I – Instructions to Bidders

The Instructions to Bidders contain general guidelines and instructions on the preparation, clarification, and submission of Bids.

A. INTRODUCTION

1. General

UNESCO as the Purchaser invites Sealed Bids for the specified Works to the UN system.

2. Eligible Bidders

Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the specifications, and other documents to be used for the procurement of works to be purchased under this Invitation to Bid. Bidders shall be legally incorporated entities, or groups formed by such as joint ventures.

This bid is open to all national and international suppliers who are legally constituted, can provide the requested services.

Bidders are ineligible if at the time of submission of the offer:

- (a) The bidder is on the exclusion list published on the global portal for suppliers of the United Nations Organization, (<http://www.ungm.org>) due to fraudulent activities.
- (b) The name of the bidder appears on the Consolidated United Nations Security Council Sanctions List which includes all individuals and entities subject to sanctions measures imposed by the Security Council.
- (c) The bidder is excluded by the World Bank Group.

3. Fraud and corruption

UNESCO requires that bidders, contractors and their subcontractors adhere to the highest standard of moral and ethical conduct during the procurement and execution of UNESCO contracts and do not engage in corrupt, fraudulent, collusive, coercive or obstructive practices.

For the purpose of this provision such practices are collectively referred to as “fraud and corruption” and defined as follows:

- “Corrupt practice” is the offering, giving, receiving or soliciting, directly or indirectly, an undue advantage, in order that the person receiving the advantage, or a third person, act or refrain from acting in the exercise of their official duties, or abuse their real or supposed influence;
- “Fraudulent practice” is a knowing misrepresentation of the truth or concealment of a material fact aiming at misleading another party in view of obtaining a financial or other benefit or avoiding an obligation, or in view of having another party act to their detriment;
- “Collusive practice” means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party;
- “Coercive practice” means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party.
- “Obstructive practice” means acts intended to materially impede the exercise of UNESCO’s contractual rights of audit, investigation and access to information, including destruction, falsification, alteration or concealment of evidence material to a UNESCO investigation into allegations of fraud and corruption.

- “Unethical practice” means conduct or behaviour that is contrary to Staff or Supplier codes of conduct, such as those relating to conflict of interest, gifts, hospitality, postemployment provisions, abuse of authority and harassment.

UNESCO expects that all suppliers who wish to do business with UNESCO will embrace the [United Nations Supplier Code of Conduct](#)

UN Agencies have adopted a zero tolerance policy on gifts and therefore, it is of overriding importance that UNESCO staff should not be placed in a position where their actions may constitute or could be reasonably perceived as reflecting favourable treatment of an individual or entity by accepting offers of gifts, hospitality or other similar favours. Vendors are therefore requested not to send or offer gifts or hospitality to UNESCO personnel.

UNESCO will:

- Reject a proposal to award a contract if it determines that a vendor recommended for award has engaged in fraud and corruption in competing for the contract in question.
- Cancel or terminate a contract if it determines that a vendor has engaged in fraud and corruption in competing for or in executing a UNESCO contract.
- Declare a vendor ineligible, either indefinitely or for a stated period of time, to become a UN registered vendor if it at any time determines that the vendor has engaged in fraud and corruption in competing for or in executing a UNESCO contract.

Any concern or evidence that corruption or fraud may have occurred or is occurring related to a UNESCO contract shall be forwarded to the Office of Internal Oversight. Please refer to [how-to-report-fraud-corruption-or-abuse](#).

4. Cost of Bid

The Bidder shall bear all costs associated with the preparation and submission of the Bid, and the procuring UNESCO will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the solicitation.

5. Pre-bid Conference and Site Visit

UNESCO will organize a site visit as specified in the **Bid Data Sheet (BDS), Annex II**.

B. SOLICITATION DOCUMENTS

6. Examination of Solicitation Documents

The Bidder is expected to examine all corresponding instructions, forms, terms and specifications contained in the Solicitation Documents. Failure to comply with these documents will be at the Bidder's risk and may affect the evaluation of the Bid. The Solicitation Documents are those stated below and should be read in conjunction with any Addenda issued in accordance with Clause 7 below.

- (a) Instructions to Bidders;
- (b) Bid Data Sheet (BDS);
- (c) Contract for Works (form of);
- (d) General Conditions of Contract for Construction Works;
- (e) Scope of Works;
- (f) Bills of Quantities;
- (g) Technical specifications;
- (h) Drawings;
- (i) Sample forms;
- (j) Any other document listed in the **Bid Data Sheet** as forming part of the Solicitation Documents.

7. Clarification of Solicitation Documents

A prospective Bidder requiring any clarification of the Solicitation Documents may notify UNESCO in writing. The response will be made in writing to any request for clarification of the Solicitation Documents that it receives earlier than two weeks prior to the Deadline for the Submission of Bids. Written copies of the response (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective Bidders that received the Solicitation Documents. All communication connected with this Bid must be directed exclusively to the UNESCO person identified as the contact person **in the Bid Data Sheet**.

8. Amendments of Solicitation Documents

Prior to the Deadline for Submission of Bids, the UNESCO may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, amend the Solicitation Documents. All prospective Bidders that have received the Solicitation Documents will be notified in writing of any amendments. In order to afford prospective Bidders reasonable time in which to take the amendments into account in preparing their offers, the UNESCO may, at its discretion, extend the Deadline for the Submission of Bids.

C. PREPARATION OF BIDS

9. Language of the Bid

The Bid prepared by the Bidder and all correspondence and documents relating to the Bid exchanged by the Bidder and UNESCO shall be written in the language indicated on the Bid Data Sheet (Annex II).

10. Documents Comprising the Bid

The Bid must comprise the following documents:

- (a) A Bid Submission form;
- (b) Bid Security, if required, under clause 15 of Instructions to Bidders and in the form provided in Section 11.
- (c) Priced Bill of Quantities;
- (d) Written Power of Attorney, authorising the signatory of the bid to commit the bidder;
- (e) Technical information as may be required by the Bid Data Sheet;
- (f) Qualification information in accordance with clause 11 and 12 of the Instructions to Bidders, if prequalification of bidders has not been carried out.
- (g) Any additional information required to be completed and submitted by bidders as specified **in the Bid Data Sheet**.

11. Documents Establishing Bidder's Eligibility and Qualifications

11.1 The Bidder shall furnish evidence of its qualification by submitting the following information and documents with their bids, unless otherwise stated **in the Bid Data Sheet**:

- (a) Copies of original documents defining the constitution or legal status, place of registration, and principal place of business of the Bidder; written power of attorney of the signatory of the Bid to commit the Bidder;
- (b) Total annual monetary value of construction works performed for the years specified in the Bid Data Sheet;
- (c) Experience in works of a similar nature and size for each of the period of years specified in the Bid Data Sheet, and details of work under way or contractually committed; and clients who may be contacted for further information on those contracts;
- (d) Major items of construction equipment proposed to carry out the Contract;
- (e) Qualifications and experience of key site management and technical personnel proposed for the Contract;
- (f) Reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past five years;

- (g) Evidence of adequacy of working capital for this Contract (access to line(s) of credit and availability of other financial resources);
- (h) Authority to seek references from the Bidder's bankers;
- (i) Information regarding any litigation, current or during the last five years, in which the Bidder was/is involved, the parties concerned, and the disputed amounts; and awards;

11.2 To qualify for award of the Contract, bidders shall meet the following minimum qualifying criteria:

- (a) an average annual financial amount of construction work over the period specified **in the Bid Data Sheet**.
- (b) Experience as prime contractor in the construction of at least the number of works of a nature and complexity equivalent to the Works over the period specified **in the Bid Data Sheet** (to comply with this requirement, works cited should be at least 70 percent complete);
- (c) Proposals for the timely acquisition (own, lease, hire, etc.) of the essential equipment listed **in the Bid Data Sheet**;
- (d) A Contract Manager with at least the number of years' of experience in works of an equivalent nature and volume as specified **in the Bid Data Sheet** including no less than at least the number of years as Manager as specified **in the Bid Data Sheet**;
- (e) 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 the amount specified **in the Bid Data Sheet**.

A consistent history of litigation or arbitration awards against the Applicant or any partner of a Joint Venture may result in disqualification.

12. Documents Establishing Conformity of Equipment Incorporated into the Works

Where electrical and mechanical goods and equipment form part of the Works, the Bidder shall also furnish as part of its Bid, documents establishing the conformity to the Bidding Documents of all equipment and related services, which the Bidder proposes to supply under the contract.

The documentary evidence of conformity to the Bidding Documents may be in the form of literature, drawings, and data, and shall consist of:

- (a) a detailed description of the essential technical and performance characteristics of the goods;
- (b) a list giving full particulars, including available sources and current prices of spare parts, special tools, etc, necessary for the proper and continuing functioning of the goods for a period to be specified in the **Bid Data Sheet**, following commencement of the use of the goods.

13. Bid Currencies/Bid Prices

All prices shall be quoted in the nominated currency in the **Bid Data Sheet**. The Bidder shall indicate on the appropriate Bill of Quantities the unit prices (where applicable) and total Bid Price of the goods and/or services it proposes to supply under the contract.

14. Period of Validity of Bids

Bids shall remain valid for 90 days after the date of Bid Submission as indicated in the **Bid Data Sheet**. A Bid valid for a shorter period may be rejected as non-responsive pursuant to clause 21 of Instructions to Bidders. In exceptional circumstances, UNESCO may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. Bidders granting the request will not be required nor permitted to modify their Bids.

15. Bid Security

- (a) The Bidder may be requested to furnish at its own cost and expense, as part of its Bid, a Bid Security to the UNESCO in the amount as indicated **in the Bid Data Sheet**.
- (b) The Bid Security is to be sealed in a separate envelope within the main sealed bid
- (c) The Bid Security is to protect the UNESCO against the risk of the Bidder's conduct, which would warrant the security's forfeiture, pursuant to clause 15(h) below;
- (d) The Bid Security shall be denominated in US Dollars and shall be in the form of a bank guarantee, issued by a reputable bank, and in the form provided in these Solicitation Documents.

- (e) Any Bid not secured in accordance with clauses 15(a) and 15(d) above will be rejected by the UNESCO as non-responsive pursuant to clause 28 of Instructions to Bidders;
- (f) Unsuccessful Bidder's Bid Security will be discharged or returned as promptly as possible but not later than thirty (30) days after the expiration of the period of Bid Validity prescribed by the UNESCO pursuant to clause 14 of Instructions to Bidders;
- (g) The successful Bidder's Bid Security will be discharged or returned upon the Bidder signing the Purchase Order, pursuant to clause 28 of Instructions to Bidders, and furnishing the Performance Security, pursuant to clause 29 of Instructions to Bidders;
- (h) The Bid Security may be forfeited:
 - 1. If a Bidder withdraws its offer during the period of the Bid Validity specified by the Bidder on the Bid Submission Form, or, refuses to accept the correction of errors in its Bid, or,
 - 2. In the case of a successful Bidder, if the Bidder fails:
 - (i) To sign the Contract Order in accordance with clause 28 of Instructions to Bidders, or,
 - (ii) To furnish Performance Security in accordance with clause 29 of Instructions to Bidders.

D. SUBMISSION OF BIDS

16. Format and Signing of Bids

The Bidder shall prepare two copies of the Bid, clearly marking each "Original Bid" and "Copy of Bid" as appropriate. In the event of any discrepancy between them, the original shall govern. The two copies of the Bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorised to bind the Bidder to the contract. A Bid shall contain no interlineations, erasures, or overwriting except, as necessary to correct errors made by the Bidder, in which case such corrections shall be initialled by the person or persons signing the bid.

17. Sealing and Marking of Bids

- 17.1 The Bidder shall seal the original and the copy of the Bid in separate envelopes, duly marking the envelopes as "ORIGINAL" and "COPY". The envelopes shall then be sealed in an outer envelope.
- 17.2 The inner and outer envelopes shall:
 - (a) be addressed to UNESCO at the address given in Annex II of these Solicitation Documents; and
 - (b) make reference to the "subject" indicated in Annex II of these Solicitation Documents and a statement: "SEALED TENDER - DO NOT OPEN", to be completed with the time and the date specified in Annex II of these Solicitation Documents for Bid Opening pursuant to clause 17 of Instructions to Bidders.
- 17.3 The inner and outer envelopes shall also indicate the name and address of the Bidder to enable the Bid to be returned unopened in case it is declared "late".
- 17.4 If the outer envelope is not sealed and marked as required by clause 17.2 of Instructions to Bidders, UNESCO will assume no responsibility for the Bid's misplacement or premature opening.
- 17.5 The Bid Security is to be sealed in a separate envelope within the main sealed bid.

18. Deadline for Submission of Bids/Late Bids

- 18.1 Bids must be delivered to the office on or before the date and time specified in section II of these Solicitation Documents.
- 18.2 UNESCO may, at its discretion, extend this deadline for the submission of the bids by amending the Bidding Documents in accordance with clause 7 of Instructions to Bidders, in which case all rights and obligations of UNESCO and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.
- 18.3 Any Bid received by UNESCO after the Deadline for Submission of Bids will be rejected and returned unopened to the Bidder.

19. Modification and Withdrawal of Bids

The Bidder may withdraw its Bid after submission, provided that written notice of the withdrawal is received by UNESCO prior to the deadline for submission. No Bid may be modified after passing of the Deadline for Submission of Bids. No Bid may be withdrawn in the interval between the Deadline for Submission of Bids and the expiration of the Period of Bid Validity.

E. OPENING AND EVALUATION OF BIDS

20. Opening of Bids

UNESCO will open all Bids after the deadline for submissions and in accordance with the rules and regulations of the organization. The opening of bids may or may not be in public.

21. Clarification of Bids

To assist in the examination, evaluation and comparison of Bids UNESCO may at its discretion ask the Bidder for clarification of its Bid. The request for clarification and the response shall be in writing and no change in price or substance of the Bid shall be sought, offered or permitted.

22. Preliminary Examination

- 22.1 Prior to the detailed evaluation, UNESCO will determine the substantial responsiveness of each Bid to the Invitation to Bid (ITB). A substantially responsive Bid is one which conforms to all the terms and conditions of the ITB without material deviations.
- 22.2 UNESCO will examine the bids to determine whether they are complete, whether any computational errors have been made, whether the documents have been properly signed, and whether the bids are generally in order as specified in the Bid Data Sheet.
- 22.3 Arithmetical errors will be rectified on the following basis: If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the Bidder does not accept the correction of errors, its Bid will be rejected. If there is a discrepancy between words and figures the amount in words will prevail.
- 22.4 A Bid determined as not substantially responsive will be rejected by UNESCO and may not subsequently be made responsive by the Bidder by correction of the non-conformity. UNESCO shall use the criteria as detailed in the **Bid Data Sheet (Annex 2)** to establish responsiveness.

23. Conversion to Single Currency

To facilitate evaluation and comparison, UNESCO will convert all Bid Prices expressed in the amounts in various currencies in which the Bid Prices are payable to US dollars at the official UN exchange rate on the last day for Submission of Bids.

24. Evaluation of Bids

Determination of compliance with the Solicitation Documents is based on the content of the Bid itself without recourse to extrinsic evidence.

The evaluation will take into account the following criteria:

Evaluation Criteria	
1.1	Compliance with pricing conditions set in the ITB and specifically the Bills of Quantities.
1.2	Compliance with requirements relating to the Specifications, Scope of Works and Drawings
1.3	Compliance with Special and General Conditions specified by these Solicitation Documents
1.4	Compliance with start-up, time for Completion deadlines set by UNESCO.
1.5	Company's general and specific experience
1.6	Proposed detailed workplan
1.7	Demonstrated technical capacity to perform the required works as per required

	Technical Proposal documents (key personnel, machinery capacity to implement the works)
1.8	Demonstrated ability to honor important responsibilities and liabilities allocated to the contractor in this ITB (e.g. quality, insurance coverage, etc...)

F. AWARD OF CONTRACT

25. Award Criteria

UNESCO will issue the Purchase Order/Contract to the lowest priced technically qualified Bidder. UNESCO reserves the right to accept or reject any Bid, to annul the solicitation process and reject all Bids at any time prior to award of Purchase Order/Contract, without thereby incurring any liability to the affected Bidder(s) or any obligation to provide information on the grounds for UNESCO's action.

26. Purchaser's right to vary requirements at time of award and to negotiate

UNESCO reserves the right at the time of award of contract to vary the quantity of works and services specified in the ITB.

UNESCO reserves the right to undertake further negotiations on the proposed offer.

27. Notification of Award

Prior to the expiration of the period of Bid Validity, UNESCO will send the successful Bidder the Contract. The Contract may only be accepted by the Supplier's signing and returning an acknowledgement copy of it or by timely delivery of the goods in accordance with the terms of this Contract, as herein specified. Acceptance of this Contract shall affect a contract between the parties under which the rights and obligations of the parties shall be governed solely by the terms and conditions of this Contract.

28. Signing of the Purchase Order/Contract

The successful Bidder shall sign the Contract and return it to UNESCO at the earliest convenience but no later than within 7 days upon date of issuance.

29. Performance Security

The successful Bidder shall provide a Performance Security in the form of a bank guarantee, a sample of which is provided in these Solicitation Documents (Annex XII), within 30 days of receipt of the Purchase Order/Contract from UNESCO.

Failure of the successful Bidder to comply with the requirement of clause 28 or clause 29 of Instructions to Bidders shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security if any, in which event UNESCO may make the award to the next lowest evaluated Bidder or call for new Bids.

G. OTHER REQUIREMENTS:

30. Time for Completion

The Time for Completion is specified **in the BDS**. The completion of the Works shall be in accordance with the terms of the resulting Contract as may be issued by UNESCO.

31. Material, Labour and Facilities

No material, labour or facilities will be furnished by UNESCO or its clients unless specified in the ITB.

H. PAYMENT

32. Time of Payment

Unless otherwise indicated in the Special Terms and Conditions of this ITB, UNESCO will normally effect payment within 30 days after receipt of a commercial invoice, certification of site works (if applicable) and other supporting documents.

33. Letter of Credit

UNESCO does not accept Letter of Credit terms.

34. Advance Payment

It is not the normal policy of UNESCO to approve advance payments, unless specifically stated in the **Special Contract Conditions (Annex XI)**. In such case, the amount of the advance payment will have to be covered by a bank guarantee (see Annex XI, Special Payment Conditions, point 8).

35. Currency of Payment

Payment will be made in the currency in which the Contract is issued.

ANNEX II – Bid Data Sheet

The following specific data shall complement, supplement or amend the provisions in Annex I - Instructions to Bidders. Whenever there is a conflict, the provisions herein shall prevail.

1. Works (clause 2)	The works are the construction of Girls' Educational Center (GEC) based on the building design for a complete fully functioning two-storey building structure located inside the compound of the DepEd Regional Office 8 in Brgy. Candahug, Palo, Leyte.
2. Requests for additional information (clause 7)	All communication must be directed to UNESCO/Country Office Procurement focal point: Name: Clemitson, Dawn e-mail: d.clemitson@unesco.org ; edjak.itb@unesco.org . Fax: +62 217279 6489
3. Language of the Bid: (clause 9)	English, including supporting documents.
4. Documents Comprising the Bid: (clause 10)	The original and copy of the bid shall include the following documentation (for items (a), (c) and (d) bidders are required to use the dedicated forms contained in the ITB): (a) Bid Submission Form; (b) Bid security, if applicable (c) Priced Bill of Quantities; (d) Written Power of Attorney; (e) Qualification information in accordance with clause 11.1/11.2 of the Instructions to Bidders; (f) Technical Proposal to include: <ol style="list-style-type: none"> 1. Work Plan 2. Financial Schedule (accounting for the expected monthly performance and instalments in accordance with the Work Plan) 3. Personnel Schedule (qualified staff, skilled labours and unskilled labours to be allocated to perform the works under the contract); 4. Equipment Schedule (specifications, quantities and condition of all the required equipment to be allocated to perform the works under the contract)
5. Eligibility Criteria (clause 11.1)	Bidders shall be legally incorporated entities, or groups formed by such joint ventures. All information under this clause shall be submitted by the bidder for its eligibility: [list your eligibility criteria in connection with local marketplace practice, as an example, if applicable : <ul style="list-style-type: none"> - valid registration with relevant local authorities - relevant authorities to be specified, ex : local Ministry of Finance, - specify the annual financial amount of construction works over the last 5 years [specify the period in years; usually 5 years] required to qualify - list of implemented projects of similar size and nature for the last 10 years, including starting dates and end dates and references of client who may be contacted - list of the ongoing projects contracted by bidder - qualifications and experience of key site management and technical personnel proposed for the contract in accordance to the required qualifications as per clause 11.1 - list of construction equipment owned or to be leased by the contractor to carry out the contract - financial report for the past two years signed by a certified auditor - information regarding any litigation, current or during the last 5 years, in which the Bidder was/is involved, the parties concerned, and the

	disputed amounts and awards]	
6. Qualification Criteria (clause 11.2)	<p>To qualify for award of the contract, bidders shall meet the following minimum qualifying criteria:</p> <p>List your minimum qualification criteria in connection with local marketplace practice, as an example, if applicable:</p> <p>(a) Experience as prime contractor in the construction of at least 5 projects of a nature and complexity equivalent to the Works over the 10 years (to comply with this requirement, works cited should be at least 70 percent complete).</p> <p>(b) The bidder shall provide the following personnel throughout the project: List type of positions (ex: contract manager – architect or civil engineer, technical personnel) and for each type of position state minimum experience in similar work required <u>if applicable</u> and if necessary the diploma required.</p> <p>(c) A consistent history of litigation or arbitration awards against the Applicant or any partner of a Joint Venture may result in disqualification.</p> <p>(d) The bidder shall provide the Risk Action Plan (RAP) including: foreseen type of risk / possible consequences / risk rating / mitigation actions during the implementation phase of the project.</p> <p>(e) Failure to provide the documents stated under clause 10 and 11.1 may result in disqualification of the bidder.</p>	
7. Equipment (clause 11.2 (c))	The essential equipment to be made available for the Contract by the successful Bidder shall be (if applicable): [insert equipment list] .	
8. Bid and Contract Currency (clause 13)	In US Dollars	
9. Bid security: (clause 15)	<p>The Bid Security is for an amount of US \$ 12,000</p> <p>Clearly marked with the Company Name and:</p> <p>BID SECURITY, ITB No JAK/ITB/20/ED/001</p> <p>The Bid Security shall name UNESCO as the beneficiary and shall be in the form of an irrevocable bank guarantee) issued by a reputable bank or other financial organization and in the form provided in these Solicitation Documents., other formats may be permitted, subject to the prior approval of UNESCO.</p> <p>The Bid Security shall remain valid for thirty (30) days beyond the original validity period for the Bid. In the event of bid validity being extended, the bid security shall be extended accordingly.</p>	
10. Sealed Bids to be received at / Bids to be marked (clause 17):	<p>UNESCO (Country Office) Jalan Galuh II, No. 5 Kebayoran Baru, Jakarta 12110</p>	<p>“ATTENTION: “Administrative Unit” SEALED BID NO. JAK/ITB/20/ED/001 DEADLINE: 24-01-2021 AT 12.00 (noon) Jakarta Time and 13:00 Philippines Time NOT TO BE OPENED BY REGISTRY</p>
11. Deadline for Submission of Bids/ late	24-01-2021 AT 12.00 (noon) Jakarta Time and 13:00 (noon) Philippines Time	

bids : (clause 18)	Bids submitted by fax or e-mail will not be accepted. Any bid received by UNESCO after the deadline for submission of bids will be rejected and returned unopened to the Bidder.
12. Time, date and Place of Bid Opening, (clause 20)	13:00 hours (Philippines) Time on 24-01-2021 at UNESCO Office Jakarta
13. Completeness of bids:	[] Partial bids permitted. <input checked="" type="checkbox"/> Partial bids not permitted.
14. Time for Completion (clause 30)	8 calendar months from the date of notice to proceed which will be issued by the Engineer after contract signature
15. Site Visit (clause 5)	The site visit will take place in Palo, Leyte , Philippines two weeks before the deadline for submission of Bids at 10.00 AM and will be followed by a clarification meeting providing additional information on the bidding. Each bidder shall bear the cost of his site visit and of attending such meeting.
16. Alternative Bids	<i>Alternative bids are not acceptable.</i>
17. Optional Condition: Payable bidding documents	<i>Not applicable</i>
18. Audit Assurance Clause	UNESCO shall have the right, at its own expense, to have the Contractor's books and records pertaining to the project bank account and project execution reviewed (and, if desired, copied) upon prior written notice at any reasonable time agreeable to the Contractor by the UNESCO's, internal/external auditor, auditors as UNESCO may appoint or the Contractor's own auditor. UNESCO may conduct, or arrange for, a periodic evaluation of the contractor's implementation of the project. To this end, the contractor will upon UNESCO's request, enable representatives or designees of UNESCO to visit the project site(s) and facilities, inspect property and review books and records related to the project.

ANNEX III – Bid Submission Form

To: UNESCO

(To form an integral part of the Bid Submission)

Dear Sir/Madam,

Having examined the Solicitation Documents, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to execute the works related to the project of Better Life for Out-of-School Girls to Fight Poverty and Injustice in the Philippines in conformity with the said Solicitation Documents for the sum of *[total bid amount in words and figures]* as may be ascertained in accordance with the Price Schedule Sheet attached herewith and made part of this Bid.

We undertake, if our Bid is accepted, to execute the Works in accordance with Annex (Scope of Works), Annex (Bill of Quantities), annex (Technical Specifications), annex (Working drawings), Annex (General Terms and Conditions), Annex (Special Contract Conditions) and as further specified in the Solicitation Documents.

Provided that a Purchase Order/Contract is issued by UNESCO within Bid Validity Period, the undersigned hereby offers, subject to the terms of such Contract, and at the price offered, to substantially complete the works within the period of *xxxx* months after commencement.

We understand that you are not bound to accept any Bid you may receive.

Name of Bidder:	
Address of Bidder:	
Authorised Signature:	
Name & title of Authorised Signature:	
Date:	

ANNEX IV - Intention to Bid Form

To be completed and returned within ten (10) working days after date of issuance of the ITB.

By email or fax to UNESCO Focal Point

Attn: Please refer to Section II – Bid Data Sheet

ITB Ref.: (JAK/ITB/20/ED/001 - Construction of Girls Education Center in Palo, Leyte, Philippines)

Yes, we intend to submit a bid.

We are sorry to inform you that we are unable to submit a bid in response to the above-mentioned invitation to bid due to the reason(s) listed below:

- The requested products are not within our range of supply
- We are unable to submit a competitive offer for the requested products at the moment
- The requested products are not available at the moment
- We cannot meet the specifications required
- Insufficient time is allowed to prepare a bid
- We cannot meet the delivery requirements
- We cannot adhere to your terms and conditions (please specify which: e.g. payment terms, request for performance bond etc)
- The information provided for bid purposes is insufficient
- We do not export
- Our production capacity is currently full
- We are closed during the holiday season
- We had to give priority to other clients' requests
- We do not sell directly but through distributors
- We have no after-sales service available in the country of destination
- Others (please specify)

If UNESCO has any question about this NO BID, please contact

Mr./Ms. who will be able to assist you.

Name of the Bidder:

Authorised Signature

Date:

ANNEX V – Bidder Information Form

General Information :

Company Name:	
City, Country	
Web Site URL:	
Contact Person:	
Title:	
Phone:	
Email Address:	

Experience of the Bidder :

Bidders should list the works contract which have been awarded and also ongoing contracts as per below:

EXECUTED CONTRACTS				
No	Name and description of nature of works	Contact Details (name, tel. and e-mail)	Value of executed works use USD or local currency	Duration of works
ON-GOING CONTRACTS				
No	Name and description of nature of works	Contact Details	Value of contracted works use USD or local currency	Deadline for construction work

Proposed personnel:

The bidders should provide the names of suitably qualified personnel and the required details relating to the qualifications and experience of each key personnel (as specified in bid data) in charge of the administration and execution of the works in order to meet UNESCO's requirements. *[Information to be supported by a resume for each key personnel]*

Position	Name	Qualification/Years of experience (in general)	Years of experience relating to works in the foreseen position

Project Manager			
Project Engineer			
Foreman			

Template for resume

1. Names
2. Qualifications
3. Other training
4. Professional experience (references)
5. Works related professional experience (references)

List of equipment:

As a minimum, the equipment listed below are essential for the execution of the works. The bidders are invited to provide all requested information in below table:

(This is an example to be adapted to your project if judged useful)

Description of Equipment	Details as to (minimum capacity, power rating, tonnage...) and minimum quantity	State (new, good, poor) and available quantity	Owned, leased (from whom?)
- Tipper truck - Excavator - Loader - Concrete Vibrator - Levelling Instrument	15m ³ (1) 1 – 15m ³ range (1) 1 – 15m ³ range (1) Dumpy level		

ANNEX VI – Scope of Works

I. BACKGROUND

This pioneering building project is to provide purpose-designed facilities suitable for the Alternative Learning System (ALS) specifically developed by the Department of Education of the Philippines, to aid and empower the women by promoting positive social transformations and inclusion into the mainstream of society. Envisioned to be a prototype for a scalable ALS learning center for girls, this building shall embody the programme ideals and seeks to house the needs of this demographic group in a low- maintenance functional building.

Considering the out-of-school girls living in the damaged Tacloban area, Region VIII- Eastern Visayas, this project is designed to strengthen Alternative Learning System (ALS) enabling them to pass Accreditation and Equivalency (A & E) Test for a national education qualification requiring for coming back to schools, further studies in Higher Education, or having jobs. According to Department of Education (DepED) in the Philippines as of 2011 data, the total of national education budget shares only 0.19% with ALS. Furthermore, the DepED has recently reformed the National Curriculum K-12, but without ALS Reform yet due to financial difficulties. This project therefore not only to respond to individual interests in having an educational opportunity to fight poverty and injustice but also to advance national education system through strengthening ALS.

Under the vision of "Better Quality for Girls", a strategic framework of this project was devised consisting of four activities in a close partnership with the Philippines DepED: 1) Establishment and operation of Girls Education Centre; 2) Development and piloting of National Learning Modules of ALS; 3) Development and piloting of teachers' guidelines of Learning Modules of ALS, and 4) Capacity building trainings for ALS Teachers.

By providing 1) ALS classes free to out-of-school girls and in-service programmes to ALS teachers, 2) advanced standard of Learning Modules for ALS-A & E Test within the New National Curriculum K-12, and 3) improved quality of ALS instructional materials and teachers' capacities, this project aims to increase numbers of out-of-school girls in Tacloban enabling to have jobs and further educational opportunities to fight against poverty and injustice as their rights to education. It is worth noting that this project is planned to develop and hand-over Learning Modules and Teachers' Guidelines to the Philippines DepED.

This project therefore would not only bring significant contribution to Education Sector of the Philippines but to the vulnerable segment of the society through achieving Sustainable Development Goals (SDGs) of the 2030 Agenda, especially SDG 4 and SDG 5 for Quality Education and Gender Equality respectively with a close partnership with the Government in the Philippines.

2. OBJECTIVE OF THE CONTRACT

The objective of the contract is the construction of Girls' Educational Center (GEC) based on the building design for a complete fully functioning two-storey building structure within the available 864 square meters of lot area (18mx48m) located inside the compound of the DepEd Regional Office 8 in Brgy. Candahug, Palo, Leyte. The GEC would include the following rooms and spaces (**Annex IX**):

2.1 FIRST FLOOR

2.1.1. **Library:** with reading space capacity for 30 students with tables and chairs as well as fixed furniture for books display (3 linear meters of full-height book shelves).

2.1.2 **Life Skills Training Room**

- 2.1.3. **Wellness Room:** expanded and elaborated room; combined all possible health related concerns; guidance area, breast feeding area has a CR and shower stall installed with PVC Partition to the clinic and medical staff area.
- 2.1.4. **Cafeteria with Server:** with capacity to serve 36 diners at one time.
- 2.1.5. **Exhibition gallery and lounge for Learners and Visitors:** a multi-functional room for displaying the products/artefacts including handicrafts produced by out of school girls for their income generating activity.
- 2.1.6. **Kitchen-Lab/Lecture** (dual function): functional full-service kitchen plus vocation education class for cooking/baking with a capacity of six students per class.
- 2.1.7. **Power House:** a conversion of Emergency Generator Room (drop ceiling not required), including all rough-ins for generator sets with capacity for full lighting and wall outlets, room air conditioning for ICT Laboratory, Office, and Wellness rooms.
- 2.1.8. **Rest Rooms:** seven water closets (4 for female, 2 for male, 1 for PWD); four urinals (1 for female with children, 3 for male), and seven lavatories (3 for female, 3 for male, 1 for PWD).
- 2.1.9. **Other facilities:** Playroom, Garage, Terrace, Vehicular Ramp, PWD Ramp, Stair,

2.2. SECOND FLOOR

- 2.2.1. **Three (3) Classrooms:** soundproofed flush-mounted folding partitions that can be converted into Multi-Purpose Function Room with a capacity of 200 conference seating.
- 2.2.2. **Science Laboratory:** with a learning capacity for 24 students and one Science teacher demonstration Lab Table. Provide wall space for Laboratory gown hooks and 1.20 linear meters of material storage cabinets.
- 2.2.3. **ICT/Math Laboratory:** with capacity of 24 computer stations with chairs, and one teacher operation space with a main desk and tools, floor outlets on electrical plan. Provide wall space for Laboratory gown hooks and 1.20 linear meters of material storage cabinets.
- 2.2.4. **Teachers' Room:** for nine staff working capacity with conference table for 12 staff.
- 2.2.5. **Rest Rooms:** seven water closets (4 for female, 2 for male, 1 for PWD); four urinals (1 for female with children, 3 for male), and seven lavatories (3 for female, 3 for male, 1 for PWD).
- 2.2.6. **Stock Room.**
- 2.2.7. **Other facilities:** Amin Office, PWD Ramp, Stair.

3. CONTRACT EXPECTED OUTPUT

In cooperation with its relevant partners and under the stage approval of UNESCO Office, Jakarta, the contractor is expected to undertake the construction works in compliance with the technical and administrative direction contained in this ITB. The contractor should deliver the following:

3.1 Pre-Construction Phase:

- 3.1.1. Temporary Facilities, Formwork and Falsework Materials/ Methodology, Vertical-Horizontal Access and Safety Plan.
- 3.1.2. Prepare a detailed Cost Estimate and Schedule of Values.
- 3.1.3. Prepare Master Building Schedule for the UNESCO's approval.
- 3.1.4. Product Submittals: Submit websites, brochures and catalogues of all proposed materials and methodologies for approval and implementation.
- 3.1.5. Secure all bonds (performance, surety, guarantee, *etc.*) and a comprehensive Contractor's All Risk Insurance covered by a UNESCO or UN accredited company.
- 3.1.6. Submit the Risk Action Plan (RAP) including: foreseen type of risk / possible consequences / risk rating / mitigation actions during the implementation phase of the project together with the Bid.

3.2 Construction Phase:

- 3.2.1. Provide ample supervision and site management personnel, equipment, support facilities, electric power, water, etc.

- 3.2.2. Provide an air-conditioned on-site office with office desk and chairs for the UNESCO representative's use.
- 3.2.3. Ensure the smooth and timely turnover of the completely energized and water-tested working facilities by closely coordinating with the local utilities providers and the DepED Region VIII Engineering Department.
- 3.2.4. Other work as required to complete the construction project in a timely manner with top quality fit and finishes.
- 3.2.5. Each Construction Phase agreed to start contract is required the UNESCO's approval.

3.3 Post-Construction Phase:

- 3.3.1. Demolish and clear the surrounding areas such as temporary shelter and offices.
- 3.3.2. Secure an occupancy permit/clearance from a government office after UNESCO has accepted the finished infrastructure.
- 3.3.3. Other activities that needs to be undertaken.

4. CONTRACT OUTPUTS/SUBMISSIONS AND TIMELINE

The contractor should submit the outputs based on the following milestones and schedule below:

Outputs/Submissions: Design Phase	Date of Submission
Outputs/Submissions: Pre-Construction Phase	Date of Submission
1. Submit Project Master Schedule, Schedule of Values and Bill of Materials for UNESCO approval	Two weeks after Notice of Award
2. Submit Project Organizational Chart indicating key managers, professionals and supervisors for review and approval by UNESCO	-ditto-
3. Submit Performance, Security and Guarantee Bonds as well as CARI for UNESCO review and approval	-ditto-
4. Submit Formwork and Falseworks Methodologies, Schedule and Safety Manual for UNESCO approval	-ditto -
5. Submit Equipment list, Methodologies and Schedule for UNESCO approval	-ditto-
6. Submit the Risk Action Plan (RAP) including: foreseen type of risk / possible consequences / risk rating / mitigation actions during the implementation phase of the project together with the Bid.	-ditto-
7. Submit all other items not indicated herein but is necessary to perform and complete the works for UNESCO approval	-ditto -
Outputs/Submissions: Construction Phase	Date of Submission
1. Submit Weekly Status Report with BOO updated aging and Three-Week Look Ahead Schedule which shall be basis for the corresponding Meeting Minutes for UNESCO review and comment	Every Thursday
2. Submit Monthly Status Report with updated aging and Three-Week Look Ahead Schedule for UNESCO review and comment	Every Third Week of the Month
3. Submit Material Tests for concrete pours and steel deliveries for UNESCO review and comment	Per Master Schedule
4. Submit Equipment Commissioning and Testing Schedule for UNESCO review and comment	-ditto-
5. Submit Attic Stock turnover schedule for UNESCO review and comment	-ditto -
6. Submit Room Key and area turnover schedule for UNESCO review and comment	-ditto-
7. Submit all other items not indicated herein but is necessary to perform and complete the works for UNESCO approval	-ditto -
Outputs/Submissions: Post-Construction Phase	Date o Submission
1. Submit clearance report on the surrounding areas	
2. Occupancy permit/clearance from a government office	

NB:

The above dates are tentative and high consideration will be given to contractor who can complete the project in the shortest possible time. The exact dates will be reflected in the original contract and subject to the agreement and availability of UNESCO's partner institutions in Philippines. Submittal acceptance and approvals are not absolute and do not absolve the contractor for omissions and missed items not reflected in this document.

7. REVIEW AND QUALITY ASSURANCE

A Construction Project Representative from UNESCO shall review all submittals carrying out spot checks and shall send comments and remarks particularly on a regular base. Periodic site inspection shall be conducted by the UNESCO Architect/Engineer Consultant who shall be assisted by the contractor who will address all on-site queries immediately with confirmation email of the subsequent actions. All intermediate and final work will be reviewed by a project committee at UNESCO Office, Jakarta. Additional inputs may be made by the project partners and the relevant United Nations agency and/or UNESCO Field Office.

All Insurance liabilities including of third parties and of building works are responsibility of the contractor.

6.1 INPUTS

UNESCO as well as its project implementing partner(s) will provide the contractor with continuously updated feedback and advice. Furthermore, the contractor will be provided with contacts of UNESCO's relevant network partners in the Philippines as deemed necessary.

The contractor shall bring in its building construction, expert and highly skilled supervision background, knowledge and experiences, with relevant contacts within Philippines architectural, civil engineering, mechanical, engineering, plumbing and fire protection professional community.

7. ELIGIBILITY, QUALIFICATION AND EXPERIENCE REQUIREMENTS

The contractor shall employ licensed professionals and experts with the following profile:

A. Construction Project Experts' Qualifications

- Qualifications and experience of key site management and technical personnel proposed for the contract in accordance to the required qualifications as per clause 11.1
- Previous experience in similar-sized projects in the Philippines for the past five years.
- Has recognized academic degrees and professional licenses valid in the Philippines in the field of architecture, civil/structural, mechanical, electrical, plumbing and fire protection.
- Has professional experience in building planning, design and construction supervision in the Philippines.
- Experiences related to disaster risk reduction, adaptation and resilience and similar initiatives will be an advantage.
- Experience in working with United Nations agencies, international non-governmental organizations, or similar entities. Previous engagement with UNESCO will be an asset.
- Experience and engagement in various governmental and non-governmental development initiatives and policy research especially in the Philippines.
- Have an excellent networks and linkages in the field if construction in the Philippines.

B. Construction Firm Qualifications

- Valid registration with relevant local authorities - relevant authorities to be specified, ex : Securities and Exchange Commission (SEC) registration and the like.
- Specify the annual financial amount of construction works over the last 5 years.
- List of implemented projects of similar size and nature for the last 10 years, including starting dates and end dates and references of client who may be contacted.
- List of the ongoing projects contracted by bidder.
- List of construction equipment owned or to be leased by the contractor to carry out the contract.
- Financial report for the past two years signed by a certified auditor.
- Information regarding any litigation, current or during the last 5 years, in which the Bidder was/is involved, the parties concerned, and the disputed amounts and awards.
- PCAB Philippine Contractors Accreditation Board category "A" minimum.
- Previous experience in similar-sized projects in the Philippines for the past five years.
- Has recognized academic degrees and professional licenses in architecture, civil/structural, mechanical, electrical, plumbing and fire protection.
- Has professional experience in building planning, design and construction supervision in the Philippines; with a demonstrated ability to abide and enforce Site Safety per the latest Occupational Safety and Health Standards.
- Experience in the construction of an educational center or institution in the Philippines would be an advantage.
- In-depth knowledge of Philippine building code, related legislations and laws especially for educational center or institution buildings.
- Have excellent networks and linkages in the field of architecture and engineering through membership in professional organizations and related entities.
- Fluency in English and the Filipino language in both verbal and written communication. Working knowledge of local language in the Philippines' Region VIII-Eastern Visayas is an advantage.

B. FINANCIAL PROPOSAL

This prospective contractor will submit a financial, technical, and management proposal quoted in US Dollars only. This financial proposal will include identified financial expenses related to the execution and accomplishment of the expected outputs and deliverables. These identified expenses can possibly include travel expenses to the project site, printing of final output and professional fees of relevant technical professionals such as civil engineer, architect, interior designer *etc.*, among others.

9. COPYRIGHT, PATENTS AND OTHER PROPRIETY RIGHTS

All rights, including but not limited to title to property, copyright, trademark and patent in any work produced by the individual consultant by virtue of its contract, shall be vested to UNESCO which alone shall hold all rights of use.

ANNEX VII – Bill of Quantities

ITEM/DESCRIPTION		Quantity	Unit Price	Material Cost	Labor Cost	Amount (USD)
A. GENERAL REQUIREMENTS/PRELIMINARIES & CONSTRUCTION						
I.	PRELIMINARIES					
1,0	Temporary Facilities	1,00	lot			0,00
2,0	Temporary Power	8,00	months			0,00
3,0	Temporary Water	8,00	months			0,00
4,0	Telephone/Communication	8,00	months			0,00
5,0	Security Services	8,00	months			0,00
6,0	General Cleaning, Sanitation, Safety and Disposal of Waste	8,00	months			0,00
7,0	Supervision Fee-Site Management, Safety, Plant and Equipment	8,00	months			0,00
8,0	Mobilization/Demobilization, & Freight/Cargo Charges	1,00	lot			0,00
9,0	Site-visit, Transportation & Accomodation	8,00	months			0,00
10,0	Workers Barracks	8,00	months			0,00
TOTAL ITEM "I"				-	-	0,00
II.	GENERAL CONSTRUCTION WORKS					
1,0	Testing of Construction Materials					
1,01	Concrete Cylinder Specimen	75,00	cyl	-	-	0,00
1,02	Reinforcing Steel Bars	60,00	pcs	-	-	0,00
1,03	Field Density Test	90,00	hole	-	-	0,00
1,04	CHB	30,00	pcs	-	-	0,00
Sub-total 1:				-	-	0,00
2,0	Temporary Perimeter Fence	172,00	lm	-	-	0,00
Sub-total 2:				-	-	0,00
3,0	Clearing and Grabbing	864,00	sq.m.	-	-	0,00
Sub-total 3:				-	-	0,00
4,0	Foundation					
4,01	Excavation	980,84	cu.m.	-	-	0,00
4,02	Trimming	362,47	sq.m.	-	-	0,00
4,03	Formworks	232,67	sq.m.	-	-	0,00
4,04	Rebar	9,037,39	kgs.	-	-	0,00
4,05	Concreting	195,10	cu.m.	-	-	0,00
4,06	Backfilling & Compaction to NGL (Re-use)	785,74	cu.m.	-	-	0,00
Sub-total 4:				-	-	0,00
5,0	Columns					
5,01	Rebar	34.577,63	kgs.	-	-	0,00
5,02	Formworks	1.034,09	sq.m.	-	-	0,00
5,03	Concreting	160,78	cu.m.	-	-	0,00
Sub-total 5:				-	-	0,00
6,0	Septic Tank					
6,01	Excavation	11,28	cu.m.	-	-	0,00
6,02	Trimming	26,03	sq.m.	-	-	0,00
6,03	Gravel Bedding	0,52	cu.m.	-	-	0,00
6,04	Rebar	530,88	kgs.	-	-	0,00
6,05	Formworks	18,80	sq.m.	-	-	0,00
6,06	Concreting	1,92	cu.m.	-	-	0,00
6,07	Masonry (plastered finish)	20,83	sq.m.	-	-	0,00
Sub-total 6:				-	-	0,00
7,0	Tie-Beams					
7,01	Rebar	19.331,44	kgs.	-	-	0,00
7,02	Formworks	639,14	sq.m.	-	-	0,00
7,03	Concreting	113,63	cu.m.	-	-	0,00
Sub-total 7:				-	-	0,00

8,0	Slab On Grade								
	8,01	Backfilling & Compaction to GF FFL (Imported Materials)	555,27	cu.m.		-	-	0,00	
	8,02	Gravel Bedding	86,40	cu.m.		-	-	0,00	
	8,03	Damproofing (6mil polyethylene sheet)	864,00	sq.m.		-	-	0,00	
	8,04	Rebar	3.557,10	kgs.		-	-	0,00	
	8,05	Formworks	33,00	sq.m.		-	-	0,00	
	8,06	Concreting	118,80	cu.m.		-	-	0,00	
Sub-total 8:						-	-	0,00	
9,0	2nd Floor Suspended Slab								
	9,01	Suspended Slab Rebar	31.489,06	kgs.		-	-	0,00	
	9,02	Suspended Slab Formworks	1.306,12	sq.m.		-	-	0,00	
	9,03	Suspended Slab Concreting	173,70	cu.m.		-	-	0,00	
	9,04	Stair Rebar	803,55	kgs.		-	-	0,00	
	9,05	Stair Formworks	41,28	sq.m.		-	-	0,00	
	9,06	Stair Concreting	11,09	cu.m.		-	-	0,00	
Sub-total 9:						-	-	0,00	
10,0	3rd Floor Suspended Slab								
	10,01	Suspended Slab Rebar	10.526,45	kgs.		-	-	0,00	
	10,02	Suspended Slab Formworks	492,38	sq.m.		-	-	0,00	
	10,03	Suspended Slab Concreting	58,43	cu.m.		-	-	0,00	
	10,04	Stair Rebar	401,78	kgs.		-	-	0,00	
	10,05	Stair Formworks	20,63	sq.m.		-	-	0,00	
	10,06	Stair Concreting	5,54	cu.m.		-	-	0,00	
Sub-total 10:						-	-	0,00	
11,0	Upper Roof Beam								
	11,01	Rebar	875,31	kgs.		-	-	0,00	
	11,02	Formworks	47,01	sq.m.		-	-	0,00	
	11,03	Concreting	5,60	cu.m.		-	-	0,00	
Sub-total 11:						-	-	0,00	
12,0	Roofing								
	12,01	Truss	9.212,50	kgs.		-	-	0,00	
	12,02	Purlins	4.774,00	kgs.		-	-	0,00	
	12,03	10mm thk. MS Plate & Other Splicing Materials	779,90	kgs.		-	-	0,00	
	12,04	10mm dia. Sag rod	293,20	kgs.		-	-	0,00	
	12,05	12mm dia. Turn buckle	64,00	pcs.		-	-	0,00	
	12,06	0.5mm thk. Rib-type Longspan Roofing Sheet	950,40	sq.m.		-	-	0,00	
	12,07	0.5mm thk. Flashing	45,00	pcs.		-	-	0,00	
	12,08	0.5mm thk. SS Gutter	30,00	pcs.		-	-	0,00	
	12,09	5mm thk. PE Foam Insulation Double Sided	20,00	rolls		-	-	0,00	
	12,10	Roofing Accessories, Paints & Consumables	1,00	lot		-	-	0,00	
	12,11	Gutter Screen	69,00	l.m.		-	-	0,00	
Sub-total 12:						-	-	0,00	
13,0	Masonry Works								
	13,01	Wall Footing	58,45	l.m.		-	-	0,00	
	13,02	CHB Laying							
	a.	6" CHB	883,43	sq.m.		-	-	0,00	
	b.	4" CHB	1.020,09	sq.m.		-	-	0,00	
	13,03	Stiffener Column	321,97	l.m.		-	-	0,00	
	13,04	Lintel Beam	264,00	l.m.		-	-	0,00	
	13,05	Plastering	3.807,02	sq.m.		-	-	0,00	
	13,06	Ledges & Stone Works	1,00	lot		-	-	0,00	
Sub-total 13:						-	-	0,00	
14,0	Fire Exit Ladder								
	14,01	2" x 2" BI Tubular S40	150,72	kgs.		-	-	0,00	
	14,02	1" x 1" BI Tubular S40	37,68	kgs.		-	-	0,00	
	14,03	Consumables	1,00	lot		-	-	0,00	
Sub-total 14:						-	-	0,00	

15,0	Railings								
15,01	Stair (Stainless Steel 38mm dia. Top rail & Post, 25mm dia. Sub rail)	48,00	l.m.			-	-	0,00	
15,02	Terrace (Stainless Steel 38mm dia. Top rail & Post, 25mm dia. Sub rail)	12,00	l.m.			-	-	0,00	
15,03	Fire Exit (BI Pipe 38mm dia. Top rail & Post, 25mm dia. Sub rail)	18,00	l.m.			-	-	0,00	
15,04	Exhibition Gallery (Stainless Steel 38mm dia. Top rail & Post, 25mm dia. S	12,00	l.m.			-	-	0,00	
15,05	PWD Ramp (Stainless Steel 38mm dia. Top rail & Post, 25mm dia. Sub ra	42,00	l.m.			-	-	0,00	
15,06	Vehicular Ramp (Stainless Steel 38mm dia. Top rail & Post, 25mm dia. Su	24,00	l.m.			-	-	0,00	
15,07	PWD CR (Stainless Steel 38mm dia. Top rail & Post, 25mm dia. Sub rail)	2,00	l.m.			-	-	0,00	
Sub-total 15:						-	-	0,00	
16,0	Ceiling								
16,01	Slab Soffit Cement Plastered Smooth Finish	155,10	sq.m.			-	-	0,00	
16,02	Plywood Ceiling	1.793,75	sq.m.			-	-	0,00	
Sub-total 16:						-	-	0,00	
17,0	Floor Finishes								
17,01	Roller Finish	156,00	sq.m.			-	-	0,00	
17,02	Cement Plastered Smooth Finish on Red Cement Topping	1.225,00	sq.m.			-	-	0,00	
17,03	60cm X 60cm Homogeneous Floor Matt Tiles (White)	60,00	sq.m.			-	-	0,00	
17,04	60cm X 60cm Homogeneous Floor Tiles (White) on Liquid Waterproofing	57,00	sq.m.			-	-	0,00	
17,05	Cement Plastered Smooth Finish	141,00	sq.m.			-	-	0,00	
17,06	30cm X 30cm Homogeneous Floor Matt Tiles with 4 Groove Edge	60,00	sq.m.			-	-	0,00	
17,07	60cm X 60cm Homogeneous Floor Glossy Tiles (White)	413,60	sq.m.			-	-	0,00	
Sub-total 17:						-	-	0,00	
18,0	Wall Finishes								
18,01	Accordion PVC partition with soundproof	54,25	sq.m.			-	-	0,00	
18,02	60cm X 30cm Homogeneous Wall Glossy Tiles	84,00	sq.m.			-	-	0,00	
18,03	Solid Plastic Toilet Partition Nylon Black Accessories	12,00	set			-	-	0,00	
18,04	Columns & Beams Yellow Rain Paint	2.166,34	sq.m.			-	-	0,00	
18,05	Exterior Walls Crisp Ecru Paint	883,43	sq.m.			-	-	0,00	
18,06	Interior Walls Beige Paint	2.923,60	sq.m.			-	-	0,00	
18,07	Ceiling Flat White/Flat Enamel White Paint	1.948,85	sq.m.			-	-	0,00	
18,08	6mm thk. Clear Glass on Aluminum Framing	19,35	sq.m.			-	-	0,00	
Sub-total 18:						-	-	0,00	
19,0	Doors & Windows								
19,01	Doors including accessories	1,00	lot					0,00	
19,02	Windows	1,00	lot					0,00	
Sub-total 19:						-	-	0,00	

20,0	Miscellaneous Works							
20,01	Countertop							
	a. Rebar		194,36	kgs.		-	-	0,00
	b. Formworks		8,93	sq.m.		-	-	0,00
	c. Concreting		1,37	cu.m.		-	-	0,00
	d. Synthetic Granite Tiles		12,00	sq.m.		-	-	0,00
	e. Kitchen Sink		4,00	pcs.		-	-	0,00
	f. WhitemestinghouseGas Range including Gas Tank		4,00	pcs.		-	-	0,00
	g. Faucet		4,00	pcs.		-	-	0,00
20,02	Comfort Rooms							
	a. 6mm thk. Facial Mirror frameless in 15mm marine plywood backing							
	a1. 2.85mW x 0.95mH		4,00	set.		-	-	0,00
	a2. 0.8mW x 0.95mH		3,00	set.		-	-	0,00
	b. Toilet Fixtures							
	b1. Lavatory		15,00	pcs.		-	-	0,00
	b2. Faucet		15,00	pcs.		-	-	0,00
	b3. Urinal		4,00	pcs.		-	-	0,00
	b4. Water Closet		15,00	pcs.		-	-	0,00
	b5. Bidet		15,00	pcs.		-	-	0,00
	b6. Telephone Shower		1,00	pcs.		-	-	0,00
20,03	Carpentry Works							
	a. Bookshelves		4,00	sets		-	-	0,00
	b. Luggage shelves		4,00	sets		-	-	0,00
	c. Cashier/Servery Counter Built-in Cabinet		1,00	sets		-	-	0,00
	d. Cashier/Servery Counter Hanging Cabinet		1,00	sets		-	-	0,00
	e. Kitchen Built-in Cabinet		3,00	sets		-	-	0,00
	f. Kitchen Built-in Hanging Cabinet		1,00	sets		-	-	0,00
	g. Training Room Cabinet		2,00	sets		-	-	0,00
	h. Exhibition Gallery Cabinet		2,00	sets		-	-	0,00
	i. Science Lab Cabinet		1,00	sets		-	-	0,00
	j. Storage Wooden Cabinet		3,00	sets		-	-	0,00
	k. Storage Metal Cabinet		1,00	sets		-	-	0,00
	l. ICT Lab/Math Lab Cabinet		1,00	sets		-	-	0,00
	m. Breastfeeding Built-in Sofa		2,00	sets		-	-	0,00
	n. Blackboard (Classroom1, Classroom 3, Science Lab, ICT Lab/Math L		4,00	sets		-	-	0,00
20,04	Ready Made							
	a. Cashier/Servery Counter		1,00	set		-	-	0,00
	b. Library Big Table		3,00	pcs.		-	-	0,00
	c. Office Tables		21,00	pcs.		-	-	0,00
	d. Lab Tables		8,00	pcs.		-	-	0,00
	e. Cafeteria Table		3,00	pcs.		-	-	0,00
	f. Conference Table		1,00	pcs.		-	-	0,00
	g. Sofa		2,00	pcs.		-	-	0,00
	h. Office Chairs		21,00	pcs.		-	-	0,00
	i. Classrooms Chairs with Arm		120,00	pcs.		-	-	0,00
	j. Chairs w/o Arm		122,00	pcs.		-	-	0,00
	k. 4 Seater Chairs		8,00	pcs.		-	-	0,00
	l. Loftable Bed		2,00	pcs.		-	-	0,00
	m. 500L Water Tank		4,00	pcs.		-	-	0,00
	n. Whiteboard (1-Kitchen Lab, 2-Classroom 2, 1-Admin, 1-Teachers Qu		5,00	sets		-	-	0,00
	o. Acer Intel Inside Core i3 Laptop		25,00	sets		-	-	0,00
	Sub-total 20:					-	-	0,00

21,0	Plumbing Works							
21,01	Sanitary & Drainage System	1,00	lot	-	-	0,00		
21,02	Water Layout	1,00	lot	-	-	0,00		
21,03	1.5Hp Water Pump including Casing and Consumables	1,00	pcs.	-	-	0,00		
Sub-total 21:						-	-	0,00
22,0	Mechanical & Fire-Pro Works							
22,01	Fire Extinguisher 10lb. Dry Chemical Type ABC	2,00	pcs.	-	-	0,00		
22,02	FE36	9,00	pcs.	-	-	0,00		
22,03	Fire Hose Cabinet	2,00	pcs.	-	-	0,00		
22,04	FDC Set including Pipelines	1,00	lot	-	-	0,00		
22,05	5700 CFM / 80W / 240V / 60Hz / 1P Oscillating Fan	30,00	pcs.	-	-	0,00		
22,06	350 CFM / 20W / 240V / 60Hz / 1P Wall Mounted Propeller Fan	4,00	pcs.	-	-	0,00		
22,07	250 CFM / 20W / 240V / 60Hz / 1P Wall Mounted Propeller Fan	6,00	pcs.	-	-	0,00		
22,08	100 CFM / 20W / 240V / 60Hz / 1P Wall Mounted Propeller Fan	2,00	pcs.	-	-	0,00		
22,09	2.5 TR Inverter Split Type AC (Carrier Brand)	1,00	pcs.	-	-	0,00		
22,10	2 TR Inverter Split Type AC (Carrier Brand)	2,00	pcs.	-	-	0,00		
22,11	1 TR Inverter Split Type AC (Carrier Brand)	1,00	pcs.	-	-	0,00		
22,12	AC Pipeline and Accessories including Consumables	1,00	lot	-	-	0,00		
22,13	PWD Lift	1,00	lot	-	-	0,00		
22,14	Testing and Commissioning	1,00	lot	-	-	0,00		
Sub-total 22:						-	-	0,00
23,0	Electrical Works							
23,01	120 KVA Genset Diesel Type Soundproof	1,00	set	-	-	0,00		
23,02	37.5 KVA Transformer	3,00	set	-	-	0,00		
23,03	Electrical Wires	1,00	lot	-	-	0,00		
23,04	Panel Boards with Breakers	1,00	lot	-	-	0,00		
23,05	Lightings	1,00	lot	-	-	0,00		
23,06	Outlets	1,00	lot	-	-	0,00		
23,07	Switches	1,00	lot	-	-	0,00		
23,08	Electrical Pipes	1,00	lot	-	-	0,00		
23,09	Consumables	1,00	lot	-	-	0,00		
23,10	Automatic Transfer Switch	1,00	lot	-	-	0,00		
23,11	Testing and Commissioning	1,00	lot	-	-	0,00		
Sub-total 23:						-	-	0,00
24,0	Electronic Works							
24,01	Fire Detection Alarm System	1,00	set	-	-	0,00		
24,02	Closed Circuit Television System	1,00	set	-	-	0,00		
24,03	Network and Telephony System	1,00	set	-	-	0,00		
24,04	Conduits and Fittings	1,00	lot	-	-	0,00		
24,05	Wires & Cables	1,00	lot	-	-	0,00		
24,06	Boxes and Pullboxes	1,00	lot	-	-	0,00		
24,07	Testing and Commissioning	1,00	lot	-	-	0,00		
Sub-total 24:						-	-	0,00
TOTAL ITEM II						-	-	0,00
TOTAL DIRECT COST: "I + II "								0,00
TOTAL PROJECT COST							USD	0,00

ANNEX VIII – Technical specifications

PROJECT : **2-STOREY GIRLS EDUCATION CENTER**
LOCATION : Candahug, Palo, Leyte

A. CONSTRUCTION SPECIFICATIONS

This set of specifications *shall govern the methods of construction and the kinds of materials* to be used for the *Construction of Two-Storey Girls Education Center* of the subject Client, shown in the plans and detail drawings.

The **plans, detailed drawings** and the **specifications** shall be considered as complementing each other so what is mentioned or shown in one, although not mentioned or shown in the other, shall be considered as appearing on both. In case of conflict to be found between the two, the same should be referred to the designing Architect/Engineer for clarification.

1. GENERAL CONDITIONS

All parts of the construction shall be finished with first class workmanship to the fullest talent and meaning of the Plans and these Specifications and to the full satisfaction of the designing Architect/Engineer and the Project Owner.

The construction shall conform to all the requirements of the National Building Code of the Philippines and the local rules and regulations of the **concerned Municipality/City**.

2. CLEARING THE SITE

The Building site shall be leveled to a suitable grade according to the plans. It should be cleared of rubbish, roots and other perishable materials.

Such unsuitable materials shall be spread over the areas adjacent to the proposed building, or disposed of, as may be directed by the Architect or Engineer who is in charge of the construction.

3. STAKING OUT THE BUILDING LINES

The Building lines shall be staked out and all lines and grades shown in the drawings shall accurately establish before any excavation is started.

Batter boards where construction reference marks have been indicated, should be erected such that they would not be disturbed during the excavation for the foundation of the structure.

4. EXCAVATION FOR FOUNDATION

All excavations shall be made to grade indicated in the drawings. Where the building site is covered with any kind of fill, the excavation for footings should be made deeper until the specified safe bearing capacity of the soil is reached.

If water is present at the excavation site, it shall be removed by bailing or pumping. Great care should be taken into consideration in order that the surrounding soil is not eroded or cave in.

Soil Bearing Capacity was designed to be *96 kPa* and is subjective to actual verification by the Client or the Contractor.

5. BACKFILLING OF EXCAVATIONS

When the concrete poured for foundation has hardened and can already withstand the pressure resulting from fills, the suitable materials removed from excavations shall be used for backfilling them, unsuitable materials shall be hauled out.

The fills and backfills shall be placed in layers not more than 150mm (6") in thickness. Each succeeding layer shall be thoroughly compacted by wetting, tamping and rolling.

6. CONCRETE WORKS

Concrete shall be mixed thoroughly such that there is uniform distribution among the cement and aggregates. The concrete should be vibrated and its forms should be tapped as it is deposited to its final position, to prevent formation of voids in the concrete member which will weaken the building.

Water to be used for mixing concrete shall be clean and free from injurious amount of oil, acids, alkalis and other organic materials.

7. PROPORTIONING OF CONCRETE MIXTURE

All concrete works for this project shall be undertaken in accordance with the standard specifications for plain and reinforced concrete as approved by the Designer.

The following proportions of concrete shall be used for the various parts of the School Building.

- Footings and Columns - 27.5MPa (4,000psi)
- Girders, Beams and Slabs - 27.5MPa (4,000psi)
- Septic Vault slab and Cover - 27.5MPa (4,000psi)
- Conc. Holl. Blk Footings - 20.7MPa (3,000psi)
- Concrete Slab on Fill - 20.7MPa (3,000psi)

Class AA concrete shall be a mixture of 1 part cement, 1-1/2 parts fine aggregates and 3 parts coarse aggregate by volume, plus enough water to make the mixture into pliable paste.

Class A concrete shall be a mixture of 1 part cement, 2 parts fine aggregates and 3 parts coarse aggregate by volume, plus enough water to make the mixture into pliable paste.

Class B concrete shall be a mixture of 1 part cement, 2-1/2 parts fine aggregates and 5 parts coarse aggregate by volume, plus enough water to make the mixture into pliable paste.

Class C concrete shall be a mixture of 1 part cement, 3 parts fine aggregates and 6 parts coarse aggregate by volume, plus enough water to make the mixture into pliable paste.

The fine aggregate for concrete shall consist of natural sand or of inert materials with similar characteristics, having hard, clean and durable grains free from organic matters or loam.

The coarse aggregate for concrete shall consist of crushed rock of durable qualities, or clean and hard gravel. Size of the coarse aggregate to be used shall vary from 20mm (3/4") to 40mm (1-1/2")

Concrete slabs on fill shall be poured on a layer of hard gravel fill spread over well-compacted and thoroughly tamped earth fill. Each concrete slab course to be poured shall not be more than 1 meter wide, and each course shall be poured alternatively to the indicated floor finishes.

8. FORM FOR CONCRETE WORKS

Forms for all reinforced concrete shall be adequately supported and braced or tied together to maintain the correct positions and the shapes of poured concrete. Wooden forms shall be constructed sufficiently tight to prevent the bulging of concrete members upon pouring or leaking/drainage of water during curing.

The forms shall not be removed until the concrete has attained sufficient strength to support its own weight and any temporary load placed on it. The side forms of girders and beams may be removed earlier than the bottom forms. However, additional supports and shoring must be placed under until they have attained strength.

9. STEEL REINFORCING BARS

Steel reinforcing bars to be used for this project shall consist of standard deformed structural bars meeting *ASTM specifications*.

The steel reinforcements for concrete shall be formed accurately according to the sizes of the columns, beams and girders, footings, slabs etc., where they are to be used. They shall be tied together at each bar intersection with Gauge No. 16 G.I wire.

No steel reinforcement should be installed unless it is free from rust, scale or other coating which would destroy or reduce the bond with concrete. The reinforcement bars must be positioned such that there is space between the steel at the sides and bottom of the forms.

The concrete protection for reinforcing bars: for Foundations is 75mm; Slab on grade is 40mm, Surface exposed to weather is 50mm, Columns is 40mm, Beams and Girders is 40mm, Suspended Slabs & Stairs is 20mm, Wall is 20mm.

10. CONCRETE FLOOR SLAB ON FILL

Concrete slab on fill shall be poured on gravel bed of not less than 10mm thick. Each concrete slab course to be poured shall not be more than one meter wide, and each course shall be poured alternately to the indicated finish.

Slab reinforcing bars shall be spliced where indicated on details or as approved by the Structural Engineer, straight continuous bars in slab may be spliced (lapped) at support for bottom bars, and mid-span for top bars.

When preparing the concrete for upper floor slabs of Toilet-Bath, it shall be made waterproof by adding "sahara" or equivalent product waterproofing compound.

The proportion of the waterproofing to a given volume of concrete shall be as recommended by the product manufacturer.

All steel reinforcing bars to be used shall consist of standard deformed structural bars meeting ASTM specifications.

11. CONCRETE HOLLOW BLOCKS

Concrete hollow blocks to be used shall be of good quality readily available in the locality. Use of such alternative brand shall be approved by the Project Architect or Engineer and the Client/s.

All cells of concrete hollow blocks to be laid shall be filled with cement mortar mixture of 1 part cement and 5 parts sand by volume. The horizontal joints between units shall be provided with 1:5 cement mortar mix. at least 10mm thick.

The mixture of cement plaster for masonry wall shall be 1:5 (1 part cement and 5 parts sand, by volume).

The size of concrete hollow blocks to be used for these walls shall be 6" X 8" X 16" for exterior and 4" x 8" x 16" for interior.

All concrete hollow block walls shall be reinforced with 10mm diameter deformed bars both ways for every 0.6 meter concrete hollow block laid horizontally and vertically.

12. ROOFING FRAMING, ROOFING AND ACCESSORIES

The materials to be used for the roof framing such as trusses, struts and web members shall consist of steel angles 3/16" & 1/8" thick. Other accessories for the roof frames are shown in the Details of Truss Joints and in the Roof Framing Plan.

Roofing sheets shall be 0.5mm thk. rib type long span "Union or Apo brand" roof or any other brands of choice by the client. The ridge rolls, gutters, valleys and firewall flashings shall be 0.5mm thick stainless steel.

All downspouts shall be 3" diameter PVC pipes series 1000.

Heat insulation shall be installed under the roof of the building consisting of 5mm thick double sided sheets.

13. DOORS WINDOWS AND ACCESSORIES

The designs and specifications of materials for doors and windows to be installed are shown in the Schedule of Doors and Windows detail drawings.

All interior doors shall be installed on door jambs with at least 3 sets of 3" x 3" loose-pin hinges. For exterior doors, use 3 sets 6" double action spring hinges. Hinges shall be US made "Stanley brand" or equal.

Exterior doors shall be fitted with Stanley dead bolts which are locked and unlocked at the interior side of the building. One can only unlock the dead bolts from outside by using a key.

The entrance door lockset, with decorative dummy trim and dead bolt shall be "Stanley brand" or equal. Foot-bolts and overhead barrel bolts shall also be installed.

14. PLUMBING WORKS AND FIXTURES

Plumbing works and materials shall be in accordance with the National Plumbing Code of the Philippines. Soil and waste pipes shall be properly graded or pitched downward to facilitate easy discharge of the solid and liquid wastes from the plumbing fixtures or receptacles to their place of disposal. Sloping pipes must be well supported and rigidly suspended to prevent sagging, displacement or pipe breakage, resulting in leakage of waste materials.

All plumbing fixtures should be connected to a vertical vent pipe, with its top end extending above the roof at least 0.60 meter or 2 feet.

The water closets and lavatory to be installed in the Toilet and Bathroom (for the rooms) shall be HCG or equivalent brand.

The sink shall stainless steel with any desirable brand, faucets, flexible hoses and brass-chrome knobs.

15. PLUMBING PIPES AND FITTINGS

Pipes and fittings to be used shall be as follows:

- Hot and cold water pipes - - - - (not indicated in the plan/optional)
- Service entrance pipe - - - - - Size 3/4" diameter
- Sewer line pipes - - - - - 4" PVC pipe series 1000
- Stainless steel floor drains - - - - size 4" x 4"
- Hose bibs, brass finish - - - - - optional

Also to be provided in all Toilets are bidet, water closet. All downspouts from the roof shall be 3" diameter PVC pipes series 1000. The lower ends shall terminate in concrete catch basins. Underground concrete pipes, 4" and 6" in diameter shall connect to the catch basins for draining the water to the street gutter fronting the building.

16. ELECTRICAL WORKS

Specifications for electrical works are included in the electrical plans of this project.

The electrical installation shall be done in accordance with the approved plans and under the direct supervision and control of a licensed Electrical Engineer or Master Electrician.

All electrical works and materials shall conform to the provisions of the latest edition of the Philippine or National Electric Code.

The type of electrical services to be supplied to the building shall be 230V, AC, single phase.

There shall be only one service drop from the nearest Electrical Company pole to the proposed building – Electric Wires for light and power shall not be smaller than 3.5mm² (AWG no. 12), 600V insulation.

The following are the specifications of the electrical works and materials to be used:

Voltage	-	230 Volts
Wiring	-	Phelp-dodge brand / Philflex brand
Plate covers	-	GE or equivalent brand
Panel Board	-	GE/Westinghouse circuit breakers
Wall & floor outlets	-	Panasonic or equivalent brand
Air condition unit	-	Clients approval
Computer outlets	-	Panasonic or equivalent brand
Conduits pipes	-	PVC Schedule 40, Neltex brand
Utility boxes	-	TEMCO or Gewiss brand
Service entrance	-	RSG, Electrical Company standard
Porcelain receptacles	-	Japan brand

The spare circuit shall be provided with empty PVC pipe, size 19mmØ that should extend at least 300mm above the ceiling line. The grounding wires shall be identified and all wires shall be color-coded for easy identification.

The Panel Board shall be provided with circuit directory.

17. FLOOR FINISHES

Following are the specified materials to be used as floor finishes for the different floor part of the project

60cm x 60cm Homogeneous Matt Tiles : For Toilet – Bathroom Floor.

60cm x 30cm Homogeneous Glossy Tiles : For Toilet – Wall Tiles.

60cm x 60cm Homogeneous Glossy Tiles : For Hallway & Gallery Area.

30cm x 30cm Homogeneous Matt Tiles w/ 4 Groove Edge : For Stairs.

The lavatory counter tops shall be 4” thick reinforced concrete, finished with synthetic granite tiles.

All tiles to be used for this project shall be first class quality. Each piece should be free from chipped off corners, serrated edges or other defects. The tiles must be set in place accurately and firmly with ¾” thick tile adhesive for floors and at least ½” thick on walls.

The mortar for laying the wall and floor tiles shall be tile adhesive. Match color cement grout shall be used between mouldings, tiles and other tile accessories.

18. PAINTING AND VARNISHING

All painting and varnishing works for this project shall be executed in first class workmanship using DAVIES brand products. Surfaces should be thoroughly cleaned to remove mortar, dust, grease, rust and other foreign substances that may be present on areas to be painted or varnished.

Surface defects such as cracks, dents and holes must be filled with putty and sandpapered before final coat of paint or varnish is applied.

All concrete surfaces to be painted shall first be given a coat of Zemcoat skimcoat. Metal and steel must be primed with anti-rust paint before the application of subsequent coats of paint.

Schedule of paint and varnish finishes to be followed for this project:

- Roofing & Accessories – Aqua Paradise (Davies MCS-3103)
- Doors – Temptation (Davies SR-318)
- Columns & Beams – Yellow Rain (Davies MCS 4105)
- Exterior Wall – Crisp Ecu (Davies MCS 0112)
- Interior Wall – Bright Wonder (Davies MCS 4101)
- Ceilings – Flat White/Flat Enamel White (Davies MCS Flat)

All rough and finishing wood materials such as joists and hangers, door frames, railings cabinet and closet, doors and shelves, baseboards, mouldings, etc., must be treated with anti-termite solution such as Solignum wood preservative or any other brand approved by the Architect and Client.

The overall color scheme to be followed in painting and varnishing the building, including those of other materials like tiles, plumbing fixtures and other accessories shall be left to the decision of the Client and the Architect.

B. MATERIALS SPECIFICATIONS

I. STRUCTURAL

Concrete and Masonry

- | | | |
|---------------------------------|---|-----------------------------------------------------|
| 1. Cement | - | Portland, Type 1 |
| 2. Sand | - | Clean/washed |
| 3. Gravel | - | 3/4" crushed stones |
| | - | G-1 crushed stones |
| 4. 6" Conc. Hollow Blocks | - | for Exterior Walls |
| 5. 4" Conc. Hollow Blocks | - | for Interior/Partition Walls |
| 6. Reinforcing Steel Bars | - | deformed bars |
| - G.40 16-28mmØ RSB | - | for footings, columns, beams |
| - G.40 16mmØ bars | - | for other structural member |
| - G.33 10mmØ bars | - | for vertical/horizontal bars, CHB walls |
| - G.33 10mmØ bars | - | for 2 nd floor slab reinforcement, Stair |
| - G.33 10mmØ bars | - | for lateral ties and stirrups |
| 7. Tie wire | - | G.I. #16 |
| 8. Concrete Mixture, 4000 psi | - | Footings, Columns, Beams & Suspended Slab |
| 9. Concrete Mixture, 3000 psi | - | Ground floor slab |
| 10. Plastering Mixture, Class B | - | All CHB plastering walls |
| 11. Sahara Waterproofing | - | Applied for all firewalls and exposed walls |

II. ROOFING SYSTEM

- | | | |
|---------------------------|---|---------------------------------------------|
| 1. Steel frames / trusses | - | 2-1/2" x 2" x 3/16" for top & bot. chord |
| | - | 2" x 2" x 1/8" for sub-chord |
| 2. Purlins | - | 2" x 6" x 1.5mm thick C-purlins |
| 3. Roof sheets | - | 0.50mm thick rib type long span |
| 4. Gutters | - | 0.50mm thick stainless steel |
| 5. End flashings | - | 0.50mm thick stainless steel |
| 6. PE Foam Insulation | - | 5mm thick double sided |
| 7. Blind rivets | - | 5/32" x 3/4" rivet |
| 8. Metal Tex screws | - | 2-1/2" |
| 9. Roof sealant | - | Bostik super vulca seal elastomeric sealant |

III. CARPENTRY

- | | | |
|----------------------|---|------------------------------------------------------------------------------------------|
| 1. Doors (D-1) | - | Double swing glass door |
| | - | Aluminum door frame with 6mm thk. clear glass on powder coated aluminum frame 900 series |
| | - | Aluminum door jamb |
| (D-2, D-4, D-5, D-6) | - | Mild steel sheet door |
| | - | Gauge 16 Steel jamb |
| | - | Keyed lever type |
| | - | 3" x 3" x 0.13 standard weight & duty |
| | - | 2-ball bearing hinges |
| (D-3) | - | Mild steel sheet door |
| | - | Gauge 16 Steel jamb |
| | - | Keyed lever type |
| | - | 150 x 20 x 17mm Foot bolt |
| | - | 3" x 3" x 0.13 standard weight & standard duty 2-ball bearing hinges |
| 2. Ceiling | - | 4" x 8" x 1/2" ord. plywood |
| | - | 1-1/2" x 1-1/2" x 0.8mm thk. wall angle |
| | - | 50-80mm x 25mm x 0.6mm thk. Furring channel |

- 1/4" x 1-1/2" expansion bolt
 - 1-1/2" x 3" x 0.8mm thk. Carrying channel
 - 8mm dia. suspension rod
 - 1-1/4"x3"x1-1/4"x2mm thk. Z-channel furring
3. Cabinet (Storage) - Wooden cabinet (Furniture made)
- (Kitchen) - 1m x 1.8m x 0.35 metal locker by supplier
- 4" x 8" x 3/4" laminated plywood
4. Partition (Toilet) - 18mm thk. solid PVC
- (Classroom & Breastfeeding) - Stainless steel accessories
- Accordion PVC door with soundproof partition

IV. WINDOW TYPE

1. Casement Windows - Series 50 aluminum window frame w/ 6mm thk. clear glass
2. Fixed Windows - Series 900 aluminum window frame w/ 6mm thk. clear glass
3. Sliding Window - Series 900 aluminum window frame w/ 6mm thk. clear glass

V. TILES

1. Toilet Floor Tiles - 60cm x 60cm white homogeneous matt tiles
2. Toilet Wall Tiles - 60cm x 30cm @ 1.5m height homogeneous glossy tiles
3. Lavatory - synthetic granite tiles
4. Hallway, Gallery - 60cm x 60cm homogeneous glossy tiles
5. Stair - 30cm x 30cm homogeneous matt Tiles w/ 4 groove edge

VI. FIXTURES

1. Toilet and Bathroom - HCG Water Closet
- SS faucet & SS bidet
- SS floor drain
- HCG Lavatory
- HCG Urinal
- SS Telephone Shower
2. Kitchen - SS sink
3. Garden - SS Hose Bibb

VII. ELECTRICAL

1. PVC 32mm dia., Neltex Brand
2. PVC 25mm dia., Neltex Brand
3. PVC 20mm dia., Neltex Brand
4. Flexible Metal Conduit 20mm dia., Smartube Brand
5. IMC 50mmdia., Smartube Brand
6. IMC 40mmdia., Smartube Brand
7. RSC 80mmdia., Smartube Brand
8. Junction Box, Galvanized, Gauge 16

9. Utility Box, Galvanized, Gauge 16
10. Square Box, Galvanized, Gauge 16
11. PVC Adapter 32mm dia., Neltex Brand
12. PVC Adapter 25mm dia., Neltex Brand
13. PVC Adapter 20mm dia., Neltex Brand
14. Straight Connector 20mm dia., Smartube Brand
15. Locknut & Bushing 80mm dia., Smartube Brand
16. Locknut & Bushing 50mm dia., Smartube Brand
17. Locknut & Bushing 40mm dia., Smartube Brand
18. Locknut & Bushing 25mm dia., Smartube Brand
19. Locknut & Bushing 20mm dia., Smartube Brand
20. Entrance Cap 80mm dia., Smartube Brand
21. Wire Gutter 2m X .25m X .2m Powder Coated Finished(grey), Gauge16
22. 80mm² THHN/THWN Wire, Phelp Dodge Brand
23. 30mm² THHN/THWN Wire, Phelp Dodge Brand
24. 14mm² THHN/THWN Wire, Phelp Dodge Brand
25. 8.0mm² THHN/THWN Wire, Phelp Dodge Brand
26. 5.5mm² THHN/THWN Wire, Phelp Dodge Brand
27. 3.5mm² THHN/THWN Wire, Phelp Dodge Brand
28. 2.0mm² THHN/THWN Wire, Phelp Dodge Brand
29. 100mm² BCW Wire, Phelp Dodge Brand
30. 12AWG THHN/THWN Copper Wire, Phelp Dodge Brand
31. 1 Gang Switch, Panasonic Brand
32. 2 Gang Switch, Panasonic Brand
33. 3 Gang Switch, Panasonic Brand
34. 3-Way Switch 1 Gang, Panasonic Brand
35. Single Outlet, Panasonic Brand
36. Duplex Outlet, Panasonic Brand
37. Floor Mounted Duplex Pop-up Outlet, Round Type, Panasonic Brand
38. Porcelain Receptacle with 1x18 watts Led Bulb, Firefly Brand
39. Round Down light with 1x18 watts Led Bulb, Firefly Brand
40. 1x18 watts Flourescent LED lamp sealed packed, vapor tight, surface mounted, Firefly Brand
41. 2x18 watts Flourescent LED lamp, Recessed Troffer, Mirrorized w/ Al. Reflector & Satin Finish Louver, Firefly Brand
42. 175AT, 3P, 400V, MCCB, GE Brand
43. 100AT, 3P, 400V, MCCB, GE Brand
44. 70AT, 3P, 400V, MCCB, GE Brand
45. 60AT, 3P, 400V, MCCB, GE Brand
46. 50AT, 1P, 230V, MCCB, GE Brand
47. 30AT, 1P, 230V, MCCB, GE Brand
48. 20AT, 1P, 230V, MCCB, GE Brand
49. 30AT, 1P, 400V, MCCB, GE Brand
50. 20AT, 1P, 400V, MCCB, GE Brand
51. NEMA 1, Powder Coated, Complete w/ Grounding Bus Bar & Terminal Lugs
52. NEMA 3R, Powder Coated, Complete w/ Grounding Bus Bar & Terminal Lugs
53. Ground Rod
54. Solderless Connector

VIII. PLUMBING

1. PPR Pipe 1/2"ø
2. PPR Elbow 1/2"ø
3. PPR Pipe 3/4"ø
4. PPR Tee 3/4"ø
5. PPR Female Adapter 3/4"ø
6. PPR Elbow 3/4"ø
7. 3/4"ø Union Patente
8. 3/4"ø Gate Valve (Crane)
9. 3/4"ø Water Meter (Asahi)
10. Neltex PVC Pipe Cement for joining PVC Pipes

11. Teflon Tape (U.S.)
12. 2" PVC Pipe (Neltex series 1000) for Vents and Kitchen Sink
13. 2" PVC Elbow (Neltex) for Vents and Kitchen Sink
14. 2" PVC Tee (Neltex) for Kitchen Sink
15. 2" PVC Wye (Neltex) for Kitchen Sink
16. 2" PVC U-trap (Neltex) for Kitchen Sink
17. 2" Flexible Pipe for Lavatory U-trap
18. 2" Floor Clean Out
19. 3" Ceiling Clean Out
20. 3" PVC Pipes (Neltex series 1000) for Downspouts and Floor Drains
21. 3"x2" PVC Pipe Reducer (Neltex) for Kitchen Sink Drains
22. 3" PVC Elbow (Neltex) for Downspouts and Floor Drains
23. 3" PVC Tee (Neltex) for Downspouts and Floor Drains
24. 3" PVC Tee (Neltex) for Downspouts and Floor Drains
25. 3" PVC Wye (Neltex) for Downspouts and Floor Drains
26. 4" PVC Pipe (Neltex series 1000) for Sewer Line
27. 4" PVC Tee (Neltex) for Sewer Line
28. 4" PVC Elbow (Neltex) for Sewer Line
29. 4" PVC Wye (Neltex) for Sewer Line
30. 4" Ceiling Clean Out
31. 6" PVC Pipe (Neltex series 1000) for Main Drainage Line

IX. MECHANICAL

1. Fire Extinguisher 10lbs. Dry Chemical Type ABC
2. 65mm \varnothing BI Pipe S40
3. 40mm \varnothing BI Pipe S40
4. 65 mm \varnothing x 40mm \varnothing BI Pipe Reducer
5. 40mm \varnothing BI Pipe Tee
6. 65mm \varnothing BI Pipe Elbow
7. 40mm \varnothing BI Pipe Elbow
8. 6013 Welding Rod
9. 6011 Welding Rod
10. Fire Hose Cabinet including Angle Valve & Accessories
11. FE 36
12. FDC Set
13. 5/8" Seamless Copper Tubing ASTM B-88, Type L rated for R410A Refrigerant
14. 3/8" Seamless Copper Tubing ASTM B-88, Type L rated for R410A Refrigerant
15. 5/8" Copper Pipe Elbow
16. 3/8" Copper Pipe Elbow
17. 5/8" Copper Coupling
18. 3/8" Copper Coupling
19. 5/8" Flare Nut
20. 3/8" Flare Nut
21. 5/8" Access Valve
22. 3/8" Access Valve
23. 3/8" Filter Dryers
24. 3/8" Sight Glass
25. 40mm x 25mm thk. Rubber Pipe Insulation
26. 3/4" x 25mm thk. Rubber Pipe Insulation
27. 1/2" x 25mm thk. Rubber Pipe Insulation
28. Refrigerant R410A
29. Nitrogen
30. Refrigerant Oil
31. Polyethylene Tape
32. Polyurethane Foam
33. 75mm \varnothing G.I. Pipe S20
34. Wall Mounted Propeller Fan 250CFM/20W/240V/60Hz/1P
35. Wall Mounted Propeller Fan 350CFM/20W/240V/60Hz/1P
36. Wall Mounted Propeller Fan 100CFM/20W/240V/60Hz/1P
37. Oscillating Fan 5700CFM/80W/240V/60Hz/1P

38. 2.5TR Inverter Split Type Package Air Condition
39. 2TR Inverter Split Type Package Air Condition
40. 1TR Inverter Split Type Package Air Condition

X. PAINTING

1. Zemcoat Skimcoat
2. Davies 1350 Megacryl Concrete Primer & Sealer
3. Davies Sun and Rain Elastomeric Putty
4. Davies Sun & Rain for Exterior Wall (MCS 0112)
5. Davies Sun & Rain for Roofing (MCS 3103)
6. Davies 911 Red Oxide Primer
7. Davies Sun & Rain for Doors (SR 318)
8. Davies Sun & Rain for Interior Wall (MCS 4101)
9. Davies Sun & Rain for Columns & Beams (MCS 4105)
10. Davies Sun & Rain for Ceiling (MCS Flat White)
11. Davies Sun & Rain for Ceiling (MCS Flat Enamel White)
12. Polytuff with hardener
13. Paint Thinner
14. Solignum Anti Anay for Wood (Clear)
15. Anti Anay for Soil

ANNEX IX – Drawings



Figure 1. Front View



Figure 2. Right Isometric View



Figure 3. Left Isometric View

Please find detail drawings in this link:

<https://drive.google.com/drive/folders/1yxd3opG00RnaJDnGxROjivBtPS1FRPk4?usp=sharing>

ANNEX X – General Terms and Conditions for Large Scale Works

1. Definitions
2. Singular and Plural
3. Headings or Notes
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28. Copyright, Patents and Other Proprietary Rights, and Royalties
29. Interference with Traffic and Adjoining Properties
30. Extraordinary Traffic and General Loads
31. Opportunities for Other Contractors
32. Cleanliness of the Site
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44. Rate of Progress
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46. Certificate of Substantial Completion
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50. Approval of Materials, Etc., Not Implied
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52. Liability of the Parties
53. Authorities
54. Urgent Repairs
55. Increase and Decrease of Costs
56. Taxation
57. Blasting
58. Machinery
59. Temporary Works and Reinstatement
60. Photographs and Advertising
61. Prevention of Corruption
62. Date Falling on Holiday
63. Notices
64. Language, Weights and Measures
65. Records, Accounts, Information and Audit
66. Force Majeure
67. Suspension by the UNESCO
68. Termination by the UNESCO
69. Termination by the Contractor
70. Rights and Remedies of the UNESCO
71. Settlement of Disputes
72. Privileges and Immunities
73. Child Employment
74. Mines
75. Security
76. Anti-Terrorism

For the purpose of the Contract Documents the words and expressions below shall have the following meanings:

- a) "Employer" means the United Nations Educational Scientific and Cultural Organisation (UNESCO).

- b) "Contractor" means the person whose Bid has been accepted and with whom the Contract has been entered into.
- c) "Engineer" means the person whose services have been engaged by UNESCO to administer the Contract as provided therein, as will be notified in writing to the Contractor.
- d) "Contract" means the written agreement between the Employer and the Contractor, to which these General Conditions are annexed.
- e) "The Works" means the works to be executed and completed under the Contract.
- f) "Temporary Works" shall include items to be constructed which are not intended to be permanent and form part of the Works.
- g) "Drawings" and "Specifications" mean the Drawings and Specifications referred to in the Contract and any modification thereof or addition thereto furnished by the Engineer or submitted by the Contractor and approved in writing by the Engineer in accordance with the Contract.
- h) "Bill of Quantities" is the document in which the Contractor indicates the cost of the Works, on the basis of the foreseen quantities of items of work and the fixed unit prices applicable to them.
- i) "Contract Price" means the sum agreed in the Contract as payable to the Contractor for the execution and completion of the Works and for remedying of any defects therein in accordance with the Contract.
- j) "Site" means the land and other places on, under, in or through which the Works or Temporary Works are to be constructed.

2. SINGULAR AND PLURAL

Words importing persons or parties shall include firms or companies and words importing the singular only shall also include the plural and vice versa where the context requires.

3. HEADINGS OR NOTES

The headings or notes in the Contract Documents shall not be deemed to be part thereof or be taken into consideration in their interpretation.

4. LEGAL RELATIONSHIPS

The Contractor and the sub-contractor(s), if any, shall have the status of an independent contractor vis-à-vis the Employer. The Contract Documents shall not be construed to create any contractual relationship of any kind between the Engineer and the Contractor, but the Engineer shall, in the exercise of his duties and powers under the Contract, be entitled to performance by the Contractor of its obligations, and to enforcement thereof. Nothing contained in the Contract Documents shall create any contractual relationship between the Employer or the Engineer and any subcontractor(s) of the Contractor.

5. GENERAL DUTIES/POWERS OF ENGINEER

- a) The Engineer shall provide administration of Contract as provided in the Contract Documents. In particular, he shall perform the functions hereinafter described.
- b) The Engineer shall be the Employer's representative vis-à-vis the Contractor during construction and until final payment is due. The Engineer shall advise and consult with the Employer. The Employer's instructions to the Contractor shall be forwarded through the Engineer. The Engineer shall have authority to act on behalf of the Employer only to the extent provided in the Contract Documents as they may be amended in writing in accordance with the Contract. The duties, responsibilities and limitations of authority of the Engineer as the Employer's representative during construction as set forth in the Contract shall not be modified or extended without the written consent of the Employer, the Contractor and the Engineer.
- c) The Engineer shall visit the Site at intervals appropriate to the stage of construction to familiarize himself generally with the progress and quality of the Works and to determine in general if the Works are proceeding in accordance with the Contract Documents. On the basis of his on-site observations as an Engineer, he shall keep the Employer informed of the progress of the Works.
- d) The Engineer shall not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Works or the Temporary Works. The Engineer shall not be responsible for or have control or charge over the acts or omissions of the Contractor (including the Contractor's failure to carry out the Works in accordance with the Contract) and of Sub-contractors or any of their agents or employees, or any other persons performing services for the Works, except if such acts or omissions are caused by the Engineer's failure to perform his functions in accordance with the contract between the Employer and the Engineer.
- e) The Engineer shall at all times have access to the Works wherever and whether in preparation or progress. The Contractor shall provide facilities for such access so that the Engineer may perform his functions under the Contract.
- f) Based on the Engineer's observations and an evaluation of the documentation submitted by the Contractor together with the invoices, the Engineer shall determine the amounts owed to the Contractor and shall issue Certificates for Payment as appropriate.
- g) The Engineer shall review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformity with the design concept of the Works and with the provisions of the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay. The Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component.
- h) The Engineer shall interpret the requirements of the Contract Documents and judge the performance there under by the Contractor. All interpretations and orders of the Engineer shall be consistent with the intent of and reasonably inferable from the Contract Documents and shall be in writing or in the form of drawings. Either party may make a written request to the Engineer for such interpretation. The Engineer shall render the interpretation necessary for the proper execution of the Works with reasonable promptness and in accordance with any time limit agreed upon. Any claim or dispute arising from the interpretation of the Contract Documents by the Engineer or relating to the execution or progress of the Works shall be settled as provided in Clause 71 of these General Conditions.
- i) Except as otherwise provided in the Contract, the Engineer shall have no authority to relieve the Contractor of any of his obligations under the Contract nor to order any work involving delay in

- completion of the Works or any extra payment to the Contractor by the Employer, or to make any variations to the Works.
- j) In the event of termination of the employment of the Engineer, the Employer shall appoint another suitable professional to perform the Engineer's duties.
- k) The Engineer shall have authority to reject work which does not conform to the Contract Documents. Whenever, in his opinion, he considers it necessary or advisable for the implementation of the intent of the Contract Documents, he will have authority to require General Inspection or testing of the work whether or not such work be then fabricated, installed or completed. However, neither the Engineer's authority to act nor any reasonable decision made by him in good faith either to exercise or not to exercise such authority shall give rise to any duty or responsibility of the Engineer to the Contractor, any subcontractor, any of their agents or employees, or any other person performing services for the Works.
- l) The Engineer shall conduct inspections to determine the dates of Substantial Completion and Final Completion, shall receive and forward to the Employer for the Employer's review written warranties and related documents required by the Contract and assembled by the Contractor, and shall issue a final Certificate for Payment upon compliance with the requirements of Clause 47 hereof and in accordance with the Contract.
- m) If the Employer and Engineer so agree, the Engineer shall provide one or more Engineer's Representative(s) to assist the Engineer in carrying out his responsibilities at the site. The Engineer shall notify in writing to the Contractor and the Employer the duties, responsibilities and limitations of authority of any such Engineer's Representative(s).

6. CONTRACTOR'S GENERAL OBLIGATIONS/RESPONSIBILITIES

6.1 Obligation to Perform in Accordance with Contract

The Contractor shall execute and complete the Works and remedy any defects therein in strict accordance with the Contract, with due care and diligence and to the satisfaction of the Engineer, and shall provide all labour, including the supervision thereof, materials, Constructional Plant and all other things, whether of a temporary or permanent nature, required in and for such execution, completion and remedying of defects, as far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract. The Contractor shall comply with and adhere strictly to the Engineer's instructions and directions on any matter, touching or concerning the Works.

6.2 Responsibility for Site Operations

The Contractor shall take full responsibility for the adequacy, stability and safety of all site operations and methods of construction, provided that the Contractor shall not be responsible, except as may be expressly provided in the Contract, for the design or specification of the Permanent Works or of any Temporary Works prepared by the Engineer.

6.3 Responsibility for Employees

The Contractor shall be responsible for the professional and technical competence of his employees and will select for work under this Contract, reliable individuals who will perform effectively in the implementation of the Contract, respect local customs and conform to a high standard of moral and ethical conduct.

6.4 Source of Instructions

The Contractor shall neither seek nor accept instructions from any authority external to the Employer, the Engineer or their authorized representatives in connection with the performance of his services under this Contract. The Contractor shall refrain from any action which may adversely affect the Employer and shall fulfil his commitments with fullest regard for the interest of the Employer.

6.5 Officials Not to Benefit

The Contractor warrants that no official of the Employer has been or shall be admitted by the Contractor to any direct or indirect benefit arising from this Contract or the award thereof. The Contractor agrees that breach of this provision is a breach of an essential term of the Contract.

6.6 Use of Name, Emblem or Official Seal of UNESCO or the United Nations

The Contractor shall not advertise or otherwise make public the fact that he is performing, or has performed services for the Employer or use the name, emblem or official seal of the Employer or the United Nations or any abbreviation of the name of the Employer or the United Nations for advertising purposes or any other purposes.

6.7 Confidential Nature of Documents

All maps, drawings, photographs, mosaics, plans, reports, recommendations, estimates, documents and all other data compiled by or received by the Contractor under the Contract shall be the property of the Employer, shall be treated as confidential and shall be delivered only to the duly authorized representative of the Employer on completion of the Works; their contents shall not be made known by the Contractor to any person other than the personnel of the Contractor performing services under this Contract without the prior written consent of the Employer.

7. ASSIGNMENT AND SUBCONTRACTING

7.1 Assignment of Contract

The Contractor shall not, except after obtaining the prior written approval of the Employer, assign, transfer, pledge or make other disposition of the Contract or any part thereof or of any of the Contractor's rights, claims or obligations under the Contract.

7.2 Subcontracting

In the event the Contractor requires the services of subcontractors, the Contractor shall obtain the prior written approval of the Employer for all such subcontractors. The approval of the Employer shall not relieve the Contractor of any of his obligations under the Contract, and the terms of any subcontract shall be subject to and be in conformity with the provisions of the Contract.

7.3 Assignment of Subcontractor's Obligations

In the event of a subcontractor having undertaken towards the Contractor in respect of the work executed or the goods, materials, Plant or services supplied by such subcontractor for the Works, any continuing obligation extending for a period exceeding that of the Defects Liability Period under the Contract, the Contractor shall at any time after the expiration of such Period, assign to the Employer, at the Employer's request and cost, the benefit of such obligation for the unexpired duration thereof.

8. DRAWINGS

8.1 Custody of drawings

The drawings shall remain in the sole custody of the Employer but two (2) copies thereof shall be furnished to the Contractor free of cost. The Contractor shall provide and make at his own expense any further copies required by him.

8.2 One copy of Drawings to be kept on Site

One copy of the Drawings furnished to the Contractor as aforesaid shall be kept by the Contractor on the Site and the same shall at all reasonable times be available for inspection and use by the Engineer and by any other person authorized in writing by the Engineer.

8.3 Disruption of Progress

The Contractor shall give written notice to the Engineer whenever planning or progress of the Works is likely to be delayed or disrupted unless any further drawing or order, including a direction, instruction or approval, is issued by the Engineer within a reasonable time. The notice shall include details of drawing or order required and of why and by when it is required and of any delay or disruption likely to be suffered if it is late.

9. WORK BOOK

The Contractor shall maintain a Work Book at the Site with numbered pages, in one original and two copies. The Engineer shall have full authority to issue new orders, drawings and instructions to the Contractor, from time to time and as required for the correct execution of the Works. The Contractor shall be bound to follow such orders, drawings and instructions.

Every order shall be dated and signed by the Engineer and the Contractor, in order to account for its receipt.

Should the Contractor want to refuse an order in the Work Book, he shall so inform the Employer, through the Engineer, by means of an annotation in the Work Book made within three (3) days from the date of the order that the Contractor intends to refuse. Failure by the Contractor to adhere to this procedure shall result in the order being deemed accepted with no further possibility of refusal.

The original of the Work Book shall be delivered to the Employer at the time of Final Acceptance of the Works. A copy shall be kept by the Engineer and another copy by the Contractor.

10. PERFORMANCE SECURITY

a) As guarantee for his proper and efficient performance of the Contract, the Contractor shall on signature of the Contract furnish the Employer with a Performance Security issued for the benefit of the Employer. The amount and character of such security (bond or guarantee) shall be as indicated in the Contract.

b) The Performance Bond or Bank Guarantee must be issued by an acceptable insurance company or accredited bank, in the format included in Annex 5 to these General Conditions, and must be valid up to twenty-eight days after issuance by the Engineer of the Certificate of Final Completion. The Performance Bond or Bank Guarantee shall be returned to the Contractor within twenty-eight days after the issuance by the Engineer of the Certificate of Final Completion, provided that the Contractor shall have paid all money owed to the Employer under the Contract.

c) If the surety of the Performance Bond or Bank Guarantee is declared bankrupt or becomes insolvent or its right to do business in the country of execution of the Works is terminated, the Contractor shall within five (5) days thereafter substitute another bond or guarantee and surety, both of which must be acceptable to the Employer.

11. INSPECTION OF SITE

The Contractor shall be deemed to have inspected and examined the site and its surroundings and to have satisfied himself before submitting his Bid and signing the Contract as to all matters relative to the nature of the land and subsoil, the form and nature of the Site, details and levels of existing pipe lines, conduits, sewers, drains, cables or other existing services, the quantities and nature of the work and materials necessary for the completion of the Works, the means of access to the Site, and the accommodation he may require, and in general to have himself obtained all necessary information as to risk contingencies, climatic, hydrological and natural conditions and other circumstances which may influence or affect his Bid, and no claims will be entertained in this connection against the Employer.

12. SUFFICIENCY OF BID

The Contractor shall be deemed to have satisfied himself before Bidding as to the correctness and sufficiency of his Bid for the construction of the Works and of the rates and prices, which rates and prices shall, except in so far as it is otherwise provided in the Contract, cover all his obligations under the Contract and all matters and things necessary for the proper execution and completion of the Works.

13. PROGRAMME OF WORK TO BE FURNISHED

Within the time limit specified in the Contract, the Contractor shall submit to the Engineer for his consent a detailed Programme of Work showing the order of procedure and the method in which he proposes to carry out the Works. In preparing his Programme of Work the Contractor shall pay due regard to the priority required by certain works. Should the Engineer, during the progress of work, require further modifications to the Programme of Work, the Contractor shall review the said program. The Contractor shall also whenever required by the Engineer submit particulars in writing of the Contractor's arrangements for carrying out the Works and of the Constructional Plant and Temporary Works which the Contractor intends to supply, use or construct as the case may be. The submission of such program, or any modifications thereto, or the particulars required by the Engineer, shall not relieve the Contractor of any of his duties or obligations under the Contract nor shall the incorporation of any modification to the Programme of Work either at the commencement of the contract or during its course entitle the Contractor to any additional payments in consequence thereof.

14. WEEKLY SITE MEETING

A weekly site meeting shall be held between the UNESCO Project Coordinator or engineer, if any, the representative of the Contractor and the Engineer or the Engineer's Representative, in order to verify that the Works are progressing normally and are executed in accordance with the Contract.

15. CHANGE ORDERS

- a) The Engineer may instruct the Contractor, with the approval of the Employer and by means of Change Orders, all variations in quantity or quality of the Works, in whole or in part, that are deemed necessary by the Engineer.
- b) Processing of change orders shall be governed by clause 48 of these General Conditions.

16. CONTRACTOR'S SUPERINTENDENCE

The Contractor shall provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary for the proper fulfillment of the Contractor's obligations under the Contract. The Contractor or a competent and authorized agent or representative of the Contractor approved in writing by the Engineer, which approval may at any time be withdrawn, shall be constantly on the site and shall devote his entire time to the superintendence of the Works. Such authorized agent or representative shall receive on behalf of

the Contractor directions and instructions from the Engineer. If the approval of such agent or representative shall be withdrawn by the Engineer, as provided in Clause 17(2) hereinafter, or if the removal of such agent or representative shall be requested by the Employer under Clause 17(3) hereinafter, the Contractor shall as soon as it is practicable after receiving notice of such withdrawal remove the agent or representative from the Site, and replace him by another agent or representative approved by the Engineer. Notwithstanding the provision of Clause 17(2) hereinafter, the Contractor shall not thereafter employ, in any capacity whatsoever, a removed agent or representative again on the Site.

17. CONTRACTOR'S EMPLOYEES

- a) The Contractor shall provide and employ on the Site in connection with the execution and completion of the Works and the remedying of any defects therein:
 - i. Only such technical assistants as are skilled and experienced in their respective callings and such sub-agent foremen and leading hands as are competent to give proper supervision to the work they are required to supervise, and
 - ii. Such skilled, semi-skilled, and unskilled labour as is necessary for the proper and timely execution and completion of the Works.
- b) The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person employed by the Contractor in or about the execution or completion of the Works, who in the opinion of the Engineer is mis-conducting himself, or is incompetent or negligent in the proper performance of his duties, or whose employment is otherwise considered reasonably by the Engineer to be undesirable, and such person shall not be again employed on the Site without the written permission of the Engineer. Any person so removed from the Works shall be replaced as soon as reasonably possible by a competent substitute approved by the Engineer.
- c) Upon written request by the Employer, the Contractor shall withdraw or replace from the Site any agent, representative or other personnel who do not conform to the standards set forth in paragraph (a) of this Clause. Such request for withdrawal or replacement shall not be considered as termination in part or in whole of this Contract. All costs and additional expenses resulting from any withdrawal or replacement for whatever reason of any of the Contractor's personnel shall be at the Contractor's expense.

18. SETTING-OUT

The Contractor shall be responsible for the true and proper setting out of the Works in relation to original points, lines and levels of reference given by the Engineer in writing and for the correctness of the position, levels, dimensions and alignment of all parts of the Works and for the provision of all necessary instruments, appliances and labour in connection therewith. If, at any time during the progress of the Works, any error shall appear or arise in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required so to do by the Engineer, shall, at his own cost, rectify such error to the satisfaction of the Engineer.

19. WATCHING AND LIGHTING

The Contractor shall in connection with the Works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the Engineer or by any duly constituted authority for the protection of the Works and the materials and equipment utilized therefore or for the safety and convenience of the public or others.

20. CARE OF WORKS

- a) From the commencement date of the Works to the date of substantial completion as stated in the Certificate of Substantial Completion, the Contractor shall take full responsibility for the care thereof and of all Temporary Works. In the event that any damage or loss should happen to the Works or to any part thereof or to any Temporary Works from any cause whatsoever (save and except as shall be due to Force Majeure as defined in Clause 66 of these General Conditions), the Contractor shall at his own cost repair and make good the same so that, at completion, the Works shall be in good order and condition and in conformity in every respect with the requirements of the Contract and the Engineer's instructions. The Contractor shall also be liable for any damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of complying with his obligations Clause 47 hereof.
- b) The Contractor shall be fully responsible for the review of the Engineering design and details of the Works and shall inform the Employer of any mistakes or incorrectness in such design and details which would affect the Works.

21. INSURANCE OF WORKS ETC

Without limiting his obligations and responsibilities under Clause 20 hereof, the Contractor shall insure immediately following signature of this Contract, in the joint names of the Employer and the Contractor* (a) for the period stipulated in Clause 20 (a) hereof, against all loss or damage from whatever cause arising, other than cause of Force majeure as defined in clause 66 of these General Conditions, and (b) against loss or damage for which the Contractor is responsible, in such manner that the Employer and the Contractor are covered for the period stipulated in Clause 20 (1) hereof and are also covered during the Defects Liability Period for loss or damage arising from a cause occurring prior to the commencement of the Defects Liability Period and for any loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under Clause 47 hereof:

- a) The Works, together with the materials and Plant for incorporation therein, to their full replacement cost, plus an additional sum of ten (10) per cent of such replacement cost, to cover any additional costs of and incidental to the rectification of loss or damage including professional fees and the cost of demolishing and removing any part of the Works and of removing debris of whatsoever nature;
 - b) The Contractor's equipment and other things brought on to the Site by the Contractor to the replacement value of such equipment and other things;
 - c) An insurance to cover the liabilities and warranties of Section 52(4);
- Such insurance shall be effected with an insurer and in terms approved by the Employer, which approval shall not be unreasonably withheld, and the Contractor shall, whenever required, produce to the Engineer the policy or policies of insurance and the receipts for payment of the current premiums.

22. DAMAGE TO PERSONS AND PROPERTY

The Contractor shall (except if and so far as the Contract provides otherwise) indemnify, hold and save harmless and defend at his own expense the Employer, its officers, agents, employees and servants from and against all suits, claims, demands, proceedings, and liability of any nature or kind, including costs and expenses, for injuries or damages to any person or any property whatsoever which may arise out of or in consequence of acts or omissions of the Contractor or its agents, employees, servants or subcontractors in the execution of the Contract. The provision of this Clause shall extend to suits, claims, demands, proceedings and liability in the nature of workmen's compensation claims and arising out of the use of patented inventions and devices. Provided always that nothing herein contained shall be deemed to render the Contractor liable for or in respect of or with respect to:

- a) The permanent use or occupation of land by the Works or any part thereof;
- b) The right of the Employer to construct the Works or any part thereof on, over, under, or through any land.
- c) Interference whether temporary or permanent with any right of light, airway or water or other easement or quasi-easement which is the unavoidable result of the construction of the Works in accordance with the Contract.
- d) Death, injuries or damage to persons or property resulting from any act or neglect of the Employer, his agents, servants or other contractors, done or committed during the validity of the Contract.

23. LIABILITY INSURANCE

23.1 Obligation to take out Liability Insurance

Before commencing the execution of the Works, but without limiting his obligations and responsibility under Clause 20 hereof, the Contractor shall insure against his liability for any death, material or physical damage, loss or injury which may occur to any property, including that of the Employer or to any person, including any employee of the Employer by or arising out of the execution of the Works or in the carrying out of the Contract, other than due to the matters referred to in the proviso to Clause 22 hereof.

23.2 Minimum Amount of Liability Insurance

Such insurance shall be effected with an insurer and in terms approved by the Employer, which approval shall not be unreasonably withheld, and for at least the amount specified in the contract. The Contractor shall, whenever required by the Employer or the Engineer, produce to the Engineer the policy or policies of insurance and the receipts for payment of the current premiums.

23.3 Provision to Indemnify Employer

The insurance policy shall include a provision whereby, in the event of any claim in respect of which the Contractor would be entitled to receive indemnity under the policy, being brought or made against the Employer, the insurer shall indemnify the Employer against such claims and any costs, charges and expenses in respect thereof.

24. ACCIDENT OR INJURY TO WORKMEN

a) The Employer shall not be liable for or in respect of any damages or compensation payable at law in respect of or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-Contractor, save and except an accident or injury resulting from any act or default of the Employer, his agents or employees. The Contractor shall indemnify, hold and save harmless the Employer against all such damages and compensation, save and except as aforesaid, and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

b) Insurance Against Accident, etc., to Workmen

The Contractor shall insure against such liability with an insurer approved by the Employer, which approval shall not be unreasonably withheld, and shall continue such insurance during the whole of the time that any persons are employed by him for the Works and shall, when required, produce to the Engineer such policy of insurance and the receipt for payment of the current premium. Provided always that, in respect of any persons employed by any subcontractor, the Contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the subcontractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy but the Contractor shall require such subcontractor to produce to the Engineer when required such policy of insurance and the receipt for the current premium, and obtain the insertion of a provision to that effect in its contract with the subcontractor.

25. REMEDY ON CONTRACTOR'S FAILURE TO INSURE

If the Contractor shall fail to effect and keep in force any of the insurances referred to in Clauses 21, 23 and 24 hereof, or any other insurance which he may be required to effect under the terms of the Contract, the Employer may in any such case effect and keep in force any such insurance and pay such premium as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer as aforesaid from any monies due or which may become due to the Contractor, or recover the same as a debt due from the Contractor.

26. COMPLIANCE WITH STATUTES, REGULATIONS, ETC.

a) The Contractor shall give all notices and pay all fees and charges required to be given or paid by any national or State Statutes, Ordinances, Laws, Regulations or By-laws, or any local or other duly constituted authority in relation to the execution of the Works or of any Temporary Works and by the Rules and Regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works or any Temporary Works.

b) The Contractor shall conform in all respects with any such Statutes, Ordinances, Laws, Regulations, By-laws or requirements of any such local or other authority which may be applicable to the Works and shall keep the Employer indemnified against all penalties and liabilities of every kind for breach of any such Statutes, Ordinances, Laws, Regulations, By-laws or requirements.

27. DISCOVERIES

All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the Site of the Works shall as between the Employer and the Contractor be deemed to be the absolute property of the Employer and the Contractor shall take reasonable precautions to prevent his workmen or any other persons from removing or damaging any such article or thing and shall immediately upon discovery thereof and before removal acquaint the Employer of such discovery and carry out at the expense of the Employer the Engineer's orders as to the disposal of the same.

28. COPYRIGHT, PATENT AND OTHER PROPRIETARY RIGHTS, AND ROYALTIES

- a) The Contractor shall hold harmless and fully indemnify the Employer from and against all claims and proceedings for or on account of infringement of any patent rights, design trademark or name or other protected rights in respect of any Plant, equipment, machine, work or material used for or in connection with the Works or Temporary Works and from and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, except where such infringement results from compliance with the design or Specification provided by the Engineer.
- b) Except where otherwise specified, the Contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the Works or Temporary Works.

29. INTERFERENCE WITH TRAFFIC AND ADJOINING PROPERTIES

All operations necessary for the execution of the Works and for the Construction of any Temporary Works shall, so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with the public convenience, or the access to, use and occupation of, public or private roads and footpaths to or of properties whether in the possession of the Employer or of any other person. The Contractor shall hold harmless and indemnify the

Employer in respect of all claims, demands, proceedings, damages, costs, charges and expenses whatsoever arising out of or in relation to any such matters in so far as the Contractor is responsible thereby.

30. EXTRAORDINARY TRAFFIC AND GENERAL LOADS

- a) The Contractor shall use every reasonable means to prevent any of the roads or bridges communicating with or on the routes to the Site from being damaged by any traffic of the Contractor or any of his sub-contractors and, in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from the moving of plant and material from and to the Site shall be limited as far as reasonably possible and so that no unnecessary damage may be occasioned to such roads and bridges.
- b) Should it be found necessary for the Contractor to move any load of Constructional Plant, machinery, pre-constructed units or parts of units of work, or other thing, over part of a road or bridge, the moving whereof is likely to damage any such road or bridge unless General protection or strengthening is carried out, then the Contractor shall before moving the load on to such road or bridge, save insofar as the Contract otherwise provide, be responsible for and shall pay for the cost of strengthening any such bridge or altering or improving any such road to avoid such damage, and the Contractor shall indemnify and keep the Employer indemnified against all claims for damage to any such road or bridge caused by such movement, including such claim as may be made directly against the Employer, and shall negotiate and pay all claims arising solely out of such damage.

31. OPPORTUNITIES FOR OTHER CONTRACTORS

The Contractor shall in accordance with the requirements of the Engineer afford all reasonable opportunities for carrying out their work to any other contractors employed by the Employer and their workmen and to the workmen of the Employer and of any other duly constituted authorities who may be employed in the execution on or near the Site of any work not included in the Contract or of any contract which the Employer may enter into in connection with or ancillary to the Works. If work by other contractors of the Employer as above-mentioned involves the Contractor in any direct expenses as a result of using his Site facilities, the Employer shall consider payment to the Contractor of such sum or sums as may be recommended by the Engineer.

32. CLEANLINESS OF THE SITE

During the progress of the Works, the Contractor shall keep the Site reasonably free from all unnecessary obstruction and shall store or dispose of any Constructional Plant and surplus materials and clear away and remove from the Site any wreckage, rubbish or Temporary Works no longer required to an authorised public dumping area.

33. CLEARANCE OF SITE ON SUBSTANTIAL COMPLETION

On the substantial completion of the Works, the Contractor shall clear away and remove from the Site all Constructional Plant surplus materials, rubbish and Temporary Works of every kind and leave the whole of the Site and Works clean and in a workmanlike condition to the satisfaction of the Engineer.

34. LABOUR

34.1 Engagement of Labour

The Contractor shall make his own arrangements for the engagement of all labour local or otherwise.

34.2 Supply of Water

The Contractor shall provide on the Site to the satisfaction of the Engineer an adequate supply of drinking and other water for the use of the Contractor's staff and work people.

34.3 Alcoholic Drinks or Drugs

The Contractor shall comply with Government laws and regulations and orders in force as regards the import, sale, barter or disposal of alcoholic drinks or narcotics and he shall not allow or facilitate such importation, sale, gift, barter or disposal by his sub-contractors, agents or employees.

34.4 Arms and Ammunition

The restrictions specified in clause 34.3 above shall include all kinds of arms and ammunition.

34.5 Holiday and Religious Customs

The Contractor shall in all dealings with labour in his employ have due regard to all holiday, recognized festivals and religious or other customs.

34.6 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.

34.7 Disorderly Conduct, etc.

The Contractor shall at all times take all reasonable precautions to prevent any unlawful riotous or disorderly conduct by or amongst his employees and for the preservation of peace and the protection of persons and property in the neighbourhood of the Works against the same.

34.8 Observance by Sub-Contractors

The Contractor shall be considered responsible for the observance of the above provisions by his Sub-Contractors.

34.9 Legislation applicable to Labour

The Contractor shall abide by all applicable Ethiopian legislation and regulations with regard to labour.

35. RETURNS OF LABOUR, PLANT, ETC.

The Contractor shall, if required by the Engineer, deliver to the Engineer at his office, a return in detail in the form and at such intervals as the Engineer may prescribe showing the supervisory staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such information respecting Constructional plant as the Engineer may require.

36. MATERIALS, WORKMANSHIP AND TESTING

36.1 Materials and Workmanship

a) All materials and workmanship shall be of the respective kinds described in the Contract and in accordance with the Engineer's instructions and shall be subjected from time to time to such tests as the Engineer may direct at the place of manufacture or fabrication, or on the Site or at all or any of such places. The Contractor shall provide such assistance, instruments, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any materials used and shall supply samples of materials before incorporation in the Works for testing as may be selected and required by the Engineer. All testing equipment and

instruments provided by the Contractor shall be used only by the Engineer or by the Contractor in accordance with the instructions of the Engineer.

b) No material not conforming with the Specifications in the Contract may be used for the Works without prior written approval of the Employer and instruction of the Engineer, provided always that if the use of such material results or may result in increasing the Contract Price, the procedure in Clause 48 shall apply.

36.2 Cost of Samples

All samples shall be supplied by the Contractor at his own cost unless the supply thereof is clearly intended in the Specifications or Bill of Quantities to be at the cost of the Employer. Payment will not be made for samples which do not comply with the Specifications.

36.3 Cost of Tests

The Contractor shall bear the costs of any of the following tests:

a) Those clearly intended by or provided for in the Contract Documents.

b) Those involving load testing or tests to ensure that the design of the whole of the Works or any part of the Works is appropriate for the purpose which it was intended to fulfil.

37. ACCESS TO SITE

The Employer and the Engineer and any persons authorized by either of them shall, at all times, have access to the Works and to the Site and to all workshops and places where work is being prepared or whence materials, manufactured articles or machinery are being obtained for the Works and the Contractor shall afford every facility for and every assistance in or in obtaining the right to such access.

38. EXAMINATION OF WORK BEFORE COVERING UP

No work shall be covered up or put out of view without the approval of the Engineer and the Contractor shall afford full opportunity for the Engineer to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The Contractor shall give due notice to the Engineer whenever any such work or foundations is or are ready or about to be ready for examination and the Engineer shall without unreasonable delay unless he considers it unnecessary and advises the Contractor accordingly attend for the purpose of examining and measuring such work or of examining such foundations.

39. REMOVAL OF IMPROPER WORK AND MATERIALS

39.1 Engineer's power to order removal

The Engineer shall during the progress of the Works have power to order in writing, and the Contractor shall execute at his cost and expense, the following operations:

- a) The removal from the Site within such time or times as may be specified in the order of any materials which in the opinion of the Engineer are not in accordance with the Contract;
- b) The substitution of proper and suitable materials; and
- c) The removal and proper re-execution (notwithstanding any previous test thereof or interim payment therefore) of any work which in respect of materials or workmanship is not in the opinion of the Engineer in accordance with the Contract.

39.2 Default of Contractor in carrying out Engineer's Instructions

In case of default on the part of the Contractor in carrying out an instruction of the Engineer, the Employer shall be entitled to employ and pay other persons to carry out the same and all expenses consequent thereon or incidental thereto shall be borne by the Contractor and shall be recoverable from him by the Employer and may be deducted by the Employer from any monies due or which may become due to the Contractor.

40. SUSPENSION OF WORK

The Contractor shall on the written order of the Engineer suspend the progress of the Works or any part thereof for such time or times and in such manner as the Engineer may consider necessary and shall, during such suspension, properly protect and secure the Works so far as it is necessary in the opinion of the Engineer. The Employer shall be notified and his written approval should be sought for any suspension of work in excess of three (3) days.

41. POSSESSION OF SITE

41.1 Access to Site

The Employer shall with the Engineer's written order to commence the Works, give to the Contractor possession of so much of the Site as may be required to enable the Contractor to commence and proceed with the construction of the Works in accordance with the Programme referred to in Clause 13 hereof and otherwise in accordance with such reasonable proposals of the Contractor as he shall make to the Engineer by notice in writing, and shall from time to time as the Works proceed give to the Contractor possession of such further portions of the Site as may be required to enable the Contractor to proceed with the construction of the Works with due dispatch in accordance with the said Programme or proposals, as the case may be.

41.2 Wayleaves, etc.

The Contractor shall bear all expenses and charges for General temporary wayleaves required by him in connection with access to the Site. The Contractor shall also provide at his own cost any additional accommodation outside the Site required by him for the purpose of the Works.

41.3 Limits of the Site

Except as defined below, the limits of the Site shall be as defined in the Contract. Should the Contractor require land beyond the Site, he shall provide it entirely at his own expense and before taking possession shall supply the Engineer with a copy of the necessary permits. Access to the Site is available where the Site adjoins a public road but it is not provided unless shown on the Drawings. When necessary for the safety and convenience of workmen, public or livestock or for the protection of the Works, the Contractor shall, at his own expense, provide adequate temporary fencing to the whole or part of the Site. The Contractor shall not disturb, damage or pull down any hedge, tree or building within the Site without the written consent of the Engineer.

42. TIME FOR COMPLETION

- a) Subject to any requirement in the Contract as to completion of any section of the Works before completion of the whole, the whole of the Works shall be completed, in accordance with the provisions of Clause 46 and 47 hereof, within the time stated in the Contract.
- b) The completion time includes weekly rest days, official holidays, and days of inclement weather.

43. EXTENSION OF TIME FOR COMPLETION

If, subject to the provisions of the Contract, the Engineer orders alterations or additions in the Works in accordance with Clause 48 hereof, or if circumstances constituting force majeure as defined in the Contract have occurred, the Contractor shall be entitled to apply for an extension of the time for completion of the Works specified in the Contract. The Employer shall, upon such application, determine the period of any such extension of time; provided that in the case of alterations or

additions in the Works, the application for such an extension must be made before the alterations or additions in the Works are undertaken by the Contractor.

44. RATE OF PROGRESS

The whole of the materials, plant and labour to be provided by the Contractor and the mode, manner and speed of execution and completion of the Works are to be of a kind and conducted in a manner to the satisfaction of the Engineer. Should the rate of progress of the Works or any part thereof be at any time in the opinion of the Engineer too slow to ensure the completion of the Works by the prescribed time or extended time for completion, the Engineer shall so notify the Contractor in writing and the Contractor shall thereupon take such steps as the Contractor may think necessary and the Engineer may approve to expedite progress so as to complete the Works by the prescribed time or extended time for completion. If the work is not being carried on by day and by night and the Contractor shall request permission to work by night as well as by day, then, if the Engineer shall grant such permission, the Contractor shall not be entitled to any additional payment. All work at night shall be carried out without unreasonable noise and disturbance. The contractor shall indemnify the Employer from and against any claims or liability for damages on account of noise or other disturbance created while or in carrying out the work and from and against all claims, demands, proceedings, costs and expenses whatsoever in regard or in relation to such noise or other disturbance. The Contractor shall submit in triplicate to the Engineer at the end of each month signed copies of explanatory Drawings or any other material showing the progress of the Works.

45. LIQUIDATED DAMAGES FOR DELAY

- a) If the Contractor fails to complete the Works within the time for completion prescribed in the Contract, or any extended time for completion in accordance with the Contract, then the Contractor shall pay to the Employer the sum specified in the Contract as liquidated damages, for the delay between the time prescribed in the Contract or the extended time for completion, as the case may be, and the date of substantial completion of the Works as stated in the Certificate of Substantial Completion, subject to the applicable limit stated in the Contract. The said sum shall be payable by the sole fact of the delay without the need for any previous notice or any legal proceedings, or proof of damage, which shall in all cases be considered as ascertained. The Employer may, without prejudice to any other method of recovery, deduct the amount of such liquidated damages from any monies in its hands due or which may become due to the Contractor. The payment or deduction of such damages shall not relieve the Contractor from his obligation to complete the Works or from any other of his obligations and liabilities under the Contract.
- b) If, before the time for completion of the whole of the Works or of a Section of the Works, a Certificate of Substantial Completion has been issued for any part or Section of the Works, the liquidated damages for delay in completion of the remainder of the Works or of that Section may, for any period of delay after the date stated in such Certificate of Substantial Completion, and in the absence of alternative provisions in the Contract, be reduced in the proportion which the value of the part or Section so certified bears to the total value of the whole of the Works or Section, as applicable. The provisions of this Sub-Clause shall only apply to the rate of liquidated damages and shall not affect the limit thereof.

46. CERTIFICATE OF SUBSTANTIAL COMPLETION

46.1 Substantial Completion of the Works

When the whole of the Works have been substantially completed and have satisfactorily passed any test on completion prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer accompanied by an undertaking to finish any outstanding work during the Defects Liability Period. Such notice and undertaking shall be in writing and shall be deemed to be a request by the Contractor, for the Engineer to issue a Certificate of Substantial Completion in respect of the Works. The Engineer shall, within twenty-one (21) days of the date of delivery of such notice either issue to the Contractor, with a copy to the Employer, a Certificate of Substantial Completion stating the date on which, in his opinion, the Works were substantially completed in accordance with the Contract or give instructions in writing to the Contractor specifying all the work which, in the Engineer's opinion, requires to be done by the Contractor before the issuance of such Certificate. The Engineer shall also notify the Contractor of any defects in the Works affecting substantial completion that may appear after such instructions and before completion of the work specified therein. The Contractor shall be entitled to receive such Certificate of Substantial Completion within twenty-one (21) days of completion, to the satisfaction of the Engineer, of the work so specified and making good any defect so notified. Upon issuance of the Certificate of Substantial Completion of the Works, the Contractor shall be deemed to have undertaken to complete with due expedition any outstanding work during the Defects Liability Period.

46.2 Substantial Completion of Sections or Parts of the Works

In accordance with the procedure in Sub-Clause (1) of this Clause and on the same conditions as provided therein, the Contractor may request the Engineer to issue, and the Engineer may issue, a Certificate of Substantial Completion in respect of any Section or part of the Works which has been substantially completed and has satisfactorily passed any tests on completion prescribed by the Contract, if:

- a) a separate time for completion is provided in the Contract in respect of such Section or part of the Works;
- b) such Section or part of the Works has been completed to the satisfaction of the Engineer and is required by the Employer for his occupation or use.

Upon the issuance of such Certificate, the Contractor shall be deemed to have undertaken to complete any outstanding work during the Defects Liability Period.

47. DEFECTS LIABILITY

47.1 Defects Liability Period

The expression "Defects Liability Period" shall mean the period of twelve (12) months, calculated from the date of completion of the Works stated in the Certificate of Substantial Completion issued by the Engineer or, in respect of any Section or part of the Works for which a separate Certificate of Substantial Completion has been issued, from the date of completion of that Section or part as stated in the relevant Certificate. The expression "the Works" shall, in respect of the Defects Liability Period, be construed accordingly.

47.2 Completion of Outstanding Work and Remedying of Defects

During the Defects Liability Period, the Contractor shall finish the work, if any, outstanding at the date of the Certificate of Substantial Completion, and shall execute all such work of repair, amendment, reconstruction, rectification and making good defects, imperfections, shrinkages or

other faults as may be required of the Contractor in writing by the Engineer during the Defects Liability Period and within fourteen (14) days after its expiration, as a result of an inspection made by or on behalf of the Engineer prior to expiration of the Defects Liability Period.

47.3 Cost of Execution of Work of Repair, etc.

All such outstanding work shall be carried out by the Contractor at his own expense if the necessity thereof shall, in the opinion of the Engineer, be due to the use of material or workmanship not in accordance with the Contract, or to neglect or failure on the part of the Contractor to comply with any obligation expressed or implied, on the Contractor's part under the Contract.

47.4 Remedy on Contractor's Failure to Carry Out Work Required

If the Contractor fails to do any such work outstanding on the Works, the Employer shall be entitled to employ and pay other persons to carry out the same, and all expenses consequent thereon or incidental thereto shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or which may become due to the Contractor.

47.5 Certificate of Final Completion

Upon satisfactory completion of the work outstanding on the Works, the Engineer shall within twenty eight (28) days of the expiration of the Defects Liability period issue a Certificate of Final Completion to the Contractor. The Contract shall be deemed to be completed upon issuance of such Certificate, provided that the provisions of the Contract which remain unperformed and the Settlement of Disputes provision in the Contract shall remain in force for as long as is necessary to dispose of any outstanding matters or issues between the Parties.

48. ALTERATIONS, ADDITIONS AND OMISSIONS

48.1 Variations

The Engineer may within his powers introduce any variations to the form, type or quality of the Works or any part thereof which he considers necessary and for that purpose or if for any other reasons it shall, in his opinion be desirable, he shall have power to order the Contractor to do and the Contractor shall do any of the following:

- (a) increase or decrease the quantity of any work under the Contract;
- (b) omit any such work;
- (c) change the character or quality or kind of any such work;
- (d) change the levels, lines, positions and dimensions of any part of the Works;
- (e) execute additional work of any kind necessary for the completion of the Works, and no such variation shall in any way vitiate or invalidate the Contract.

48.2 Variations Increasing Cost of Contract or altering the Works.

The Engineer shall, however, obtain the written approval of the Employer before giving any order for any variations which may result in an increase of the Contract Price or in an essential alteration of the quantity, quality or character of the Works.

48.3 Orders for Variations to be in Writing

No variations shall be made by the Contractor without an order in writing from the Engineer. Variations requiring the written approval of the Employer under paragraph (2) of this Clause shall be made by the Contractor only upon written order from the Engineer accompanied by a copy of the Employer's approval. Provided that, subject to the provisions of the Contract, no order in writing shall be required for any increase or decrease in the quantity of any work where such increase or decrease is not the result of an order given under this Clause but is the result of the quantities exceeding or being less than those stated in the Bill of Quantities.

48.4 Valuation of Variations

The Engineer shall estimate to the Employer the amount to be added or deducted from the Contract Price in respect of any variation, addition or omission. In the case of any variation, addition or omission which may result in an increase of the Contract Price, the Engineer shall communicate such estimate to the Employer together with his request for the Employer's written approval of such variation, addition or omission. The value of any variation, addition or omission shall be calculated on the basis of the unit prices contained in the Bill of Quantities.

49. PLANT, TEMPORARY WORKS AND MATERIALS

49.1 Plant, etc., Exclusive Use for the Works

All Constructional Plant, Temporary Works and Materials provided by the Contractor shall, when brought on the Site, be deemed to be exclusively intended for the construction and completion of the Works and the Contractor shall not remove the same or any part thereof (save for the purpose of moving it from one part of the Site to another) without the consent in writing of the Engineer which shall not be unreasonably withheld.

49.2 Removal of Plant, etc.

Upon completion of the Works the Contractor shall remove from the Site all the said Constructional Plant and Temporary Works remaining thereon and any unused materials provided by the Contractor shall be deposited in a location approved by the local authorities.

49.3 Employer not liable for Damage to Plant

The Employer shall not be at any time liable for the loss of any of the said Constructional plant, Temporary Works or Materials save if such loss results from the act or neglect of the Employer, its employees or agents.

49.4 Ownership of paid material and work

All material and work covered by payments made by the Employer to the Contractor shall thereupon become the sole property of the Employer, but this provision shall not be construed as relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work or as waiving the right of the Employer to require the fulfilment of all of the terms of the Contract.

49.5 Equipment and supplies furnished by Employer

Title to any equipment and supplies which may be furnished by the Employer shall rest with the Employer and any such equipment and supplies shall be returned to the Employer at the conclusion of the Contract or when no longer needed by the Contractor. Such equipment when returned to the Employer, shall be in the same condition as when delivered to the Contractor, subject to normal wear and tear.

50. APPROVAL OF MATERIALS ETC., NOT IMPLIED

The operation of Clause 49 hereof shall not be deemed to imply any approval by the Engineer of the materials or other matters referred to therein nor shall it prevent the rejection of any such materials at any time by the Engineer.

51. MEASUREMENT OF WORKS

The Engineer shall, when he requires any part or parts of the Works to be measured, give notice to the Contractor or the Contractor's authorized agent or representative who shall forthwith attend or send a qualified agent to assist the Engineer in making such measurement and shall furnish all particulars required by either of them. Should the Contractor not attend or neglect or omit to send such agent, then the measurement made by the Engineer or approved by him shall be taken to be the correct measurement of the work. The purpose of measuring is to ascertain the volume of work executed by the Contractor and therefore determine the amount of the monthly payments.

52. LIABILITY OF THE PARTIES

52.1 The Works shall not be considered as completed until a Certificate of Final Completion shall have been signed by the Engineer and delivered to the Employer stating that the Works have been completed and that the Contractor has fulfilled all his obligations under Clause 47 to his satisfaction.

52.2 The Employer shall not be liable to the Contractor for any matter arising out of or in connection with the Contract or the execution of the Works unless the Contractor shall have made a claim in writing in respect thereof before the giving of the Certificate of Final Completion and in accordance with the Contract.

52.3 Unfulfilled Obligations

Notwithstanding the issue of the Certificate of Final Completion, the Contractor shall remain liable for the fulfillment of any obligation incurred under the provisions of the Contract prior to the issuance of the Certificate of Final Completion and which remains unperformed at the time such Certificate is issued. For the purpose of determining the nature and extent of any such obligation the Contract shall be deemed to remain in force between the parties hereto.

52.4 Contractor Responsible

Notwithstanding any other provisions in the Contract documents, the Contractor shall be totally responsible for and shall bear any and all risks of loss or damage to or failure of the Works or any part thereof for a period of three years after issuance of the Certificate of Final Completion, provided always that such risks, damage or failure result from acts, defaults and negligence of the Contractor, his agents, employees or workmen and such contractors.

53. AUTHORITIES

53.1 The Employer shall have the right to enter upon the Site and expel the Contractor therefrom without thereby voiding the Contract or releasing the Contractor from any of his obligations or liabilities under the Contract or affecting the rights and powers conferred on the Employer and the Engineer by the Contract in any of the following cases:

- (a) If the Contractor is declared bankrupt or claims bankruptcy or court protection against his creditors or if the Contractor is a company or member of a company which was dissolved by legal action;
- (b) If the Contractor makes arrangements with his creditors or agrees to carry out the Contract under an inspection committee of his creditors;
- (c) If the Contractor withdraws from the Works or assigns the Contract to others in whole or in part without the Employer's prior written approval;
- (d) If the Contractor fails to commence the Works or shows insufficient progress to the extent which in the opinion of the Engineer will not enable him to meet the target completion date of the Works;
- (e) If the Contractor suspends the progress of the Works without due cause for fifteen (15) days after receiving from the Engineer written notice to proceed;
- (f) If the Contractor fails to comply with any of the Contract conditions or fails to fulfil his obligations and does not remedy the cause of his failure within fifteen (15) days after being notified to do so in writing;
- (g) If the Contractor is not executing the work in accordance with standards of workmanship specified in the Contract;
- (h) If the Contractor gives or promises to give a present or loan or reward to any employee of the Employer or of the Engineer.

Then the Employer may himself complete the Works or may employ any other contractor to complete the Works and the Employer or such other contractor may use for such completion so much of Constructional Plant, Temporary Works and Materials, which have been deemed to be reserved exclusively for the construction and completion of the Works under the provision of the Contract as he or they may think proper and the Employer may at any time sell any of the said Constructional Plant, Temporary Works and unused materials and apply the proceeds of sale in or towards the satisfaction of any sums due or which may become due to him from the Contractor under the Contract.

53.2 Evaluation after Re-entry

The Engineer shall as soon as may be practicable after any such entry and expulsion by the Employer notify the Contractor to attend the necessary evaluation of the Works. In the event that for any reason the Contractor does not attend such evaluation the Engineer shall undertake the said evaluation in the absence of the Contractor and shall issue a certificate stating the sum, if any, due to the Contractor for work done in accordance with the Contract up to the time of entry and expulsion by the Employer which has been reasonably accumulated to the Contractor in respect of the Works he has executed in such case in accordance with the Contract. The Engineer shall indicate the value of the materials whether unused or partially used and the value of construction equipment and any part of the Temporary Works.

53.3 Payment after Re-entry

If the Employer shall enter and expel the Contractor under this Clause he shall not be liable to pay the Contractor any money on account of the Contract until the expiration of the Defects Liability Period, and thereafter until the costs of completion and making good any defects of the Works, damages for delay in completion (if any), and all other expenses incurred by the Employer have been ascertained and their amount certified by the Engineer.

The Contractor shall then be entitled to receive only such sum or sums (if any) as the Engineer may certify would have been due to him upon due completion by him after deducting the said amount. But if such amount shall exceed the sum which would have been payable to the Contractor on due completion by him, then the Contractor shall upon demand pay to the Employer the amount of such excess. The Employer in such case may recover this amount from any money due to the Contractor from the Employer without the need to resort to legal procedures.

54. URGENT REPAIRS

If by reason of any accident or failure or other event occurring to, in or in connection with the Works or any part thereof either during the execution of the Works or during the Defects Liability Period any remedial or other work or repair shall in the opinion of the Engineer be urgently necessary for security and the Contractor is unable or unwilling at once to do such work or repair, the Employer may by his own or other workmen do such work or repair as the Engineer may consider necessary. If the work or repair so done by the Employer is work which in the opinion of the Engineer the Contractor was liable to do at his own expense under the Contract, all costs and charges properly incurred by the Employer in so doing shall on demand be paid by the Contractor to the Employer or may be deducted by the Employer from any monies due or which may become due to the Contractor provided always that the Engineer shall as soon after the occurrence of any such emergency as may be reasonably practicable notify the Contractor thereof in writing.

55. INCREASE AND DECREASE OF COSTS

Except if otherwise provided by the Contract, no adjustment of the Contract Price shall be made in respect of fluctuations of market, prices of labour, materials, plant or equipment, neither due to fluctuation in exchange rates, interest rates nor devaluation or any other matters affecting the Works.

56. TAXATION

The Contractor shall be responsible for the payment of all charges and taxes in respect of income including value added tax, all in accordance with and subject to the provisions of the income tax laws and regulations in force and all amendments thereto. It is the Contractor's responsibility to make all the necessary inquiries in this respect and he shall be deemed to have satisfied himself regarding the application of all relevant tax laws.

57. BLASTING

The Contractor shall not use any explosives without the written permission of the Engineer who shall require that the Contractor has complied in full with the regulations in force regarding the use of explosives. However, the Contractor, before applying to obtain these explosives, has to provide well arranged storage facilities. The Engineer's approval or refusal to permit the use of explosives shall not constitute ground for claims by the Contractor.

58. MACHINERY

The Contractor shall be responsible for coordinating the manufacture, delivery, erection and commissioning of plant machinery and equipment which are to form a part of the Works. He shall place all necessary orders as soon as possible after the signing of the Contract. These orders and their acceptance shall be produced to the Engineer on request. The Contractor shall also be responsible for ensuring that all sub-contractors adhere to such programs as are agreed and are needed to ensure completion of the Works within the period for completion. Should any sub-contracted works be delayed, the Contractor shall initiate the necessary action to speed up such completion. This shall not prejudice the Employer's right to exercise his remedies for delay in accordance with the Contract.

59. TEMPORARY WORKS AND REINSTATEMENT

The Contractor shall provide and maintain all temporary roads and tracks necessary for movement of plant and materials and clear same away at completion and make good all works damaged or disturbed. The Contractor shall submit drawings and full particulars of all Temporary Works to the Engineer before commencing same. The Engineer may require modifications to be made if he considers them to be insufficient and the Contractor shall give effect to such modifications but shall not be relieved of his responsibilities. The Contractor shall provide and maintain weather-proof sheds for storage of material pertinent to the Works both for his own use and for the use of the Employer and clear same away at the completion of the Works. The Contractor shall divert as required, at his own cost and subject to the approval of the Engineer, all public utilities encountered during the progress of the Works, except those Generally indicated on the drawings as being included in the Contract. Where diversions of services are not required in connection with the Works, the Contractor shall uphold, maintain and keep the same in working order in existing locations. The Contractor shall make good, at his own expense, all damage to telephone, telegraph and electric cable or wires, sewers, water or other pipes and other services, except where the Public Authority or Private Party owning or responsible for the same elects to make good the damage. The costs incurred in so doing shall be paid by the Contractor to the Public Authority or Private Party on demand.

60. PHOTOGRAPHS AND ADVERTISING

The Contractor shall not publish any photographs of the Works or allow the Works to be used in any form of advertising whatsoever without the prior approval in writing from the Employer.

61. PREVENTION OF CORRUPTION

The Employer shall be entitled to cancel the Contract and to recover from the Contractor the amount of any loss resulting from such cancellation, if the Contractor has offered or given any person any gift or consideration of any kind as an inducement or reward for doing or intending to do any action in relation to the obtaining or the execution of the Contract or any other contract with the Employer or for showing or intending to show favour or disfavour to any person in relation to the Contract or any other contract with the Employer, if the like acts shall have been done by any persons employed by him or acting on his behalf whether with or without the knowledge of the Contractor in relation to this or any other Contract with the Employer.

62. DATE FALLING ON HOLIDAY

Where under the terms of the Contract any act is to be done or any period is to expire upon a certain day and that day or that period fall on a day of rest or recognized holiday, the Contract shall

have effect as if the act were to be done or the period to expire upon the working day following such day.

63. NOTICES

63.1 Unless otherwise expressly specified, any notice, consent, approval, certificate or determination by any person for which provision is made in the Contract Documents shall be in writing. Any such notice, consent, approval, certificate or determination to be given or made by the Employer, the Contractor or the Engineer shall not be unreasonably withheld or delayed.

63.2 Any notice, certificate or instruction to be given to the Contractor by the Engineer or the Employer under the terms of the Contract shall be sent by post, cable, telex or facsimile at the Contractor's principal place of business specified in the Contract or such other address as the Contractor shall nominate in writing for that purpose, or by delivering the same at the said address against an authorized signature certifying the receipt.

63.3 Any notice to be given to the Employer under the terms of the Contract shall be sent by post, cable, telex or facsimile at the Employer's address specified in the Contract, or by delivering the same at the said address against an authorized signature certifying the receipt.

63.4 Any notice to be given to the Engineer under the terms of this Contract shall be sent by post, cable, electronic mails or facsimile at the Engineer's address specified in the Contract, or by delivering the same at the said address against an authorized signature certifying the receipt.

64. LANGUAGE, WEIGHTS AND MEASURES

Except as may be otherwise specified in the Contract, English shall be used by the Contractor in all written communications to the Employer or the Engineer with respect to the services to be rendered and with respect to all documents procured or prepared by the Contractor pertaining to the Works. The metric system of weights and measures shall be used in all instances.

65. RECORDS, ACCOUNTS, INFORMATION AND AUDIT

The Contractor shall maintain accurate and systematic records and accounts in respect of the work performed under this Contract.

The Contractor shall furnish, compile or make available at all times to the UNESCO any records or information, oral or written, which the UNESCO may reasonably request in respect of the Works or the Contractor's performance thereof.

The Contractor shall allow the UNESCO or its authorized agents to inspect and audit such records or information upon reasonable notice.

66. FORCE MAJEURE

Force majeure as used herein means Acts of God, natural disasters, war (whether declared or not), invasion, revolution, insurrection or other acts or events of a similar nature or force.

In the event of and as soon as possible after the occurrence of any cause constituting force majeure, the Contractor shall give notice and full particulars in writing to the UNESCO and to the Engineer of such force majeure if the Contractor is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under this Contract. Subject to acceptance by the UNESCO of the existence of such force majeure, which acceptance shall not be unreasonably withheld, the following provisions shall apply:

- (a) The term of this Contract shall be extended for a period equal to the period of suspension taking however into account any General condition which may cause the additional time for completion of the Works to be different from the period of suspension;
- (b) If the Contractor is rendered permanently unable, wholly or in part, by reason of force majeure, to perform his obligations and meet his responsibilities under the Contract, the UNESCO shall have the right to terminate the Contract on the same terms and conditions as provided for in Clause 68 of these General Conditions, except that the period of notice shall be seven (7) days instead of fourteen (14) days, and
- (c) For the purpose of the preceding sub-paragraph, the UNESCO may consider the Contractor permanently unable to perform in case of any suspension period of more than ninety (90) days.

67. SUSPENSION BY THE UNESCO

The UNESCO may by written notice to the Contractor suspend for a specified period, in whole or in part, payments to the Contractor and/or the Contractor's obligation to continue to perform the Works under this Contract, if in the UNESCO's sole discretion:

- (a) any conditions arise which interfere, or threaten to interfere with the successful execution of the Works or the accomplishment of the purpose thereof, or the Contractor shall have failed, in whole or in part, to perform any of the terms and conditions of this Contract.
- (b) After suspension under sub-paragraph (a) above, the Contractor shall be entitled to reimbursement by the UNESCO of such costs as shall have been duly incurred in accordance with this Contract prior to the commencement of the period of such suspension.

The term of this Contract may be extended by the UNESCO for a period equal to any period of suspension, taking into account any General conditions which may cause the additional time for completion of the Works to be different from the period of suspension.

68. TERMINATION BY THE UNESCO

The UNESCO may, notwithstanding any suspension under Clause 67 above, terminate this Contract for cause or convenience in the interest of the UNESCO upon not less than fourteen (14) days written notice to the Contractor.

Upon termination of this Contract:

- (a) The Contractor shall take immediate steps to terminate his performance of the Contract in a prompt and orderly manner and to reduce losses and to keep further expenditures to a minimum, and
- (b) The Contractor shall be entitled (unless such termination has been occasioned by the Contractor's breach of this Contract), to be paid for the part of the Works satisfactorily completed and for the materials and equipment properly delivered to the Site as of the date of termination for incorporation to the Works, plus substantiated costs resulting from commitments entered into prior to the date of termination as well as any reasonable substantiated direct costs incurred by the Contractor as a result of the termination, but shall not be entitled to receive any other or further payment or damages.

69. TERMINATION BY THE CONTRACTOR

In the case of any alleged breach by the UNESCO of the Contract or in any other situation which the Contractor reasonably considers to entitle him to terminate his performance of the Contract, the Contractor shall promptly give written notice to the UNESCO detailing the nature and the circumstances of the breach or other situation. Upon acknowledgement in writing by the UNESCO of the existence of such breach and the UNESCO's inability to remedy it, or upon failure of the UNESCO to respond to such notice within twenty (20) days of receipt thereof, the Contractor shall be entitled to terminate this Contract by giving 30 days written notice thereof. In the event of disagreement between the Parties as to the existence of such breach or other situation referred to above, the matter shall be resolved in accordance with Clause 71 of these General Conditions. Upon termination of this Contract under this Clause the provisions of sub-paragraph (b) of Clause 68 hereof shall apply.

70. RIGHTS AND REMEDIES OF THE UNESCO

Nothing in or relating to this Contract shall be deemed to prejudice or constitute a waiver of any other rights or remedies of the UNESCO.

The UNESCO shall not be liable for any consequences of, or claim based upon, any act or omission on the part of the Government.

71. SETTLEMENT OF DISPUTES

In the case of any claim, controversy or dispute arising out of, or in connection with this Contract or any breach thereof, the following procedure for resolution of such claim, controversy or dispute shall apply.

71.1 Notification

The aggrieved party shall immediately notify the other party in writing of the nature of the alleged claim, controversy or dispute, not later than seven (7) days from awareness of the existence thereof.

71.2 Consultation

On receipt of the notification provided above, the representatives of the Parties shall start consultations with a view to reaching an amicable resolution of the claim, controversy or dispute without causing interruption of the Works.

71.3 Conciliation

Where the representatives of the Parties are unable to reach such an amicable settlement, either party may request the submission of the matter to conciliation in accordance with the UNCITRAL Rules of Conciliation then obtaining.

71.4 Arbitration

Any claim, controversy or dispute which is not settled as provided under clauses 71.1 through 3 above shall be referred to arbitration in accordance with the UNCITRAL Arbitration Rules then obtaining. The Parties shall be bound by the arbitration award rendered in accordance with such arbitration as the final adjudication of any such controversy or claim.

72. PRIVILEGES AND IMMUNITIES

Nothing in or relating to this Contract shall be deemed a waiver of any of the privileges and immunities of the United Nations of which the UNESCO is an integral part.

73. CHILD EMPLOYMENT

The Contractor represents and warrants that neither it, nor any of its suppliers is engaged in any practice inconsistent with the rights set forth in the Convention on the Rights of the Child, including Article 32 thereof, which, inter-alia, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical mental, spiritual, moral or social development.

Any breach of this representation and warranty shall entitle UNESCO to terminate this Contract immediately upon notice to the Contractor, at no cost to UNESCO.

74. MINES

The Contractor represents and warrants that neither it nor any of its suppliers is actively and directly engaged in patent activities, development, assembly, production, trade or manufacture of mines or in such activities in respect of components primarily utilized in the manufacture of Mines. The term "Mines" means those devices defined in Article 2, Paragraphs 1, 4 and 5 of Protocol II annexed to the Convention on Prohibitions and Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects of 1980.

75. SECURITY

The responsibility for the safety and security of the Contractor and its personnel and property, and of UNESCO property in the Contractor's custody, rests with the Contractor. The Contractor shall:

- (a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the services are being provided;
- (b) assume all risks and liabilities related to the Contractor's security, and the full implementation of the security plan. UNESCO reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this contract. Notwithstanding the foregoing, the Contractor shall remain solely responsible for the security of its personnel and for UNESCO property in its custody.

76. ANTI-TERRORISM

The Contractor agrees to undertake all reasonable efforts to ensure that none of the UNESCO funds received under this Contract are used to provide support to individuals or entities subject to sanctions measures imposed by the Security Council and that the recipients of any amounts provided by UNESCO hereunder do not appear on the Consolidated United Nations Security Council Sanctions List, including the UN Security Council Resolution 1267 (1989). The list can be accessed via <https://www.un.org/sc/suborg/en/sanctions/un-sc-consolidated-list>. This provision must be included in all sub-contracts or sub-agreements entered into under this Contract.

ANNEX XI – Special Contract Conditions

The following Special Conditions shall complement, supplement, or amend Section VIII - General Terms and Conditions. Whenever there is a conflict, the provisions herein shall prevail over those in the General Terms and Conditions.

Warranty/Guarantee		
<input checked="" type="checkbox"/> Applies <input type="checkbox"/> Does not apply		According to clause 47 of the of the General Conditions, the defects liability period will be applicable for the period of 12 months calculated from the date of completion of the Works stated in the Certificate of Substantial Completion. The Contractor shall finish the work, if any, outstanding at the date of the Certificate of Substantial Completion, and if any defects are discovered or arise during this period and shall execute all such work of repair at his own expense.
Liquidated damages		
<input checked="" type="checkbox"/> Applies <input type="checkbox"/> Does not apply		According to Clause 45 of the General Conditions, the liquidated damages for delay shall be 0.35% of the price of the Contract per Calendar Day of delay, up to a maximum of 10% of the final price of the Contract.
Performance Guarantee		
<input checked="" type="checkbox"/> Applies <input type="checkbox"/> Does not apply		The Performance Guarantee referred to in Clause 10 of the General Conditions shall be submitted by the Contractor for an amount of 10% (Ten Percent) of the Contract Amount. The performance guarantee should be valid for a period of 12 months after completions of works.
Liability Insurance		
<input checked="" type="checkbox"/> Applies <input type="checkbox"/> Does not apply		The liability insurance referred to in Clause 23 of the General Conditions shall be taken out by the Contractor for an amount of The Contract Value plus 10% with a maximum deductible of 10% (ten percent) .
Mobilization Period		
<input checked="" type="checkbox"/> Applies <input type="checkbox"/> Does not apply		The Contractor shall commence work within 45 (Forty Five) days from the date on which he shall have been given access to the Site and received the notice to commence from the Engineer.
Completion Period		
<input checked="" type="checkbox"/> Applies <input type="checkbox"/> Does not apply		The Contractor shall perform and substantially complete the Works 16 (Sixteen) Months after Commencement , in accordance with the Contract. The Contractor shall provide all material, supplies, labour and other services necessary to that end.
Special Payment Conditions		
<input checked="" type="checkbox"/> Applies <input type="checkbox"/> Does not apply		<ol style="list-style-type: none"> 1 The final price of the Contract will be determined on the basis of the actual quantities of work and materials utilized in the complete and satisfactory performance of the Works as certified by the Engineer and the unit prices contained in the Contractor's financial proposal. Such unit prices are fixed and are not subject to any variation whatsoever. 2 If the Contractor foresees that the final price of the Contract may exceed the total estimated price contained in the Total Bid Price as per the Price Schedule Form above, he shall so inform the Engineer without delay, in order for UNESCO to decide, at its discretion, to increase the estimated price of the Contract as a result of a larger quantity of work/material or to reduce the quantity of work to be performed or materials to be used. UNESCO shall not be responsible for payment of any amount in excess of that stipulated in the Total Bid Price as per the Price Schedule Form above unless this latter amount has been

increased by means of a written amendment in writing between both parties duly signed by the authorized representatives of the Contractor and UNESCO.

- 3 The Contractor shall submit an invoice for up to **20% (Twenty Percent) of the Contract Amount Plus VAT (IVA)**, for an **Advance Payment**, if requested, upon signature of this Contract by both parties, and invoices for the work performed and materials utilized **not later than the 25th day of each month**, and a final invoice within 30 days from the issuance of the Certificate of Substantial Completion by the Engineer.
- 4 UNESCO shall effect payment of the invoices **30 (thirty) days** after receipt of the certificate of payment issued by the Engineer, approving the amount contained in the invoice. The Engineer may make corrections to that amount, in which case UNESCO may effect payment for the amount so corrected. The Engineer may also withhold invoices if the work is not performed at any time in accordance with the terms of the Contract or if the necessary insurance policies or performance security are not valid and/or in order. The Engineer shall process the invoices submitted by the Contractor within 15 days of their receipt.
- 5 Payments effected by UNESCO to the Contractor shall be deemed neither to relieve the Contractor of its obligations under the Contract nor as acceptance by UNESCO of the Contractor's performance of the Works.
- 6 Payment of the final invoice shall be effected by UNESCO after issuance of the Certificate of Final Completion by the Engineer.
- 7 The amount to be retained and paid into a retention fund from each payment will be 10% (ten percent) to a total of 5% of the contract value. 50% of the retention monies will be released upon the issuance of the Certificate of Substantial Completion and the balance at the end of the defects liability period.
- 8 Any request for advance payment, if necessary, shall be made upon signature of the contract by both parties and is subject to receipt and acceptance by UNESCO of a bank guarantee for the full amount of the advance payment issued by a Bank in **Philippines** and in a form acceptable to UNESCO.
- 9 The amounts of the payments referred to under section 5 above shall be subject to a deduction of **20% (Twenty Percent)** of the amount accepted for payment until the cumulative amount of the deductions so effected shall equal the amount of the advance payment. Should the cumulative amount of the deductions so made be lower than the amount of the advance payment after the date of substantial completion of the Works, UNESCO may deduct the amount equal to the difference between the advance payment and the cumulative deductions from the payments due after substantial completion or may recover such amount from the bank guarantee referred to in 8 above.
- 10 The Contingency amount as allowed for in the Price Schedule shall be used at the discretion of the Engineer, and duly authorized by UNESCO, according to clause 48 of the of the General Conditions, and the works shall be measured according to the rate contained into the priced Bills of Quantities.

Compliance with any other condition(s) required?

Applies

Does not apply

To follow the national and local construction standard, regulation and requirements

ANNEX XII – Models for Security Forms (if applicable)

Samples of acceptable forms of Bid, Performance, and Advance Payment Securities are provided in this Section XII. Bidders shall not complete the Performance and Advance Payment Security forms at this stage of the procurement process. Only the successful Bidder shall be required to provide these two securities

1. BID SECURITY FORM (BANK GUARANTEE)

*[the **Bank/Bidder** shall fill in this Bank Guarantee form in accordance with the instructions indicated in brackets.]*

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

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

Date: _____

BID GUARANTEE No.: _____

We have been informed that *[name of the Bidder]* (hereinafter called "the Bidder") has submitted to you its bid dated (hereinafter called "the Bid") for the execution of *[name of contract]* under Invitation for Bids No. *[IFB number]* ("the IFB").

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.

At the request of the Bidder, we *[name of Bank]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *[amount in figures]* (*[amount in words]*) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

- (a) has withdrawn its Bid during the period of bid validity specified by the Bidder in the Form of Bid; or
- (b) having been notified of the acceptance of its Bid by the Employer during the period of bid validity, (i) fails or refuses to execute the Contract Form, if required, or (ii) fails or refuses to furnish the performance security, in accordance with the Instructions to Bidders.

This guarantee will expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the contract signed by the Bidder and the performance security issued to you upon the instruction of the Bidder; or (b) if the Bidder is not the successful bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder of the name of the successful bidder; or (ii) twenty-eight days after the expiration of the Bidder's Bid.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758.

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

2. PERFORMANCE BANK GUARANTEE (Unconditional)

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

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

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

Date: *[insert date]*

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

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

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

At the request of the Contractor, we *[insert name of Bank]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *[insert amount in figures]* (*[insert amount in words]*),¹ such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire no later than twenty-eight days from the date of issuance of the Taking-Over Certificate, calculated based on a copy of such Certificate which shall be provided to us, or on the *[insert number day of [insert month], [insert year],*² whichever occurs first. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date. This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758, except that subparagraph (ii) of Sub-article 15(a) is hereby excluded.

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

¹ The Guarantor (bank) shall insert an amount representing the percentage of the Contract Price specified in the Contract and denominated either in the currency(ies) of the Contract or a freely convertible currency acceptable to the Employer.

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

3. BANK GUARANTEE FOR ADVANCE PAYMENT

The **bank/successful bidder** providing the Guarantee shall fill in this form in accordance with the instructions indicated in brackets, if an Advance Payment is to be provided under the Contract.

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

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

Date: *[insert date]*

ADVANCE PAYMENT GUARANTEE No.: *[insert number]*

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

Furthermore, we understand that, according to the conditions of the Contract, an advance payment is to be made against an advance payment guarantee in the sum or sums indicated below.

At the request of the Contractor, we *[insert name of Bank]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *[insert amount in figures]* (*[insert amount in words]*)³ upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor used the Advance Payment for purposes other than the costs of mobilization in respect of the Works.

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

The maximum amount of this guarantee shall be progressively reduced by the amount of the Advance Payment repaid by the Contractor as indicated in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the Interim Payment Certificate indicating that eighty (80) percent of the Contract Price has been certified for payment, or on the *[insert number]* day of *[insert month]*, *[insert year]*,⁴ whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

OR alternative

This guarantee shall remain in full effect from the date of the advance payment under the contract until UNESCO recovers full payment of the same amount from the contractor / this guarantee shall expire on the *[insert number]* day of *[insert month]*, *[insert year]*.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758.

[insert signature(s) of authorized representative(s) of bank]

³ The Guarantor shall insert an amount representing the amount of the Advance Payment and denominated either in the currency(ies) of the Advance Payment as specified in the Contract, or in a freely convertible currency acceptable to the Employer.

⁴ Insert the expected expiration date of the Time For Completion. The Employer should note that in the event of an extension of the Time For Completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "We agree to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Employer's written request for such extension, such request to be presented to us before the expiry of the guarantee."