



REPUBLIC OF LEBANON
**COUNCIL FOR DEVELOPMENT AND
RECONSTRUCTION**

**BRISSA DAM AND RESERVOIR - FULL LINING AND
ADDITIONAL WATER DIVERSION PROJECT**
CAZA OF DANNIYEH

TENDER AND CONTRACT DOCUMENTS
VOLUME I

BIDDING PROCEDURES
&
CONDITIONS OF CONTRACT

September 2024



DAR AL HANDASAH NAZIH TALEB & PARTNERS
دار الهندسة نزيه طالب وشركاه

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INVITATION FOR BID

Lebanese Republic.

Contract Title: “BRISSA DAM AND RESERVOIR - FULL LINING AND ADDITIONAL WATER DIVERSION PROJECT”

1. The Government of Lebanon has received a loan from the “Kuwait Fund for Arab Economic Development (KFAED)” of the co-operation project and intends to apply part of the funds to cover eligible payments under the Contract for the **BRISSA DAM AND RESERVOIR - FULL LINING AND ADDITIONAL WATER DIVERSION PROJECT**.
2. The Council for Development and Reconstruction (CDR) as executing agency for and on behalf of the Government of Lebanon, and as Employer under the Contract invites sealed bids from eligible bidders for the **BRISSA DAM AND RESERVOIR - FULL LINING AND ADDITIONAL WATER DIVERSION PROJECT**. The project consists of the Full membrane complex installation for the existing dam and reservoir, in addition to the external protection, if required. The project includes also an inflow control system allowing the training of the water courses discharging into the reservoir and the settling of solid deposits in addition to the diversion of additional water system into the reservoir.
3. Eligible bidders shall be Lebanese Contractors and shall also meet the additional qualifying criteria listed below.
4. Bank certificate for access to liquid assets and/or evidence of access to or availability of credit facilities of not less than Two Million Dollars (2,000,000 USD) or equivalent sufficient to meet the construction cash flow for the above contract for a period of six (6) months.
5. Bidders will be post-qualified after submitting all required and necessary information stated in the Tender Documents, and shall satisfy mainly the following:
 - a- Average Annual Turnover in construction works of not less than Ten Million US\$ (10,000,000 US\$) or equivalent over the past Ten (10) years.
 - b- General experience during the last Ten (10) years as a prime Contractor in the construction of civil works projects.
 - c- Particular experience:
 - (i) Within the past Ten (10) years as prime Contractor or joint venture member, who has successfully completed two civil works projects including earthworks, excavation, concrete, ... for a minimum contract value of US\$ 10 (Ten) Million each.
 - (ii) For the above and any other contracts completed within the last 10 years, as prime Contractor or joint venture member, a minimum total waterproofing membrane installation area of 100,000 sq.m.

- d- If the bidder is a joint venture (Maximum number of Partners: two (2)), the lead partner must meet a minimum of 60% of above mentioned conditions (4 & 5a) while the other partner must meet a minimum of 50% of the above mentioned conditions (4 & 5a). Additionally, either partner of the Joint Venture or together, must have successfully completed:
- (i) Within the past ten (10) years, as prime Contractor(s) or a JV member, two civil works projects including earthworks, excavation, concrete, ...for a minimum contract value of US\$ 10 (Ten) Million each.
 - (ii) For the above and any other contracts completed within the past 10 years, as prime Contractor or joint venture member, a minimum total waterproofing membrane installation area of 100,000 sq.m.

All parties of the joint venture shall be liable jointly and severally for the execution of the said works in accordance with the Contract terms, and the lead partner and the other partner must have a minimum of ten years experience in the performance as a prime Contractor in the construction of civil and infrastructure projects.

Specific experience as waterproofing membrane installation subcontractor (if proposed by the bidder), will be considered only if it complies with the qualifying criteria and provided that the sub-contract between main Contractor and subcontractor shows the total value of subcontracted works and a clear definition of the scope of work.

6. Bidders may obtain further information, and inspect and acquire the Tender Documents at the Council for Development and Reconstruction, Legal Affairs Division, Tenders Department, Tallet El Serail, Beirut, Lebanon, during office hours (from 8:00 to 14:00 Beirut Local Time).
7. A complete set of Bidding Documents in English may be purchased at Council for Development and Reconstruction - Tallet El Serail - Beirut, Lebanon, for a non- refundable fee of One Thousand US Dollars (1,000 US\$). The method of payment will be a bank certified cheque in favor of the Council for Development and Reconstruction. The bidding document will be picked up from Tenders Department at the address below.
8. Bids must be delivered to the above office before 12 o'clock, noon, Beirut Local Time on ----- and must be accompanied by a bid security of 350,000 \$ (Three Hundred Fifty Thousand United States Dollars). Bids shall be valid for a period of One Hundred and Eighty (180) days after Bid opening date. Electronic bidding will not be permitted. Late bids will be rejected.
9. Bids will be opened in the presence of bidders' representatives who choose to attend at 12 o'clock, noon, Beirut Local Time at the offices of the:

PART 1 – Bidding Procedures

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Section I. Instructions to Bidders

A. GENERAL

1. SCOPE OF BID

1.1 The Council for Development and Reconstruction, hereinafter called "the Employer", wishes to receive bids for the construction of Works, as described in the Bidding Data Sheet, hereinafter referred to as "the Works".

1.2 The successful bidder will be expected to complete the Works within the time stated in the Contact Data from the date of commencement of the works.

1.3 Throughout these bidding documents, the terms "bid" and "tender" and their derivatives ("bidder/tenderer", "bid/tendered", "bidding/tendering", etc.) are synonymous, and day means calendar day.

2. Source Of Funds

2.1 The source of funds is as stated in the Bidding Data Sheet.

3. Eligible Bidders

3.1 This invitation to bid is open to all eligible Contractors as stated in the Bidding data sheet. Bidders shall provide evidence of their eligibility to the satisfaction of the Employer as requested.

3.2 The bidders, including all members of a Joint venture and all subcontractors shall not be affiliated with a firm or entity:

- (i) that has provided consulting services related to the Works to the Council for Development and Reconstruction during the preparatory stages of the Works or of the Project of which the Works form a part, or
- (ii) that has been hired (or is proposed to be hired) by the Council for Development and Reconstruction as Engineer for the contract.

4. Eligible Materials, Equipment And Plant

4.1 The materials, Plant or Contractor's Equipment, other supplies, and services to be supplied under the Contract, shall have their origin in eligible source countries as defined in the Bidding Data Sheet, and all expenditures made under the Contract will be limited to such materials, Plant or Contractor's Equipment, other supplies, and services.

4.2 For purposes of Sub-Clause 4.1 above, "origin" means the place where the materials, Plant, equipment, and other supplies are mined, grown, produced, or manufactured, and from which the services are supplied.

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5. Qualification Of The Bidder

5.1 To be qualified for award of the Contract, bidders shall provide the following information with their bid.

All certificates should be **originals** or **legally certified copies of the originals** otherwise the bidder's bid will be rejected.

- a) Legally certified copies of original documents defining the constitution or legal status, place of registration and principal place of business;
- b) A written power of attorney authorizing the signatory of the bid to commit the bid;
- c) Receipt for purchase of the bid documents;
- d) Certificate of quittance from the National Social Security Fund. Its validity extending beyond the bid opening date; (For Lebanese Contractors only);
- e) Certificate of quittance from the Lebanese Order of Public Works and Buildings Contractors. Its validity extending beyond the bid opening date; (For Lebanese Contractors only);
- f) Certificate from the Order of Engineers: every Engineer, whether he is a Contractor or an Engineer employed by a company or establishment classified on the basis of his employment thereby, shall enclose in his Bid a certificate confirming his membership to any one of the two Orders of Engineers in Lebanon for the year in which the Bid is submitted; (For Lebanese Contractors only);
- g) Major items of construction equipment proposed for carrying out this Contract (Schedule No.1);
- h) The names and CVs of key personnel proposed for administration and execution of this Contract, both on and off site (Schedule No.2);
- i) Proposals for subcontracting any elements of the Works. Bidders should refer to Sub-Clauses 4.4 of the Conditions of Contract (Schedule No.3);
- j) Manufacturers (Schedule No.4);
- k) Bank certificate for access to liquid assets and/or evidence of access to or availability of credit facilities;
- l) Information regarding any current litigation in which the bidder is involved;
- m) Program of work and method statement in sufficient detail to demonstrate the adequacy of the bidder's proposals to meet the technical specifications and the completion time. No alterations or changes can be made to the specifications;
- n) Contractual Commitment completed, stamped and signed;
- o) Certificate indicating the permanent address of the Bidder;
- p) Certificate of Registration of the Company issued by the Ministry of Finance; (For Lebanese Contractors only);

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- q) Additional documents for qualification of the Bidder are required (refer to the Bidding Data Sheet 5.1).

5.2 EVIDENCE OF QUALIFICATION: The information and documents required under the Sub-Section 5.1 “Qualification of Bidders” shall serve as evidence of qualification and of the Tenderer’s capability to carry out the Contract. Unless specifically listed in the Letter of Acceptance or in the Contract Agreement, these information and documents shall not form a Contract Document, but the Bidder will remain responsible for the validity, authenticity, and correctness of the information provided.

5.3 Bids submitted by a joint venture of two or more firms as partners shall comply with the following requirements:

- a) Only eligible Contractors are allowed to form a joint venture;
- b) Each partner of the joint venture shall include all the information listed in Sub-Clause 5.1 above;
- c) The Joint Venture Agreement shall be in the form of the sample agreement attached and shall be completed, entered into, and signed by the joint venture partners and submitted with the bid;
- d) One of the partners shall be nominated as being in charge; and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners;
- e) The partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture and the entire execution of the Contract including payment shall be done exclusively with the partner in charge;
- f) In case of a successful bid, the Bidders shall sign the Contract Agreement as to be legally binding on all partners. All partners of the Joint venture shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms.

6. One Bid Per Bidder

6.1 A firm shall submit only one bid in the same bidding process, either individually as a bidder or as a partner in a joint venture. No firm can be a subcontractor while submitting a bid individually or as a partner of a joint venture in the same bidding process. A firm, if acting in the capacity of subcontractor in any bid, may participate in more than one bid, but only in that capacity. A bidder who submits or participates in more than one bid will cause all the proposals in which the bidder has participated to be disqualified.

7. Cost Of bidding

7.1 The bidder shall bear all costs associated with the preparation and submission of his bid and the Employer will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bid process.

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8. Site Visit

8.1 The bidder is required at his own risk to visit and examine the Site of Works and its surroundings and obtain for himself on his own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the bidder's own expense.

B. BID DOCUMENTS

9. Content of Bid Documents

9.1 The bid documents are those stated below, and should be read in conjunction with any Addenda issued in accordance with Clause 11:

VOLUME (1/4) – BIDDING PROCEDURES / CONDITIONS OF CONTRACT

VOLUME (2/4) – TECHNICAL SPECIFICATIONS

VOLUME (3/4) – BILL OF QUANTITIES

VOLUME (4/4) – DRAWINGS

9.2 The bidder is expected to examine carefully the contents of all the above documents. Failure to comply with the requirements of bid submission will be at the bidder's own risk. Pursuant to Clause 28, bids which are not substantially responsive to the requirements of the bid documents will be rejected.

9.3 The bidder shall treat the Bid Documents as private and confidential (except as may be necessary for the purpose of bidding) and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere. The Bid Documents shall not be used for any purpose other than that for which they are intended.

10. Clarification of Bid Documents

10.1 A prospective bidder requiring any clarification of the bid documents may notify the Employer in writing delivered by hand or by facsimile at the Employer's address indicated in the Invitation for Bids and/or in the Bidding Data Sheet. The Employer will respond to any request for clarification, which he receives earlier than 14 days prior to the deadline for submission of bids. Copies of the Employer's response will be forwarded to all purchasers of the bid documents, including a description of the inquiry but without identifying its source.

10.2 Except as provided for in this clause no representation, explanation or statement made to a bidder prior to the Employer's written acceptance of his tender whether by the Engineer or any of his assistants or by any officer or member of the Employer's staff or by anyone as to the meaning of any of the documents forming the Contract or as to anything to be done or not to be done by the Contractor shall bind the Employer or fetter or bind the judgment or powers of the Engineer in the exercise by him of his duties under the Contract.

11. Amendment of Bid Documents

11.1 At any time prior to the deadline for submission of bids, the Employer may, for any reason, whether at his own initiative or in response to a clarification requested by a prospective bidder, modify the bid documents by issuing addenda.

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11.2 Any addendum thus issued shall be part of the bid documents pursuant to Sub-Clause 9.1, and shall be communicated in writing or by facsimile to all purchasers of the bid documents. Prospective bidders shall acknowledge receipt of each addendum in writing by hand or facsimile to the Employer.

11.3 To afford prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer shall, if deemed necessary, extend the deadline for submission of bids, in accordance with Clause 22.

C. PREPARATION OF BIDS

12. Language Of Bid

12.1 The bid, and all correspondence and documents related to the bid exchanged by the bidder and the Employer shall be written in the English language. Supporting documents and printed literature furnished by the bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the bid, the translation shall prevail.

13. Complete Bid

13.1 The bid must be for the whole of the Works, fully in accordance with the Bid Documents. A partial bid will be rejected.

13.2 The Form of Bid with its Appendix, the Bill of Quantities, and any other document requiring completion shall be completed. The originals of all Bid Documents, and any copies required to be submitted, shall be completed in indelible ink.

14. Bid Prices

14.1 Unless stated otherwise in the bid documents, the Contract shall be for the whole Works as described in Sub-Clause 1.1, based on the unit rates and prices submitted by the bidder.

14.2 The bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the bidder will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities.

14.3 All duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause, as of the date of the deadline for submission of bids, shall be included in the rates and prices; except for the following local taxes and duties: income tax, stamp duties, and VAT.

Income tax and stamp duties that are figured separately in the BOQ collection sheet (Summary Bill) shall be borne by the Employer.

The custom duties on imported materials that are imbedded in the permanent works shall be paid by the Contractor, unless the Employer has made arrangements for duty and tax exemption.

On the other hand, the Grand Total Tender Price shall include separately sums of income tax, stamp duties and VAT, as shown in Volume 3 – Bill of Quantities - Summary Bill.

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14.4 The Contract is subject to the VAT rules where applicable, according to the terms of the law 379, dated 14/12/2001 amended by Law No. 64 dated 26/10/2017, and according to Appendix 3 related to VAT procedure, unless otherwise instructed in the Bidding Data Sheet.

14.5 The bid shall provide a breakdown of all unit prices contained in the Bills of Quantities:

- a) a breakdown of all unit rates in labor, materials, plant, overhead, profit and other charges.
- b) a breakdown of lump sums items.

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

15. Currencies Of Bid And Payment

15.1 The currencies for the bid and all rates in the Bills of Quantities shall be as stated in the Bidding Data Sheet.

16. Bid Validity

16.1 Bids shall remain valid for a period as stipulated in the Bidding Data Sheet beyond the deadline for submission of bids specified in the invitation to bid.

16.2 In exceptional circumstances, prior to expiry of the original bid validity period, the Employer may request that the bidders extend the period of validity for a specified additional period. The request and the responses thereto shall be made in writing or facsimile. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend the validity of his bid security for the period of the extension, and in compliance with Clause 17 in all respects.

17. Bid Security

17.1 The bidder shall furnish, as part of his bid, a bid security in the amount stated in the Bidding Data Sheet.

17.2 In case of a Joint-Venture the bid security shall be in the name of the Joint-Venture.

17.3 The bid security shall be in the form of a guarantee from a bank located in Lebanon or a foreign bank through its correspondent bank in Lebanon, acceptable to the Employer. The format of the bank guarantee shall be in accordance with the attached sample form of bid security. The bid security shall be valid for the period stated in the Bidding Data Sheet.

17.4 Any bid not accompanied by an acceptable bid security shall be rejected by the Employer and shall be considered as non-responsive.

17.5 The bid securities of unsuccessful bidders will be returned as promptly as possible, but not later than 28 days after the expiration of the period of bid validity.

17.6 The bid security of the successful bidder will be returned when the bidder has signed the Agreement and furnished the required performance security.

17.7 The bid security may be forfeited if:

1. The Bidder withdraws his Bid during the period of bid validity specified in the Form of Bid; or

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2. The Bidder, having been notified of the acceptance of his Bid by the Employer during the period of bid validity:
 - a- fails or refuses to execute the Form of Agreement; or
 - b- fails or refuses to furnish or increase the Performance Security ; or
 - c- refuses to accept the correction of errors in his bid.

18. Alternative Proposals By Bidders

18.1 Bidders shall submit offers that comply with the requirements of the Bid Documents, including the technical design as indicated in the drawings and specifications. Alternatives will not be considered.

19. Pre-Bid Meeting

19.1 The bidder's designated representative may be invited to attend a pre-bid meeting, which, if convened, will take place at the venue and time stipulated in the Bidding Data Sheet.

19.2 The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

19.3 The bidder is requested, as far as possible, to submit any questions in writing or by cable, to reach the Employer not later than one week before the meeting. It may not be practicable at the meeting to answer questions received late, but questions and responses will be transmitted in accordance with the following sub-clause.

19.4 Minutes of the meeting, including the text of the questions raised and the responses given, together with any responses prepared after the meeting, will be transmitted without delay to all purchasers of the bidding documents. Any modification of the bidding documents listed in Sub-Clause 9.1 that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause 11 and not through the minutes of the pre-bid meeting.

19.5 Nonattendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

20. Format And Signing Of Bid

20.1 The bidder shall prepare one original and one copy of the documents comprising the bid. The documents shall be clearly marked "ORIGINAL" and "COPY" as appropriate. In the event of discrepancy between them, the original shall prevail.

20.2 The original and the copy of the bid shall be returned duly completed by writing in indelible ink in the space provided for unit rates and totals. In the case of copies, photocopies are acceptable. All originals and copies shall be signed by a person or persons duly authorized to sign on behalf of the bidder, pursuant to Sub-Clauses 5.1(b) or 5.2(d), as the case may be. All pages of the bid, where entries or amendments have been made, shall be signed by the person or persons signing the bid and stamped.

20.3 The originals of all other documents as listed in Sub-Clause 9.1 shall be stamped and initialed by the person or persons signing the bid.

20.4 The bid shall contain no alterations, omissions or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the bidder. Such corrections shall be initialed by the person or persons signing the bid and shall be made

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by striking out the original text and inserting the correction by hand using indelible ink; the correction of errors by overtyping with or without the use of correction fluid shall not be permitted. Any bid not complying with this sub-clause shall be rejected by the Employer.

20.5 If the bidder does not submit an original BOQ completed in indelible ink according to clause 20.2, his bid will be rejected by the Employer.

D. SUBMISSION OF BIDS

21. Sealing And Marking Of Bids

21.1 documents shall be signed, dated, completed and returned in a bid box package, as described in Bid Conditions and Procedures. The bidder shall obtain the bid box from CDR Tenders Department along with the tender documents. The bidder shall seal the bid box package and address it to:

The Council for Development And Reconstruction
Tenders Department
Tallet Al-Serail, Beirut - Lebanon

And shall mark the bid box package with the following identification:
"Bidding Documents for Brissa Dam And Reservoir - Full Lining and Additional Water Diversion Project"
and the words "Do Not Open before the date stated for the return of bid"

21.2 The bid box package shall contain two separate and sealed inner envelopes marked as Envelope No.1 and Envelope No.2. Each envelope shall contain one set of original documents and one set of copies clearly marked "ORIGINAL" and "COPY".

The inner Envelope No.1 shall bear the following clear identification:
"Bidding Documents for *Brissa Dam And Reservoir - Full Lining and Additional Water Diversion Project*"
Envelope No.1 "Administrative and Technical Offer"
Name of Bidder / Address of the Bidder

And shall contain:

- Bid security in the amount and form requested in the Bid Conditions & Procedures
- Completed Contractual Commitment signed and stamped by the Bidder
- Completed Joint Venture Agreement (if applicable), signed and stamped by the Bidders
- All information listed in Section 5: Qualification of the Bidder
- Volume 1: Bidding Procedures & Conditions of Contract, signed and stamped by the Bidder
- Volume 2: Technical Specifications, signed and stamped by the Bidder
- Volume 4: Drawings, signed and stamped by the Bidder (only original drawings are to be submitted)
- Any addenda issued by the CDR, signed and stamped by the Bidder
- Any other documents required to be completed and submitted by bidders in accordance with these Instructions to Bidders

The inner Envelope No.2 shall bear the following clear identification:
"Bidding Documents for *Brissa Dam And Reservoir - Full Lining and Additional Water Diversion Project*"
Envelope No.2 "Financial Offer"

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Name of Bidder / Address of the Bidder

And shall contain:

- Completed Form of Bid and Appendix signed and stamped by the Bidder
- Volume 3: Priced Bill of Quantities completed, signed and stamped by the Bidder
- A complete breakdown of Bill Of Quantities prices detailed to include:
 - labour,
 - materials,
 - plant,
 - overheads,
 - profit,
 - and other charges

22. Deadline For Submission Of Bids

22.1 Bids must be received by the Employer at the address specified above no later than the time and date given in the Invitation for Bidders.

22.2 The Employer may, at his discretion, extend the deadline for submission of bids by issuing an amendment in accordance with Clause 11, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

23. Late Bids

23.1 Any bid received by the Employer after the deadline for submission of bids prescribed in Clause 22 will be returned unopened to the bidder.

24. Modification And Withdrawal Of Bids

24.1 The bidder may modify or withdraw his bid after bid submission, provided that written notice of the modification or withdrawal, is received by the Employer prior to the deadline for submission of bids.

24.2 The bidder's modification or withdrawal notice shall be prepared, sealed, marked and delivered in accordance with the provisions of Clause 21, with the outer and inner envelopes additionally marked "MODIFICATION" or "WITHDRAWAL".

24.3 No bid may be modified by the bidder after the deadline for submission.

24.4 Withdrawal of a bid during the interval between the deadline for submission of bids and the expiration of the period of bid validity specified in the Letter of Bid may result in the forfeiture of the bid security pursuant to Clause 17.

E. BID OPENING AND EVALUATION

25. Bid Opening

25.1 The Employer will open the bids in the presence of bidder's representatives who choose to attend, at the time and date stated in the Invitation for Bids at the address given for return of bids in Clause 21. The bidders' representatives who are present shall sign a register evidencing their attendance. The bid opening committee will make sure that the administrative and

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technical offers are satisfactory. The committee will then proceed to open Envelope No. 2 comprising the priced financial offers.

The Bid opening and evaluation procedures may include one or two sessions as stated in the Bidding Data Sheet.

26. Process To Be Confidential

26.1 Information relating to the examination, clarification, evaluation and comparison of bids and recommendations for the award of a contract shall not be disclosed to bidders or any other persons not officially concerned with such process even after the award to the successful bidder has been announced. Any effort by a bidder to influence the Employer's processing of bids or award decisions may result in the rejection of the bidder's bid.

27. Clarification Of Bids

27.1 To assist in the examination, evaluation and comparison of bids, the Employer may, at his discretion, ask any bidder for clarification of his bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by facsimile, but no change in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the bids in accordance with Clause 29.

27.2 From the time of bid opening to the time of Contract award, if any bidder wishes to contact the Employer on any matter related to the bid, he should do so in writing.

27.3 Any effort by the bidder to influence the Employer in the Employer's bid evaluation, bid comparison, or Contract award decisions may result in the rejection of the bidder's bid.

28. Examination Of Bids & Determination Of Responsiveness

28.1 During the evaluation of Envelope No.1, the Employer will determine whether each bid:

- a) meets the eligibility criteria of Clause 3;
- b) has submitted the requested documents in the Bid Conditions and Procedures;
- c) meets the qualification requirements of Clause 5;
- d) has been properly signed;
- e) is accompanied by the required securities;
- f) is substantially responsive to the requirements of the bid documents;
- g) has provided any clarification and/or substantiation that the Employer may require.

28.2 A substantially responsive bid is one which conforms to all the terms, conditions and specifications of the bid documents, without material deviation or reservation. A material deviation or reservation is one:

- a) which affects in any substantial way the scope, quality or performance of the Works;
- b) which limits in any substantial way, inconsistent with the bid documents, the Employer's rights or the bidder's obligations under the Contract, or
- c) whose rectification would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

Section I. Instruction to Bidders

28.3 If a bid does not meet any of the criteria of Clause 28.1 and 28.2, it will be rejected by the Employer, and may not subsequently be corrected by withdrawal or correction of the non-conforming deviation or reservation.

29. Correction Of Errors

29.1 Bids determined to be substantially responsive will be checked by the Employer for arithmetic errors. Errors will be corrected by the Employer as follows:

- a) where there is a discrepancy between the amounts in figures and in words, the amount in words will govern; and
- b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern; and
- c) where there is a discount applied to the total bid price including the contingency, the total bid price shall be retained and the discount applied to the unit prices of the Bill Of Quantities items, excluding the contingency.

29.2 The amount stated in the Form of Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the bidder, shall be considered as binding upon the bidder. If the bidder does not accept the corrected amount of bid, his bid will be rejected, and the bid security will be forfeited in accordance with Sub-Clause 17.7 (c).

30. CONVERSION TO SINGLE CURRENCY

Not Used.

31. Evaluation And Comparison Of Bids

- 31.1** The Employer will open Envelope No.2 for bidders determined to be acceptable and substantially responsive in accordance with Clause 28.
- 31.2** After opening Envelope No.2, the Employer will determine for each bid the Evaluated Bid Price by adjusting the Bid Price and making any correction for errors pursuant to Clause 29.
- 31.3** If the bid of the successful bidder is seriously unbalanced in relation to the Engineer's estimate of the cost of work to be performed under the Contract, the Employer may require the bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed.

Section I. Instruction to Bidders

F. AWARD OF CONTRACT

32. PREFERENCE FOR DOMESTIC BIDDERS

Not Used.

33. Award

33.1 Subject to Clause 34, the Employer will award the Contract to the bidder whose bid has been determined to be substantially responsive to the bidding documents and who has offered the lowest Evaluated Bid Price pursuant to Clause 31, provided that such bidder has been determined to be (a) eligible in accordance with the provisions of Sub-Clause 3.1; and (b) qualified in accordance with the provisions of Clause 5.

34. Employer's Right To Accept Or To Reject Any Or All Bids

34.1 Notwithstanding Clause 33, the Employer reserves the right to accept or reject any bid, and to annul the bid process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the Employer's action.

35. Notification Of Award

35.1 Prior to expiration of the period of bid validity prescribed by the Employer, the Employer will notify the successful bidder in writing or by facsimile that his bid has been accepted. This letter shall name the sum, which the Employer will pay the Contractor in consideration of the execution, completion and maintenance of the Works by the Contractor as prescribed by the Contract.

35.2 Upon the furnishing by the successful bidder of a performance security, the Employer will notify the other bidders that their bids have been unsuccessful and return their bid security.

36. Signing of Agreement

36.1 The Contract Agreement will be signed at the Employer's Office by both parties and notified to the Contractor.

36.2 The Agreement shall be considered embodying the Employer's Letter of Acceptance referred to in the Conditions of Contract. All actions and/or activities under the Contract that relate to the date of the Letter of acceptance shall be deemed to relate to the date of this Agreement.

37. Performance Security

37.1 Within 10 days of the Contract notification, the successful bidder shall furnish to the Employer a performance security in the form of a bank guarantee in an amount of 10 percent of the Contract Price in accordance with the Conditions of Contract. The format of the bank guarantee shall be in accordance with the sample form of performance security included in the Bid Documents.

37.2 The bank guarantee shall be issued by a bank registered and licensed to operate in Lebanon, and acceptable to the Employer

Section I. Instruction to Bidders

37.3 Failure of the successful bidder to comply with the requirements of Clauses 36 or 37 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security.

38. Appeals

38.1 In case any bidder considers that there is any irregularity in the bidding process, before the signature of the Contract, the bidder may submit a complaint to the Employer only.

38.2 If, after thirty (30) days from the date on which the bidder has submitted his complaint to the Employer, as stated in sub-clause 38.1 above, the bidder is not satisfied with the Employer's response, the bidder may submit his claim exclusively to the Competent Lebanese Courts, provided that this will not affect the right of the Employer to annul the bid process in accordance with the provisions of sub-clause 34.1.

END OF SECTION

Section II. Bidding Data Sheet

The following Bidding Data Sheet will be part of the Contract.

- 1.1 The works of "Brissa Dam And Reservoir - Full Lining and Additional Water Diversion Project" consists of:

▪ **Part 1 – Compulsory Part**

Section 1

- Further site investigations to facilitate construction design and the release of execution drawings intended for the lining installation and related works;
- Construction design and studies and analysis as necessary in light of the outcomes of the further site investigations;
- Release of the final drawings and the execution drawings;
- Site clearance;
- Surface preparation for dam and reservoir;
- Drainage system placement for reservoir;
- Full membrane complex installation for the dam and reservoir;
- External protection installation, if required;
- Inflow control system allowing the training of the water courses discharging into the reservoir and the settling of solid deposits

Section 2

- Operation and Maintenance of the project for 2 years starting from the date of the provisional acceptance of the project.

The Part 1 of the works is compulsory and the time period for the execution of such works is fixed at Thirty Six (36) months starting from the date of the notice to commence, in addition to 24 Months for the Operation and Maintenance.

▪ **Part 2 – Optional Part**

Section 1

- Diversion of additional water into the reservoir.

The Part 2 of the works is optional and conditioned by the issuance of the order to commence by the CDR which will be at least 12 months before the ending of the Part 1 of works. The Employer has the right to ask the Contractor to execute a **part** or **all** of this Part 2 of works.

The time duration for the execution of the entire optional construction works for Part 2 is fixed at twelve (12) months. If the Employer decides to execute a part of the optional works, then the time duration for the execution of such works shall be fixed by the Employer. Therefore, the time duration for the execution of both parts of works (compulsory and optional) will be the duration of Part 1 (36 months).

The Contractor is not entitled to claim any indemnities, compensation or losses in case the above mentioned Part 2 optional works are cancelled or not assigned to the Contractor.

- 2.1 This Contract is foreign funded by the Kuwait Fund for Arab Economic Development (KFAED) except for the following local taxes (income tax, stamp duties, and VAT).
- 3.1 Eligible bidders, including all members of a joint venture and all subcontractors, shall be Lebanese and shall also meet the additional qualifying criteria listed below.
- 3.3 The bidder is considered acquainted with and aware of the laws in force in the Republic of Lebanon.
- 3.4 The bidder including all members of a Joint venture, are requested to sign a COVENANT OF INTEGRITY, and an ENVIRONMENTAL AND SOCIAL COVENANT as provided for in Section III – Bidding Forms & Schedules.
- 4.1 The countries and territories eligible under the Lebanese Law.
- 4.3 The bidder is considered acquainted with and aware of the laws in force in the Republic of Lebanon.
- 5.1 All certificates should be originals or legally certified copies of the originals by official authorities and maximum dated 6 months before the original bid submission deadline.
- 5.1(a) legally certified copies of original documents defining the constitution or legal status, place of registration and principal place of business, the founders, members, shareholders, authorized signatories, capital, the director and ongoing contracts.
- 5.1(b) See additional condition as stated in Appendix 5 to Conditions of Contract.
- 5.1(d) Any statement that include an unregistered institution will be rejected.
- 5.1(g) **Equipment:**
The Contractor shall include in Schedule No.1 (Refer to Forms & Schedules) his proposed equipment required on site to carry out the execution of the Project within the scope of works including testing and commissioning, all in accordance with the requirements of the Contract.

The Contractor should submit full proof (i.e. equipment registration, lease contract,...) and details of the arrangement he shall follow, to make his proposed equipment in Schedule 1 above available on site. Arrangements may be agreement with local firms, lease, purchase, others, etc.
- 5.1(h) **Evidence of suitable personnel** consisting of a prime and alternate candidate for the key positions meeting the minimum experience requirement specified below. The bidder is requested to submit a detailed curriculum vitae according to the attached Qualification Form 4 signed by the candidate:

<u>Position</u>	<u>Total Work/Business Experience (Years)</u>	<u>In Similar Work (Years)</u>
Project Manager	25	15
Resident Engineer	15	10
Design and Construction Drawings Engineer	15	10
Geotechnical Engineer	15	10

Details on key personnel are provided hereafter:

The bidder shall submit appropriate organization chart of the proposed personnel with their role/task. Key personnel who are involved in the superintendence team are the Project Manager, the Resident Engineer, the Design and Construction Drawings Engineer and the Geotechnical Engineer. The superintendence team stated above shall be capable of reading and speaking fluent English.

All other specialists involved in the works (membrane welders etc.) shall have a demonstrated experience in their activity and shall have the necessary professional certifications.

The bidder is responsible to provide sufficient number of personnel with the required skill to superintend and realized the works.

- **Project Manager:** He/She shall have no less than a BS Degree in civil engineering from an accredited University and have at least 25 years of actual field experience in the construction activities of major projects, of which 15 years must have been in the construction of works of similar nature (dams, lakes, roads, earthworks, waterproofing membranes,...) and 10 years as projects superintendent or project manager. Contract management experience under FIDIC form of contract is essential.
- **Resident Engineer, (Civil Engineer):** He/She shall be the assistant to the Project Manager. He/She shall have no less than a BS Degree in civil engineering from an accredited university, and at least 15 years of actual field experience in the construction activities of major projects, of which 10 years must have been in construction of works of similar nature (dams, lakes, roads, earthworks, waterproofing membranes,...).
- **Design and Drawings Engineer:** He/She shall have no less than a BS Degree in civil engineering from an accredited university, and have at least 15 years of total design experience and 10 years of actual experience in the design and installation of similar dams, reservoirs, waterproofing membranes and drainage systems.
- **Geotechnical Engineer:** He/She shall have no less than a BS Degree in civil engineering from an accredited University and have at least 15 years of total experience and 10 years of actual experience in similar geotechnical works.

- 5.1(i) **Specialized Subcontractors:** Only, the experience of the specialized Sub-Contractor (if proposed by the bidder) concerning the waterproofing system will be considered in the evaluation of the specific experience of the bidder.

Any other Sub-Contractor experience will not be considered in the bid evaluation.

5.1(k) A Bank certificate for access to liquid assets and/or evidence of access to or availability of credit facilities of not less than **Two Million United States Dollars (2 M USD)** or equivalent sufficient to meet the construction cash flow for the above contract for a period of 6 months. The bidder is requested to submit an original bank certificate according to the attached form.

5.1(q) In order to be qualified for award of the contract, bidders shall provide the additional qualifying criteria below:

- (a) Average Annual Turnover in construction works of not less than Ten Million US\$ (10,000,000 US\$) or equivalent over the past Ten (10) years. The bidders shall complete the attached Qualification Form 1 signed by a certified accountant and provide legally certified copies of original auditor's reports;
- (b) General experience during the last Ten (10) years as a prime Contractor in the construction of civil works projects. The bidders shall provide evidence showing the required number of years and complete the attached Qualification Form 2;
- (c) Particular experience::
 - (i) Within the past Ten (10) years, as prime Contractor or joint venture member, has successfully completed two civil works projects including earthworks, excavation, concrete, ... for a minimum contract value of US\$ 10 (Ten) Million each.
 - (ii) For the above and any other contracts completed within the past 10 years, as prime Contractor or joint venture member, a minimum total waterproofing membrane installation area of 100,000 sq.m⁽¹⁾.

The bidders shall furnish original or certified copy of original client references including projects details and components, nature and quantity of work in accordance with the attached sample Qualification Form 3. For projects outside Lebanon, the client references shall also be certified in the country of origin according to legal procedures.

- (d) Valid Technical Offer: Bidder technical offer should be submitted and should be fulfilling all the requirements mentioned in Part II- Bidder Technical offer of Volume II – Technical Specifications.

Note:

(1). *Specific experience of the specialized Sub-Contractor (if proposed by bidder) concerning the waterproofing system will be considered in the evaluation.*

5.1 (r) Commitment statement and a letter from the insurance company assuring the intention to release a professional liability insurance to cover any defect that may arise during 10 years post-completion of works for any element of the membrane complex or its physical protection. In addition, a draft of the insurance policy should be submitted also.

5.1 (s) Sub-contract agreement concerning the waterproofing membrane installation (if any).

5.1 (t) Certificate of registration of the bidder issued by the directorate of added tax, in case the bidder is registered, or a certification of non-registration in case the bidder is not registered. In this case the bidder is committed to its price, even if he becomes registered during the execution of the contract.

- 5.1 (u) Declaration listing all the owners of the economic right أصحاب الحق الإقتصادي as per form M18 issued by the Ministry of Finance (النموذج م١٨ الصادر عن وزارة المالية) with copies of their: identification cards (ID / Passport).
- 5.1 (v) The Bidder shall submit a declaration stating, that as stipulated in article (5) of the banking secrecy law dated 3/9/1956 and as stipulated in the decision of the Council of Ministries no.4 dated 28/4/2020, the Contractor agrees to lift banking secrecy over the bank account used to deposit or transfer public funds related to this Contract.
- 5.1 (w) A statement issued by the municipality within which the bidder main office is located, as per the address in the commercial registry, stating that the bidder has paid the full due imposed municipal fees.
- 5.1 (x) A legal record of the authorized signatory dated no more than 3 months before original bid submission date, free From any judgment (سجل عدلي) .
- 5.3(a) Only eligible Contractors are allowed to form a joint venture, and the maximum number of Partners is limited to two (2) (including the leader of the joint venture).
- 5.3(g) The figures for each partner of a joint venture shall be added together to determine the bidder's compliance with the minimum qualifying criteria set out in sub-clause 5.1(q) above. However, in order for a joint venture to qualify each of the partners must meet the following criteria:
- The lead partner (partner in charge) and the other partner must meet 100% of the qualifying criteria listed in sub clauses 3.1 and 5.1(q-b).
 - The lead partner (partner in charge) must meet a minimum of 60% of the qualifying criteria listed in sub-clauses 5.1(q-a) and 5.1(k); while the other partner must meet a minimum of 50% of the qualifying criteria listed in sub- clauses 5.1(q-a) and 5.1(k).
 - In addition, either partner of the Joint Venture or together, must have successfully completed:
 - (i) Within the past ten (10) years as prime Contractor(s) or a JV member, two civil works projects including earthworks, excavation, concrete, ... for a minimum contract value of US\$ 10 (Ten) Million.
 - (ii) For the above and any other contracts completed within the last 10 years, as prime Contractor or joint venture member, a minimum total waterproofing membrane installation area of 100,000 sq.m⁽¹⁾.

Note:

(1). *Specific experience of the specialized Sub-Contractor (if proposed by bidder) concerning the waterproofing system will be considered in the evaluation.*

All parties of the joint venture shall be liable jointly and severally for the execution of the said works in accordance with the Contract terms.

Specific experience as waterproofing membrane installation subcontractor (if proposed by the bidder), will be considered only if it complies with the qualifying criteria and provided that the sub-contract between main Contractor and subcontractor shows the total value of subcontracted works and a clear definition of the scope of work.

Failure to comply with these requirements will result in rejection of the joint venture's Bid. Subcontractor's experience and resources will not be taken into account in determining the Bidder's compliance with the qualifying criteria, except for specialized Subcontractors for the works defined in sub-clause 5.1(q) above. (waterproofing membrane installation).

- 10.1 All inquiries sent by fax should be notified to CDR Tenders Department, fax No. 961-1-981255, not later than 10 days prior to the deadline for submission of bids, otherwise it would not be considered. Copies of the Employer's response shall be sent not later than 6 days prior to the deadline for bid submission,.
- 14.3 - 14.4 Include VAT on the BOQ collection sheet where applicable.
- 15.1 The bid and all rates and prices inserted in the Bills of Quantities shall be expressed in US Dollars.
- 16.1 The bid validity period should remain 180 days beyond the deadline for submission of bids.
- 17.1 The bidder shall furnish, as part of his bid, a bid security in the amount of 350,000 USD (**Three Hundred Fifty Thousand US Dollars**).
- 17.3 The bid security should remain valid up to 28 days after the expiration of the bid validity.
- 21.1 & 21.2 Name of Project: **"Brissa Dam and Reservoir - Full Lining and Additional Water Diversion Project"**
- 25.1 Bid opening will be held in two separate sessions:
- On the Bid Submittal Date, Envelope No. 1 will be opened for preliminary verification of the accuracy and completeness of the submitted documents. Following this session, the Committee will conduct a complete verification and evaluation of the bidder's technical and administrative offer contained in Envelope No. 1 including the technical offer fulfilling all the requirements mentioned in Part II – Bidder Technical offer of Volume II- Technical Specifications. Based on this evaluation, the Employer will identify the responsive offers, for which financial offers will be opened; for the others, Envelopes (s) No.2 will be returned to the related bidder (s) sealed and unopened.
 - Following the complete verification of Envelope No. 1, bidders will then be called for a second session in which the committee will proceed to open Envelope No. 2 comprising the priced financial offer for the bidders who passed the technical and administrative evaluation.
- 29.1 "Replace Clause 29.1(c) to read as follows:
where there is a discount applied to the total bid price including the contingency i.e. Provisional Sum(s), the total bid price shall be corrected by applying the discount to the unit prices of the Bill Of Quantities items, excluding the contingency i.e. Provisional Sum(s)."
- 31.2 After opening Envelope No.2, the Employer will determine for each bid the Evaluated Bid Price by adjusting the Bid Price and making any correction for

errors pursuant to Clause 29 considering that the evaluated bid price is the sum of Part 1 (Compulsory Part) and Part 2 (Optional Part).

- 31.3 After evaluation of the price analyses, the Employer may require that the amount of the performance security set forth in Clause 37 be increased at the expense of the successful bidder up to 50% of the Contract price to protect the Employer against financial loss in the event of default of the successful bidder under the Contract.
- 33.1 Subject to Clause 34, the Employer will award the Contract to the bidder whose bid has been determined to be substantially responsive to the bidding documents and who has offered the lowest Evaluated Bid Price (that the sum of both compulsory and optional parts of work prices) pursuant to Clause 31, provided that such bidder has been determined to be (a) eligible in accordance with the provisions of Sub-Clause 3.1; and (b) qualified in accordance with the provisions of Clause 5.
- 35 Prior to expiration of the period of bid validity, the Employer shall publish the notification of Intention to award the contract to the successful bidder on the CDR's web page www.cdr.gov.lb and on the Public Procurement Authority page www.ppa.gov.lb.
The notification of intention to award shall contain, at a minimum, the following information:
(a) The name and address of the bidder who presented the best proposal
(b) The bid price of the successful proposal
(c) The expiry of the standstill period.
And instruction or how to request a debriefing and/or submit a complaint during the standstill period.
The Employer shall promptly respond in writing to any successful bidder who, after notification of award requests in writing the grounds on which its bid was not selected or any other information related to the names and evaluated prices of other bidders
- 36.1 Within fifteen (15) business days after being called by the Employer for contract signature, the successful bidder shall sign and date the form of agreement at the Employer's office
- 36.2 The Employer representative shall sign the contract within fifteen (15) business days from the date of signature of the successful bidders and promptly notify it to the successful bidder
- 37.1 The bank guarantee shall be in amount of 10% of the contract amount covering the compulsory parts of the work. In case the Employer decide to execute the optional parts of the work, then the Contractor will have to present another guarantee covering 10% of the amount of work to be added.
- 38 The procedures for making a procurement - related complaint should be as described in chapter 7 "Procedure of Complaint" of the law 244 of public procurement in Lebanon dated 29/7/2021
الفصل السابع "إجراءات الاعتراض" في قانون الشراء العام في لبنان تاريخ ٢٠٢١/٧/٢٩

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Abnormally low bid

An abnormally low bid is one where the bid price, in combination with other consistent elements of the bid, appears unreasonably low to the extent that the bid price raises concerns with the Employer as to the capability of the bidder to perform the contract for the offered bid price. In the event of identification of a potentially abnormally low bid, the Employer shall seek written clarification from the bidder, including a detailed price analysis of its bid price, method statement, source of material and samples and any other requirements of the bidding documents. After evaluation of the price analysis, in the event that the Employer determines that the bidder has failed to demonstrate its capability to perform the contract for the offered bid price, the Employer has the option of rejecting the bid.

40

Standstill period

The contract shall not be awarded earlier than the expiry of the standstill period.

The standstill period shall be 10 business days unless extended. The standstill period commences the day after the date the Client has published his intention to award. Upon expiry of the standstill period, specified in the notification of intention to award or any extension thereof and upon satisfactorily addressing any complaint that has been filed with the standstill period, the client shall, send a request to the successful bidder to sign the draft negotiated contract within 15 business days from the date of receipt of such notification

Section III. Bidding Forms and Schedules

Table of Forms and Schedules

FM-1	Form of Contractual Commitment
FM-2	Form of Bid
FM-3	Bill of Quantities
FM-4	Form of Bid Security (Bank Guarantee)
FM-5	Form of Bank Certificate for Financial Capabilities
FM-6	SPECIMEN – Joint Venture Agreement
FM-7	Declaration of Integrity
SCH-1	Schedule No. 1 - Major Items of Contractor's Equipment
SCH-2	Schedule No. 2 - Key Personnel
SCH-3	Schedule No. 3 - Subcontractors
SCH-4	Schedule No. 4 - Manufacturers
QF-1	Qualification Form 1- Annual Turnover
QF-2	Qualification Form 2 - General Experience Record
QF-3	Qualification Form 3 - Client's Reference
QF-4	Qualification Form 4 - Candidate Summary

Section III. Bidding Forms and Schedules

FORM OF CONTRACTUAL COMMITMENT

Name of Project:

To: REPUBLIC OF LEBANON
COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

I the undersigned _____ dully authorized to sign
on behalf of _____
having as permanent Address _____

Telephone No.: _____

Facsimile No.: _____

Acknowledge my revision and examination of the Bidding Procedures, Conditions of Contract, Technical Specifications, Drawings, Bill Of Quantities and all other documents pertaining to the execution of the above-named project.

I proclaim that after reviewing and examining the documents which I may not claim to ignore and after visiting, inspecting and examining the Site of the Works and its surroundings and having obtained all required information and being aware of the Contract details, difficulties and obstacles if any, of the required Works.

I pledge, if my Bid is accepted, to execute and complete all the required Works and remedy any defects therein in conformity with the said Conditions of Contract, Specification, Drawings and Bill of Quantities within the Time for completion stated in the Contract Document.

I also acknowledge that I have put the prices and accepted the stipulations stated in the Conditions of Contract, taking into consideration all the Bid Documents and contract conditions and the difficulties that may be encountered, if any, during the execution of the Works.

Date:

Name Of Bidder:

Name:

In the capacity of:

Signature:

Address:

(Stamp 1.5M Lebanese Pounds)

Section III. Bidding Forms and Schedules

FORM OF BID

Name of Project:

To: REPUBLIC OF LEBANON
COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

1- Having examined the Bidding Procedures, Conditions of Contract, Technical Specifications, Drawings for the execution of the above-named Project, we, the undersigned, offer to execute and complete the said Project and remedy any defects therein in conformity with the said Bidding Procedures, Conditions of Contract, Technical Specifications, Drawings and Bills of Quantities for the sum of _____ USD (Excluding the following Local Taxes and Duties: income tax, stamp duties, and VAT, estimated at _____ USD) or such other sum as may be ascertained in accordance with the said Conditions.

2- We acknowledge that the Appendix forms an integral part of our Bid.

3- We acknowledge that we have received and incorporated the following Addenda in our Bid:

4- We undertake, if our bid is accepted, to commence the works as soon as is reasonably possible, but not exceeding 30 days after receipt of the Order to Commence, and to complete the whole of the Works comprised in the Contract within the time for completion stated in the Contract Data.

5- We agree to abide by this Bid for the period of 180 days from the closing date for submission of bids and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

6- Unless and until an Agreement is prepared and executed, this Bid together with your written acceptance thereof shall constitute a binding Contract between us.

7- We understand that you are not bound to accept the lowest or any bid you may receive.

Date

Seal and Signature

in the capacity of

duly authorized to sign bids for and on behalf of

Address

Witness

Occupation

Address _____

Section III. Bidding Forms and Schedules

BILL OF QUANTITIES

For Bill of Quantities refer to VOLUME 3 - BILL OF QUANTITIES issued under a separate cover.

1. THE CONTRACTOR shall, unless otherwise stated, allow in his unit rates and prices in the Bills of Quantities for the obligations, liabilities and services described in:

Volume One: Bidding Procedures and Conditions of Contract (and appendices)

Volume Two: Technical Specifications

Volume Four: Drawings

2. The Quantities set out in the Bill of Quantities are the estimated quantities for the Works, and they are not to be taken as the actual and correct quantities of the Works to be executed by the Contractor in fulfillment of his obligations under the Contract.
3. METHOD OF MEASUREMENT: the Works shall be measured in accordance with the Method of Measurement included with the Bill of Quantities and the Specification and in accordance with the descriptions of items and preambles stated in the Specification.

Section III. Bidding Forms and Schedules

FORM OF BID SECURITY (BANK GUARANTEE)

To: Council for Development and Reconstruction
Tallet El Serail
P. O. Box 11/3170
Beirut, Lebanon

WHEREAS, *[Name of Bidder]* (hereinafter called "the Bidder") has submitted his bid dated *[Date]* for the *[Name of Project]* (hereinafter called "the Bid").

BY THIS GUARANTEE we *[Name of Bank]* of *[Name of Country]* having our registered office at _____ (hereinafter called "the Bank") are bound unto the Council for Development and Reconstruction (hereinafter called "the Employer") in the sum of _____ USD for which payment well and truly to be made to the said Employer the Bank binds himself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____ 202 ____

THE CONDITIONS of this obligation are:

1. If the bidder withdraws his Bid during the period of bid validity specified in the Form of Bid; or
2. If the Bidder having been notified of the acceptance of his Bid by, the Employer during the period of bid validity:
 - a- fails or refuses to execute the Form of Agreement; or
 - b- fails or refuses to furnish or to increase the Performance Security; or
 - c- refuses to accept the correction of errors in his bid.

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him as a result of the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date 208 days after the deadline for submission of bids or as it may be extended by the Employer at any time prior to this date, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.

DATE _____ SIGNATURE OF THE BANK _____

IN THE CAPACITY OF _____

WITNESS _____ SEAL _____

(Signature, Name, and Address)

(The bid security submitted by the bidder shall be in strict conformance with the above sample form. Any alternate form/text would result in the rejection of the bid).

Section III. Bidding Forms and Schedules

**FORM OF BANK CERTIFICATE FOR FINANCIAL
CAPABILITIES**

To : The Council for Development and Reconstruction (CDR) Beirut, Lebanon.

Project :

This letter has been issued upon the request of _____

(Name of Contractor) _____ without any responsibility on our part.

To the best of our knowledge and belief, we hereby certify that _____

[name and address of Contractor], at present has access to, or has available liquid assets, lines of credit, unencumbered assets and other financial means, net of other commitments, sufficient to meet the construction cash flow for the above contract and valued at 2,000,000 USD (Two Million United States Dollars) for a period of 6 months starting from notice to commence date*.

For and on behalf of

_____ *[name of Bank]* _____ *[Date]*

_____ *[Signature of Bank Representative]*

* For Joint Ventures, the partners should submit according to their percentage shown in clause 5.3(g) of the Bidding Data Sheet, bank certificates amounting to or exceeding the required value stated in the bidding data sheet.

Section III. Bidding Forms and Schedules

“Joint Venture Agreement” (to be completed and signed by each partner of the bidder and attached to the technical proposal)

SPECIMEN

JOINT VENTURE AGREEMENT

This agreement is made the _____ day of _____ 202, by and between:

_____ (hereinafter called _____), a company organized under the laws of _____, with its principal office at _____, and its address at _____, hereinafter called _____ of the first part,

and

_____ (hereinafter called _____), a company organized under the laws of _____, with its principal office at _____, and its address at _____, hereinafter called _____ of the second part,

The first and the second party together are hereinafter referred to as “the Parties.”

WHEREAS the Council for Development and Reconstruction, representing the Government of Lebanon, hereinafter called “the CDR” has invited the Parties to submit a proposal for the execution of the following project:

_____ (hereinafter called “the Project”)

WHEREAS the Parties wish to enter into a Joint Venture Agreement in order to be prequalified by the CDR to tender for the Project and, if successful, to execute the Project under a Contract to be awarded by the CDR, hereinafter called “the Contract”;

THE PARTIES HERETO AGREE TO FORM A JOINT VENTURE UNDER THE FOLLOWING TERMS AND CONDITIONS:

1 ESTABLISHMENT OF THE JOINT VENTURE

The Parties hereby agree to constitute themselves as a Joint Venture under the name of _____, hereinafter called “the Joint Venture”.

The Joint Venture shall have its offices at the following address:

The objective of the Joint Venture shall be to execute the Project in accordance with all terms and conditions of a Contract to be signed with the CDR. The Joint Venture shall be comply with all laws and regulations relevant to the establishment and operation of joint ventures in Lebanon and shall be certified by the relevant public notary.

Section III. Bidding Forms and Schedules

2 LIABILITY

2.1 Notwithstanding any other conditions contained in this joint venture agreement or in any other agreement between the Parties, each of the Parties hereby commits itself to be jointly and severally liable towards the CDR as well as towards any and all CO-contractors and/or subcontractors for the proper execution of all obligations of the Joint Venture in relation to the Contract to be signed with the CDR for the execution of the Project.

2.2 The Parties shall keep each other, both during and after the term of this joint venture agreement, fully indemnified against all losses and damages resulting from gross negligence or breach of contract of one party or their personnel or agents in relation to this agreement as well as to all contracts to be executed by the Joint Venture.

3 REPRESENTATION

For the purpose of this joint venture agreement, the Joint Venture shall be represented by the first party hereto _____ who is hereby authorized by the second party to act on behalf of the Parties of this Joint Venture in all matters related to the submission of the Tender, *the negotiation and signing of the Contract with the CDR, the execution of the Project, including but not limited to the invoicing and receipt of payments, the execution of subcontracts, the incurring of liabilities and receipt of instructions on behalf of all partners of the Joint Venture in relation to the Contract with CDR during the entire execution period of the said Contract.*

[Note: the level of authority delegated to the leading party must be determined by the JV Partners. If restrictions apply, supplementary “powers of attorney” must be provided to the leading partner prior to signing of the Contract.]

The Parties shall keep the CDR informed at all times of all details concerning the Joint Venture and its authorized representatives.

4 REVENUE DISTRIBUTION

The total payments to the joint venture shall be distributed between the Parties according to the following proportions:

First Party	_____	%
Second Party	_____	%
-----	_____	%

The local taxes calculation shall be based on the above mentioned percentages.

5 EXCLUSIVITY

The Parties shall exclusively work together in connection with the Project. Each party hereto agrees that it has no interest whatsoever directly or indirectly, in any other proposal which may be submitted to the CDR with respect to the execution of the Project.

6 OBLIGATION TO TENDER

The Parties shall fill in and submit to the CDR their relevant prequalification file documents, and if jointly qualified, they shall tender for the Project as a Joint Venture. If the Contract for the execution of the Project is awarded to the Joint Venture, they shall jointly execute the Project under their joint and several responsibility in accordance with the applicable terms and conditions of contract.

Section III. Bidding Forms and Schedules

7 DURATION

7.1 This joint venture agreement shall enter in to force and effect as of the date first written above.

7.2 This joint venture agreement shall expire if the Joint Venture's tender is rejected or in case the Contract is awarded to another bidder.

7.3 In case the Contract is awarded to the Joint Venture, this joint venture agreement shall remain in force until all obligations of the Parties under the Contract have been fulfilled and each of the Parties have honored its obligations towards the other.

8 RIGHTS OF CDR

All rights stipulated in this joint venture agreement in favor of the CDR shall be honored by the Parties as if the CDR were a direct beneficiary of this agreement. Consequently, the Parties hereto acknowledge the right of the CDR to act directly on the basis of this agreement against all or any of the Parties hereof.

9 SETTLEMENT OF DISPUTES

The parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this joint venture agreement or the interpretation thereof.

[Note: choose one of the Alternatives and delete the rest]

***Alternative 1:** Any dispute between the Parties as to the matters arising pursuant to this agreement which cannot be settled amicably within thirty (30) days after receipt by one party of the other party's request for such amicable settlement may be submitted by either party to the competent Court in the Republic of Lebanon. Lebanese law shall apply to the interpretation of this agreement.*

***Alternative 2:** Any dispute between the Parties as to the matters arising pursuant to this agreement which cannot be settled amicably within thirty (30) days after receipt by one party of the other party's request for such amicable settlement may be submitted by either party to arbitration for final settlement in accordance with the procedures applicable under the Laws of the Republic of Lebanon.*

***Alternative 3:** Any dispute between the Parties as to the matters arising pursuant to this agreement which cannot be settled amicably within thirty (30) days after receipt by one party of the other party's request for such amicable settlement shall be finally settled by either party under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said Rules.*

Alternative 4: Any other alternative of JV Partners acceptable to CDR

The Parties hereto have caused this agreement to be executed in three copies, one for each party and one for the CDR, by their duly authorized officers on the date first above written

FOR AND ON BEHALF OF

FIRST PARTY

NAME:

TITLE:

SIGNATURE:

STAMP:

FOR AND ON BEHALF OF

SECOND PARTY

NAME:

TITLE:

SIGNATURE:

STAMP:

Section III. Bidding Forms and Schedules

Declaration of Integrity

Name of Bid: _____

Contracting Authority: _____

Name of the bidder/authorized signatory for the company: _____

Company Name: _____

We the undersigned confirm the following:

1. Neither we nor our employees, partners, agents, shareholders, advisors or their relatives have any relationships that may give rise to a conflict of interest in the subject matter of this transaction.

2. We will inform the Public Procurement Authority and the contracting authority in the event of a conflict of interest or discovery.

3. Neither nor will any of our employees, partners, agents, shareholders, advisors or their relatives engage in fraudulent, corrupt, coercive or obstructive practices in connection with our offer or proposal.

4. Neither we, nor any of our partners, agents, shareholders, consultants, or their relatives, made any payments to the employees, partners, or employees participating in the purchase process on behalf of the contracting authority, or to anyone else

5. In the event that we violate this declaration and undertaking, we will not be eligible to participate in any public bidding whatever its subject and we accept in advance any exclusion measure taken against us and we undertake at our full will not to dispute it.

Any false information will expose us to prosecution by the competent references.

Dated on _____ day of _____, _____ [insert date of signing]

Section III. Bidding Forms and Schedules

SCHEDULE NO. 1
MAJOR ITEMS OF CONTRACTOR'S EQUIPMENT

Description (Type, Model, Make)	No. of Each	Year of Manufacture (Used)	New or Used	Owned or Leased	Estimated CIF Value	Power Rating	Capacity

* The Bidder shall enter in this Schedule under appropriate headings all major items of Contractor's Equipment which he proposes to bring on Site.

Section III. Bidding Forms and Schedules

SCHEDULE NO. 2
KEY PERSONNEL

Designation	Name and Nationality	Summary of Experience	Qualifications, and Present Occupation
<u>Headquarters:</u> Partner/Director in charge Other key staff (list Below)			
<u>Site Office:</u> Site Superintendent Deputy Superintendent Supervising Engineers Construction Supervisors Other key staff (List below)			

* The Bidder shall list in this Schedule the key personnel that he proposes to employ at headquarters and on site to execute the Works, together with their qualifications, experience, positions held and nationality.

Section III. Bidding Forms and Schedules

**SCHEDULE NO. 3
SUB-CONTRACTORS**

Element	Approximate value	Name and Address of Sub-Contractor	Statement of Similar Works Previously Executed

* The Bidder shall list in this Schedule those parts of the Works (and their approximate values) for which he proposes to employ subcontractors, together with the names and addresses of the proposed subcontractors. The Bidder shall also enter a statement of similar works previously executed by the proposed subcontractors, including description, location and value of work, year completed, and name and address of employer/engineer. Notwithstanding the provision of this information, the Bidder, if awarded the Contract, will be required to submit applications to subcontract any part of the Works as stated in the Conditions of Contract.

Section III. Bidding Forms and Schedules

**SCHEDULE NO. 4
MANUFACTURERS**

Goods or Materials	Name of Manufacturer

* The Bidder shall enter in this Schedule the names of manufacturers (and, where appropriate, model numbers) of major items of goods or materials that he proposes to incorporate in the Works. Notwithstanding the provision of this information, submission of details of goods and materials for approval, as required by the Specification, will be required from the Contractor.

Section III. Bidding Forms and Schedules

Qualification Forms

Section III. Bidding Forms and Schedules

**Qualification Form 1
ANNUAL TURNOVER**

Name of Bidder

The bidder is requested to complete the information in this form. The information supplied should be the annual turnover of the bidder, in terms of the amounts billed to clients for each year for work in progress or completed converted to Euros at the rate of exchange at the end of the period reported. Experience as a subcontractor should not be considered. This form must be certified by an auditor and submitted with original or legally certified copies of auditor's report. All documents must be certified according to legal procedures.

Annual construction turnover data		
Year	Turnover	Euros equivalent
Year 5		
Year 4		
Year 3		
Year 2		
Year 1		

Contractor's Seal and Signature

Name of Auditor

Auditor's Seal and Signature

Address and Telephone

Section III. Bidding Forms and Schedules

Qualification Form 2
GENERAL EXPERIENCE RECORD

Name of Bidder

The bidder should list all completed water and wastewater projects within the last ten years.

Name of Contract	Client	Date of Start	Date of completion	Value of completed contract (USD)

Contractor's Seal and Signature

Section III. Bidding Forms and Schedules

Qualification Form 3
CLIENT'S REFERENCE

Name and address of Client: _____

To: The Council for Development and Reconstruction (CDR) Beirut, Lebanon.
PROJECT:

This reference has been issued upon the request of _____
_____ (*Name of Contractor*)

We hereby confirm that _____

_____ (*Name & Address of Contractor*)

has successfully completed the following project under a signed contract agreement with ourselves, details of which are given below:

Name of Project: _____

Brief scope of works: _____

Date Project undertaken: Start _____ Finish _____

Location and Country: _____

Contract Duration: Years _____ Months _____

Capital Cost of Project: USD _____

For and on behalf of:

Name of Client:

Client's Representative: _____

Date: _____

Telephone/Fax No. _____

*For projects outside Lebanon, the Client references must be certified in the country of execution according to legal procedures (Legal Authorities and/or Lebanese Embassies in these countries).

Section III. Bidding Forms and Schedules

Qualification Form 4
CANDIDATE SUMMARY

Name of Bidder

The Bidder should have the proposed candidate sign and date this form

Position		Candidate <input type="checkbox"/> Prime <input type="checkbox"/> Alternate
Candidate Information	1. Name of Candidate	2. Date of Birth
	3. Professional Qualifications	
Present Employment	4. Name of Employer Address of Employer Contact Person Telephone Fax	

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From	To	Company/Project/Position/Relevant technical & management experience

PART 2 – Works Requirements

Section IV. Works Requirements

Contents

SCOPE OF WORKS	1
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DRAWINGS.....	4

Section IV. Works Requirements

Scope of Works

Description of Works

The works of “Brissa Dam And Reservoir - Full Lining and Additional Water Diversion Project” cover the following:

- Pre-construction works:
 - Site Surveys and investigation;
 - Construction design and production of final Execution drawings;
 - Execution engineering;
 - Providing a detailed work program including a work schedule;
 - Procurement and sub-contracting;
 - Obtaining relevant permits from all concerned authorities;
 - Obtaining environmental permits;
 - Delivering a traffic management plan where traffic is to be diverted;
 - Providing an environmental monitoring plan during construction;
 - Providing a quality plan;
 - Providing a HSE plan.
- Construction works:
 - Procurement of materials and equipment, including certification and documentation;
 - Mobilisation;
 - Receipt, handling and storing of material and equipment;
 - Carrying out site preparatory works;
 - Setting up the site offices;
 - Liaison with other consultants and Contractors critical to the project, to manage construction interfaces;
 - Surface preparation for dam and reservoir;
 - Drainage system placement for reservoir;
 - Full membrane complex installation for the dam and reservoir;
 - External protection installation, if required;
 - Inflow control system allowing the training of the water courses discharging into the reservoir and the settling of solid deposits
 - Diversion of additional water into the reservoir.

Section IV. Works Requirements

- Providing the necessary works and measures to ensure appropriate protection of the environment and mitigate detrimental effects thereon;
- Testing and commissioning activities;
- As-built drawings, documentation and data book;
- Clean-up, clearance, levelling and reinstatement of site and working areas;
- Operation and maintenance of the project
- Demobilisation.

The time period for the execution of the works is fixed at 36 months starting from the date of the notice to commence, and the time period for the operation and maintenance of the project is 2 years.

Section IV. Works Requirements

Specifications

For Specifications refer to VOLUME 2 – GENERAL & PARTICULAR TECHNICAL SPECIFICATIONS issued under a separate cover.

The following clause shall be deemed included and is a part of the Specifications:

Equivalency of Standards and Codes

Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national, or relate to a particular country or region, other authoritative standards that ensure a substantially equal or higher quality than the standards and codes specified will be accepted subject to the Engineer's prior review and written consent. Differences between the standards specified and the proposed alternative standards shall be fully described in writing by the Contractor and submitted to the Engineer at least 28 days prior to the date when the Contractor desires the Engineer's consent. In the event the Engineer determines that such proposed deviations do not ensure substantially equal or higher quality, the Contractor shall comply with the standards specified in the documents.

Section IV. Works Requirements

Drawings

For Drawings refer to VOLUME 4 - DRAWINGS issued under a separate cover.

The Drawings are as listed on the List of Drawings in Volume 4.

PART 3 – Conditions of Contract and Contract Forms

Section V. General Conditions (GC)

Section V. General Conditions (GC)

The General Conditions to be applied in this contract are the FIDIC® Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer, Second Edition 2017, prepared and copyrighted by the International Federation of Consulting Engineers (Fédération Internationale des Ingénieurs-Conseils, or FIDIC), Copyright FIDIC 2017.

Section VI. Particular Conditions (PC)

Section VI. Particular Conditions (PC)

The following Particular Conditions shall supplement the GC. Whenever there is a conflict, the provisions herein shall prevail over those in the GC.

Whenever the word “Bank” (as financing institution) is mentioned in the GC, it should be read as “Kuwait Fund for Arab Economic Development (KFAED)”.

Section VI. Particular Conditions (PC)

Particular Conditions Part A - Contract Data

Conditions	Sub-Clause	Data
Name of Contract		BRISSA DAM AND RESERVOIR - FULL LINING AND ADDITIONAL WATER DIVERSION PROJECT
Bank – Funding Agency		“Kuwait Fund for Arab Economic Development (KFAED)”
Borrower’s name		The Government of Lebanon (GOL)
Defects Notification Period	1.1.27	Seven Hundred Thirty (730) days - during the two years of operation and maintenance
Employer’s name and address	1.1.31 & 1.3	The Council for Development and Reconstruction (CDR) Tallet Al-Serail, Beirut Lebanon Phone. 01/980096 Fax. 01/981252/3
Engineer’s name and address	1.1.35 & 1.3	To be notified later
Site	1.1.67	Wadi Es Sbeq – Downstream Brissa Spring – DanniyeH Caza – Noth Lebanon
Sections	1.1.73	Two sections are defined in the project: Section 1: Works related to the dam, reservoir and diversion system (3 years) Section 2: Operation and maintenance of the project (2 years)
Time for Completion of Original Contract	1.1.84	One Thousand and Ninety Five (1,095) days followed by 2 years of operation and maintenance
Bank’s Name	1.1.89	KFAED
Beneficiary’s Name	1.1.90	Republic of Lebanon represented by the CDR
Electronic transmission systems	1.3	Not Applicable
Address of Employer for Communication	1.3 (d)	The Council for Development and Reconstruction (CDR) Tallet Al-Serail, Beirut Lebanon Phone. 01/980096 Fax. 01/981252/3
Address of Engineer for Communication	1.3 (d)	To be communicated later
Address of Contractor for Communication	1.3 (d)	To be filled later
Governing Law	1.4	Law of the Republic of Lebanon
Ruling language	1.4	English
Language for communications	1.4	English & Arabic
Schedules	1.5	Bill of Quantities and Price Analysis
Time for the parties to enter into the Contract Agreement	1.6	Not later than the Commencement Date
Compliance with Laws	1.13	The Contractor’s considered acquainted with and aware of the Laws in force in the Republic of Lebanon
Maximum total liability of the Contractor to the Employer	1.15	The Accepted Contract Amount
Time for access to the Site	2.1	From the site delivery notice to the Contractor
Employer’s Financial Arrangements	2.4	Not Applicable
Engineer’s Duties and Authority	3.2	Refer to Specific Provisions
Performance Security	4.2	The Performance Security will be in the form of a

Section VI. Particular Conditions (PC)

Conditions	Sub-Clause	Data
		“Performance Bank Guarantee” in the amount(s) of Ten percent of the Accepted Contract Amount of the Works at the time of signing the Contract Agreement and in the same currency (ies) of the Accepted Contract Amount (Fresh USD). This guarantee shall be submitted within a period of 10 days after Contract Notification Date and shall be valid until the issuance of the Performance Certificate. The Performance Security shall be issued by a Lebanese bank or a foreign bank through its correspondent
Number of copies of Monthly Progress Reports	4.20	Three paper-original, and one electronic copy
Subcontractors	5.1	Maximum aggregate value of subcontracted works 40% of the total contract amount
Normal Working Hours	6.5	Refer to Part B - Special Provisions
Amount to be withheld for non-submission of Programme of Works	8.3	In the case of the Contractor delay in submitting the Programme of Works beyond 14 days, the Engineer may, following written notice to the Contractor, suspend from the payments due to the Contractor the amounts equivalent to ten percent (10%) of the net amounts of each payment certificate (including any applicable discounts). Such suspension of payment will remain in force until such time as the Contractor has submitted the required programme to the approval of the Engineer. No interest shall be due on the suspended amount of payments.
Delay damages for the Works	8.8 & 14.15(b)	0.2% of the Contract Price per day
Maximum amount of delay damages	8.8	10% of the Contract Price
Provisional Sums	13.4 (b)(ii)	The percentage rate is zero
Adjustments for Changes in Law	13.6	“Base Date” means the date Twenty Eight (28) days prior to the latest date for the submission of Bids. In case it has been a Sunday or an Official Lebanese Holiday, the previous working day will be considered.
Total advance payment	14.2	15% of the Accepted Contract Amount payable in the currencies (fresh) and proportions in which the Accepted Contract Amount is payable.
Deductions	14.2.3(a)	Deductions shall commence in the next interim certificate following the advance payment certificate.
Repayment amortization rate of advance payment	14.2.3(b)	25% of each payment
Percentage of Retention	14.3(iii)	10% of each payment
Limit of Retention Money	14.3(iii)	10% of the Accepted Contract Amount
Plant and Materials intended for the Works	14.5	60% of the items related to the membrane complex items in the BoQ will be considered for payment when shipped and/or delivered to the site by the Contractor for incorporation in the Permanent Works.
Minimum Amount of Interim Payment Certificates	14.6.2	300,000 \$ (Three Hundred Thousand USD)

Section VI. Particular Conditions (PC)

Conditions	Sub-Clause	Data
Period for payment of Advance Payment to the Contractor after the Employer receives the Advance Payment Certificate	14.7 (a)	56 days
Period for payment of Interim Payments to the Contractor after the Engineer receives the Interim Payment Certificate	14.7 (b)(i)	84 days
Period for payment of Final Payment to the Contractor after the Employer receives the Final Payment Certificate	14.7 (c)	84 days
Publishing Sources of commercial interest rates for financial charges in case of Delayed Payment	14.8	Annual interest rate is a simple rate Secured Overnight Financing Rate (SOFR) +2%
Currencies of Payment	14.15	USD
Suspension by Contractor	16.1	Refer to Part B – Special Provisions
Periods for submission of insurance: - Evidence of insurance - Relevant policies	19.1	Within 14 days from signature of Contract Agreement Within 28 days from signature of Contract Agreement
Maximum amount of deductibles for insurance	19.1	Not Applicable
Minimum amount of third-party insurance	19.2.4	1,000,000 \$ (One million USD) for any one occurrence with number of occurrences unlimited
Members of DAAB	21.1	NA
Proposed Members of DAAB	21.1	NA
Arbitration Rules	21.6(a)	Any dispute between parties shall be resolved in Lebanese court.
Place of arbitration	21.6(a)	Lebanese court.

Section VI. Particular Conditions (PC)

Particular Conditions Part B – Special Provisions

1.1 Definitions

Add at the end of sub-clause 1.1.52 the following sentence:

“Noting that the United States Dollar (USD) is considered as a local currency.”

Add at the end of sub-clause 1.1.81 the following sentence:

““Tender” is synonymous with “Bid” and the words “Tender Documents” with “Bidding Documents”.”

1.3 Notices and Other Communications

Add at the end of sub-clause the following paragraph:

“For the sake of effectiveness of the Contract, the Contractor shall nominate a notice address in the Republic of Lebanon. All communication, correspondence etc. delivered at this address is deemed to be delivered to the Contractor.”

1.4 Law and Language

Add at the end of sub-clause the following paragraphs:

“The Contractor’s project and site manager(s) must be fluent in English and the key site staff must have a sufficient command of the English language to communicate with the Employer’s and the Engineer’s staff. The assignment of interpreters will not be accepted.”

"If the Contractor’s authorized representative is not, in the opinion of the Engineer, fluent in English, the Contractor shall have available on site at all times a competent interpreter to ensure the proper transmission of instruction and information."

“If the Project Manager is not fluent in Arabic (reading, writing and speaking) then a deputy Project Manager fluent in Arabic must be appointed.”

1.5 Priority of Documents

In sub-clause 1.5 (i) “Schedules” means the priced bill of quantities and the prices breakdown.

Add the following item to the priority list of the documents:

(l) The following documents are also part of the Contract:

- Appendix 1: CDR Safety, Health and Environmental Regulations.
- Appendix 2: Schedule of As-Built Drawings and Operating and Maintenance Manuals
- Appendix 3: VAT Procedures
- Appendix 4: Power of Attorney for Firm’s Representative

Section VI. Particular Conditions (PC)

In sub-clause 1.5 the priority of the documents shall be in accordance with the following sequence:

- (a) the Contract Agreement;
- (b) the Letter of Acceptance;
- (c) the Letter of Tender;
- (d) the Particular Conditions Part A – Contract Data;
- (e) the Particular Conditions Part B – Special Provisions;
- (f) these General Conditions;
- (g) the Schedules (bill of quantities and the prices breakdown);
- (h) the Specification;
- (i) the Drawings;
- (j) the JV Undertaking (if the Contractor is a JV); and
- (k) any other documents forming part of the Contract including the Contractor's Bid insofar as it is not covered by any of the foregoing.

1.6 Contract Agreement

The Last Paragraph is replaced with:

“If the Contractor comprises a JV, the authorized representative of the JV shall sign the Contract agreement in accordance with sub-clause 1.14 (Joint and several liability)”.

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

1.7 Assignment

Delete sub-clause and substitute with the following:

The Contractor shall not assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, the Contractor:

- (a) may assign a part of the contract with the prior approval of the Employer at his sole discretion, and
- (b) may, as security in favour of a bank assign its right to any moneys due, or to become due, under the Contract without the prior consent of the Employer.

1.8 Care and Supply of Documents

Amend the words “**two copies**” from the first paragraph to read “**one copy**”.

Add at the end of sub-clause the following paragraph:

“Provision of drawings, maps and investigations data that are not available from the Employer, will be the responsibility of the Contractor at his own expense.”

1.9 Delayed Drawings or Instructions

Add at the end of sub-clause the following paragraph:

“The Contractors’ construction, installation and shop drawings are to be submitted for approval to the Engineer as early as possible to avoid any delay in Works implementation.”

Section VI. Particular Conditions (PC)

1.11 Contractor's Use of Employer's Documents

Add at the end of sub-clause the following paragraph:

"The Employer without any obligation will make available, at his premises, all drawings, maps and investigation data relating to the works that are available with the Employer at the time of request by the Contractor. Provision of drawings, maps and investigation data that are not available from the Employer, will be the responsibility of the Contractor at his own expense."

1.12 Confidentiality

Delete sub-clause and substitute with the following:

"The Contractor shall treat the details of the Contract as private and confidential, save insofar as may be necessary for the purposes thereof, and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere without the previous consent in writing of the Employer. If any dispute arises as to the necessity of any publication or disclosure for the purpose of the Contract the same shall be referred to the decision of the Employer whose decision shall be final."

1.17 Bribes

Add sub-clause 1.17 to Clause 1 as follows:

If the Contractor, or any of his Subcontractors, agents or servants gives or offers to give to any person any bribe, gift, gratuity or commission as an inducement or reward for doing or forbearing to do any action in relation to the Contract or any other Contract with the Employer, then the Employer may enter upon the Site and the Works and expel the Contractor and the provisions of Sub-Clause 15.2 hereof shall apply as if such entry and expulsion had been made pursuant to that Clause.

1.18 Personal Liability of Staff Members

Add sub-clause 1.18 to Clause 1 as follows:

Neither the members nor the staff of the Employer or the Engineer or the Engineer's Representative shall be in any way personally bound or liable for the acts or obligations of the Contractor under the Contract or answerable for any default or omission in the observance or performance of any of the acts, matters or things, which are herein contained.

1.19 Protection of Existing Services

Add sub-clause 1.19 to Clause 1 as follows:

The Contractor shall carry out the Works in a way that ensures minimum interruption and no damage to the existing services, such as water, sewer, septic tanks, electricity, telephone and the like. He shall be responsible to make good, at his expense, any damage caused to such services.

Work involving interruption with existing services or work of any kind shall only be carried out on the Contractor's responsibility with the permission of and during such times and in such manner as are agreed in writing by the Engineer and the responsible Authorities.

Section VI. Particular Conditions (PC)

1.20 Inspections and Audit by the Employer or the Bank

The Contractor shall permit and shall cause its agent (where declared or not), Subcontractors, Subconsultants, service providers, suppliers and personnel, to permit the bank and/or persons appointed by the bank to inspect the site and/or the accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have such accounts, records and other documents audited by auditors appointed by the bank.

The Contractor shall sign a declaration, in which, as stipulated in article (5) of the banking secrecy law dated 3/9/1956 and as stipulated in the resolution of the Council of Ministries No. 4 Dated 28/4/2020, the bidder agrees to lift banking secrecy over the bank account used to deposit or transfer public funds related to this contract.

2.1 Right of Access to the Site

Amend third paragraph as follows:

“If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Employer to give any such right or possession within such time, the Contractor shall be entitled if deemed necessary to EOT subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] but without payment of such Cost Plus Profit.”

Add at the end of sub-clause the following paragraph:

“The Contractor shall not commence work on any Section or site unless he has given 14 days' written notice to the Engineer of his intention to do so, and the work on the site in question is shown on the latest programme consented to in accordance with Sub-Clause 8.3 at the appropriate date. Before commencing any work, the Contractor shall have agreed with the Engineer any survey of original ground levels and other records of existing works which may be required by the Engineer for measurement and as-built records.”

2.2 Assistance

Add at the end of sub-clause the following paragraph:

"The Contractor shall be solely responsible for obtaining clearance through customs for Contractor's Equipment, materials etc. imported for the Works.”

2.4 Employer's Financial Arrangements

Delete sub-clause.

2.5 Site Data and Items of Reference

Replace first paragraph with the following:

"If available the Employer shall have made accessible to the Contractor, before submission by the Contractor of the Tender, such data on hydrological and sub-surface conditions made available to and obtained by or on behalf of the Employer from investigations undertaken relevant to the Works but the Contractor shall be responsible for his own interpretation thereof.”

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3.2 Engineer's Duties and Authority

Delete sub-clause and substitute with the following:

The Employer shall appoint the Engineer who shall carry out the duties assigned to him in the Contract. The Engineer's staff shall include suitably qualified engineers and other professionals who are competent to carry out these duties.

The Engineer shall have no authority to amend the Contract.

The Engineer may exercise the authority attributable to the Engineer as specified in or necessarily to be implied from the Contract. If the Engineer is required to obtain the approval of the Employer before exercising a specified authority, the requirements shall be as stated in the Particular Conditions. The Employer shall promptly inform the Contractor of any change to the authority attributed to the Engineer.

However, whenever the Engineer exercises a specified authority for which the Employer's approval is required, then (for the purposes of the Contract) the Employer shall be deemed to have given approval.

Except as otherwise stated in these Conditions:

- (a) whenever carrying out duties or exercising authority, specified in or implied by the Contract, the Engineer shall be deemed to act for the Employer;
- (b) the Engineer has no authority to relieve either Party of any duties, obligations or responsibilities under the Contract;
- (c) any acceptance, agreement, approval, check, certificate, comment, consent, disapproval, examination, inspection, instruction, Notice, No-objection, record(s) of meeting, permission, proposal, record, reply, report, request, Review, test, valuation, or similar act (including the absence of any such act) by the Engineer, the Engineer's Representative or any assistant shall not relieve the Contractor from any duty, obligation or responsibility the Contractor has under or in connection with the Contract, including responsibility for errors, omissions, discrepancies and non-compliances; and
- (d) any act by the Engineer in response to a Contractor's request except as otherwise expressly specified shall be notified in writing to the Contractor within 28 days of receipt.

The following provisions shall apply:

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

- (A) Sub-Clause 4.12: agreeing or determining an extension of time and/or additional cost.
- (B) Sub-Clause 13.1: instructing a Variation, except;
 - (i) in an emergency situation as determined by the Engineer, or
 - (ii) if such a Variation would increase the Accepted Contract Amount by less than the percentage specified in the Contract Data.
- (C) Sub-Clause 13.3: approving a proposal for Variation submitted by the Contractor in accordance with Sub-Clause 13.1 or 13.2.

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- (D) Sub-Clause 13.4: specifying the amount payable in each of the applicable currencies.
- (E) approving subletting of any part of the Works under Sub-Clause 5.1;
- (F) giving consent for the subcontracting of any part of the Works under Clause 5;
- (G) determining an extension of time under Sub-Clauses 8.5 and 8.9;
- (H) suspending the progress of the Work under sub-clause 8.9;
- (I) issuing taking over certificates in respect of the Works under sub-clauses 10.1 and 10.2;
- (J) issuing a variation under clause 13, except in an emergency situation, as reasonably determined by the Engineer;
- (K) determining of provisional sums under Clause 13.4;

Notwithstanding the obligation, as set out above, to obtain approval, if, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibility under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite the absence of approval of the Employer, with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 13 and shall notify the Contractor accordingly, with a copy to the Employer.

3.3 Engineer Representative

“The Engineer shall obtain the consent of the Employer before appointing or replacing an Engineer’s representative”

3.6 Replacement of the Engineer

Delete sub-clause and substitute with the following:

The Employer reserves the right to appoint any other competent person to act in the capacity of the Engineer, without requiring approval of the Contractor.

4.1 Contractor’s General Obligations

Add After 2nd paragraph:

All equipment, material and services to be incorporated in or required for the works shall have their origin in any eligible source country as defined by the Bank and Lebanese laws.

Add the following at the end of sub-clause:

- (i) "The Contractor shall promptly notify the Employer and the Engineer of any error, omission, fault or any other defect in the design of or specifications for the Works which he discovers when reviewing the Contract documents or in the process of execution of

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the Works. Failure to inform the Engineer will result in the obligation of the Contractor to complete these works at his own expense.

- (j) The Contractor shall be responsible for all works not mentioned in the Contract but which may be inferred to be necessary for stability or completion or the safe, reliable and efficient operation of the Works.
- (k) The Contractor shall promptly report in writing to the Engineer the occurrence of any event or condition that might delay or prevent completion of the works in accordance with the programme and indicate steps being taken to meet the situation.
- (l) The detailed Cash Flow Estimate shall be submitted for approval by the Engineer within 21 days after the date of the Commencement of Works in a format and a level of detail approved by the Engineer. A revised cash flow estimate shall be submitted, for approval by the Engineer, within 14 days from the date requested by the Engineer.”

4.2 Performance Security

Delete sub-clause 4.2.1 and substitute with the following:

The Contractor shall provide, at his own expense, security for his proper performance of the Contract to the Employer within 10 calendar days after the Notification Date of the Contract for compulsory works.

In case the Employer decide to assign the Contractor for optional works, the Contractor shall provide to the Employers a performance security in the amount of 10% of the Contract amount for optional works.

The Performance Security shall be an unconditional bank guarantee in the FORM provided in the Tender Documents (Section VII. Annex to the Particular Conditions - Contract Forms). The amount of the bank guarantee shall be as stated in the Contract Data.

It shall be issued by a bank located in the country of the Employer or a foreign bank through a correspondent bank located in the country of the Employer.

The Performance Security shall be denominated in the types and proportions of currencies in which the Contract Price is payable. When providing such security to the Employer, the Contractor shall notify the Engineer of his actions.

Without limitation to the provisions of the preceding paragraph, whenever the Engineer determines an addition to the Contract Price as a result of a change in cost and/or legislation or as a result of a variation, the Contractor, shall promptly increase the value of the Performance Security in that currency by an equal percentage.

The Performance Security of a Joint Venture shall be in the name of the Joint Venture.

The Guarantee must remain valid until 28 days after the date of issuing the Performance Certificate.

In case of work sections, the performance security of each section shall be released after 28 days of the date of issuing the performance certificate of the concerned section. In case of one performance security for all sections, the amount of this security shall be decreased proportionally to the value of the section, which a performance certificate is released.

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Notwithstanding the above, the Performance Security shall not be released until such time as all claims filed against the Contractor resulting from the performance of the Contract, have been settled by the Contractor, and the Contractor has re-exported all Contractor's equipment, temporarily imported to the Republic of Lebanon for carrying out the Works, as certified by a Customs' Release Certificate.

No claim shall be made against such security after the issue of the Performance Certificate in accordance with Sub-Clause 11.9. The cost of complying with the requirements of this Clause shall be borne by the Contractor.

4.4 Contractor's Documents

Delete the first paragraph at the beginning of sub-clause 4.4.2 - As-Built Records.

Add the following paragraph at the end of sub-clause 4.4.2 - As-Built Records.

“Additional requirements for “As-built drawings”:

The Contractor shall prepare, and keep up-to-date, a complete set of "as-built" records of the execution of the Works, showing the exact "as-built" locations, sizes and details of the work as executed, with cross-references to relevant specifications, schedules of particulars and data sheets. These records shall be stored electronically using computer aided design (CAD) and Geographic Information System (GIS) software which is compatible with the systems used by the Employer and Engineer. Copies of all records shall be kept on the Site for the purpose of preparing and updating the “as-built” documents and drawings.

The Contractor shall obtain the consent of the Engineer as to the size, the referencing system, and other pertinent details of the as-built drawings.

Delete the first paragraph at the beginning of sub-clause 4.4.3 - Operation and Maintenance Manuals.

4.7 Setting Out

Add the following paragraph at the end of sub-clause: 4.7.4

Setting-out procedure and consequences of Contractors failure to carry out the setting out.

- (a) The Contractor shall inform the Engineer sufficiently in advance, not less than 48 hours of his intention to provide levels for any part of the Works, so that timely arrangements can be made for verifying, approving or issuing instructions.
- (b) If the Contractor fails to carry out verification of the survey control points, benchmarks and such other information provided to him thereby causing errors or delays in the work, then such failure(s) will not be an acceptable cause for time extension and additional cost.

4.8 Health and Safety Obligations

Add to the third paragraph the following:

- (iv) The Contractor shall comply with the specific requirements of the CDR Safety, Health and Environmental Regulations (Appendix 1). The Regulations include specific

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measures and actions available to the Employer and the Project Manager in the event of non-compliance by the Contractor and allow for costs in the Contract Price.

4.10 Use of Site Data

Delete the second paragraph and substitute with the following:

The Contractor shall be deemed to have inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself (so far as is practicable, having regard to considerations of cost and time) before submitting his Bid, as to:

- a) the form and nature thereof, including the sub-surface conditions,
- b) the hydrological and climatic conditions,
- c) the extent and nature of work and materials necessary for the execution and completion of the Works and the remedying of any defects therein, and
- d) the means of access to the site and the accommodation he may require and, in general, shall be deemed to have obtained all necessary information, subject as above mentioned, as to risks, contingencies and all other circumstances which may influence or affect his bid,
- e) traffic conditions and traffic diversion requirements, if applicable.

4.12 Unforeseeable Physical Conditions

In the first sentence of sub-clause 4.12.2 replace “7 days” with “as soon as practicable”.

Add the following paragraph at end of sub-clause:

“No costs shall be payable to the Contractor that are associated with any extension of time determined under this Sub-Clause. Since the Contractor has to investigate and identify utilities and since this investigation is within his obligations, the following will not be considered as unforeseeable physical obstructions or conditions:

- a) any existing utility from whatsoever kind within the Works area, either acknowledged by the Contractor prior to the start of the Works or not,
- b) the nature of the soil in any part or section of the Works, and
- c) any required partitioning of the Works and temporary usage of incomplete parts or sections of the Works. Such requirement being issued either by the Engineer or by the local authorities.”

4.15 Access Route

Add the following paragraph at the end of sub-clause:

“(f) The Contractor shall bear responsibility of the damage that he may inflict to road facilities pursuant to Sub-Clause 4.15 and Sub-Clause 4.16 (d) of these Conditions, and the cost of immediate rectification of any such damage.”

4.17 Contractor’s Equipment

Add the following paragraph at the end of sub-clause:

“Notwithstanding the provisions of Sub-Clauses 19.1 and 19.2, the Contractor’s Equipment, including essential spare parts therefore, imported by the Contractor for the sole purpose of

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executing the Contract shall be temporarily exempt from the payment of import duties and taxes upon initial importation, provided the Contractor shall post with customs authorities at the port of entry an approved export bond or bank guarantee, valid until the time completion of the Contract plus six months, in an amount equal to the full import duties and taxes which would be payable on the assessed imported value of such Contractor's Equipment and spare parts, and callable in the event that the Contractor's Equipment is not exported from the Employer's country on completion of the Contract.

The Contractor shall provide a copy of the bond or guarantee endorsed by the customs authorities to the Employer upon the importation of individual items of Contractor's Equipment and spare parts. Upon export of individual items of Contractor's Equipment and spare parts, or upon completion of the Contract, the Contractor shall prepare, for approval by the customs authorities, an assessment of the residual value of the Contractor's Equipment and spare parts to be exported, based on the depreciation scale(s) and other criteria used by the customs authorities for such purposes under the provisions of the applicable law. Import duties and taxes shall be due and payable to customs authorities by the Contractor on (a) the difference between the initial imported value and the residual value of the Contractor's Equipment and spare parts to be exported; and (b) on the initial imported value of that Contractor's Equipment and spare parts remaining in the Employer's country after completion of the Contract. Upon payment of such dues within 28 days of being invoiced, the bond or bank guarantee shall be reduced or released accordingly; otherwise the security shall be called in the full amount remaining."

4.18 Protection of the Environment

Add the following paragraph at the end of sub-clause:

"The Contractor shall comply with the specific requirements of the CDR Safety, Health and Environmental Regulations (Appendix 1). The Regulations include specific measures and actions available to the Employer and the Project Manager in the event of non-compliance by the Contractor and allow for costs in the Contract Price."

4.19 Temporary Utilities

Delete the second paragraph from sub-clause.

4.22 Contractor's Operations on Site

Add the following paragraph at the end of sub-clause:

"The Contractor shall comply with the terms and conditions of Sub-Clause 11.11.

If the Contractor fails to remove any Contractor's equipment, surplus material and Temporary Works within such reasonable time after completion of the Works as may be allowed by the Engineer then the Employer may:

- a) sell any which are the property of the Contractor, and
- b) return any which are not the property of the Contractor to the owner thereof at the Contractor's expense.

After deducting from any proceeds of sale the costs of and expenses in connection with such sale and return, the Employer shall pay the balance (if any) to the Contractor but to the extent that the proceeds of any sale are insufficient to meet all such costs and expenses, the excess shall be a debt due from the Contractor to the Employer and shall be deductible or recoverable by the

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Employer from any monies due or that may become due to the Contractor under the Contract or may be recovered by the Employer from the Contractor as a debt due.”

4.26 Temporary Facilities and Services for the Engineer

Add the following sub-clause:

If the Contractor fails to provide and maintain any of the Temporary Works and services required for the use of the Engineer's Representative and his staff and for the use of the Employer's Representative if applicable, then the Employer shall after serving a notice to the Contractor specifying this default be entitled to provide and maintain such Temporary Works and services and shall be entitled to recover from the Contractor the cost thereof or may deduct the same from any monies due or that become due to the Contractor.

5.1 Subcontractors

Replace the fourth paragraph with the following:

“In addition to obtaining the Engineer's consent to a proposed Subcontractor, the Contractor shall:

- a) notify the Engineer within 20 days of signing the Contract, and before commencing work on Site, of any parts of the Works he intends to subcontract for which approval of the Engineer is required under sub-clause 5.1. For each subcontract the following shall be provided:
 - i) the name, address and telephone and fax numbers of the Subcontractor;
 - ii) the nature and scope of the works to be subcontracted;
 - iii) information on the Subcontractor's experience of similar works and details of the Subcontractor's site supervision, sources of labour and equipment and financial capabilities, in sufficient detail to enable the Engineer to determine if the Subcontractor is able to undertake and complete the subcontract works within the time and to the standards required by the Contract;
 - iv) the approximate value of the subcontract works based on the Contract prices;
 - v) the percentage of (iv) above and the overall percentage of subcontracted works as a proportion of the Contract Price;
 - vi) confirmation that the subcontract includes terms and conditions and all obligations and responsibilities contained in the Contract, in so far as these apply to the subcontract;
 - vii) confirmation that the subcontractor meets the eligibility criteria of sub-clauses 3.2 and 4.1 of the Bidding Data Sheet. The terms and conditions of Sub-clause 1.12 of the Conditions of Contract shall be applied to the Subcontractor;
- b) notify the Engineer at least 21 days prior to the date that the Contractor requires approval from the Engineer, of any proposed change to the Subcontractors notified under (a) above and of any additional parts of the Works he intends to subcontract. Similar information to that listed under (a) above shall be given for each subcontract;
- c) include in his monthly reports to the Engineer, details of all subcontracts entered into, the names of the Subcontractors and the numbers of staff and labour for each Subcontractor on Site during the month;
- d) provide, if requested by the Engineer, copies of documents such as wage sheets and details of the names and employment references for site staff and labor, invoices for the supply of materials, etc.;

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- e) include conditions and requirements in subcontracts similar to those in the Contract regarding assignment and sub-subcontracting the whole or part of the subcontract works including requirements similar to those under (a) to (d) above. Any approval by the Contractor to a Subcontractor regarding such assignment or sub-subcontracting shall be subject to the prior approval of the Engineer;
- f) If the Contractor assigns or sub-contracts the whole or any part to the work in contravention with sub-clause 1.7 or sub-clause 5.1 the Engineer may subject to the prior consent of the Employer take the actions as stated in sub-clause 11.12”.

6.1 Engagement of Staff and Labour

Add the following paragraph at the end of sub-clause:

"The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labour from sources within or adjacent region of the project area. At all times during the period of construction skilled labour employed by the Contractor and his sub-contractors shall be nationals or legal residents within the above described jurisdiction."

6.4 Labour Laws

Add the following paragraph at the end of sub-clause:

"The Contractor shall comply with all laws and regulations regarding the employment of labour in Lebanon, including any laws or regulations that come into force after the date of the Bid."

6.5 Working Hours

Add the following paragraph at the end of sub-clause:

"In case of working outside locally recognized days of rest or outside normal working hours, the Contractor shall have no right to claim for additional compensation."

6.6 Facilities for Staff and Labour

Delete sub-clause and substitute with the following:

"Unless otherwise established in the Contract, the Contractor shall provide and maintain such accommodation and amenities as he may consider necessary for all his staff and labour employed for the purposes of or in connection with the Contract, including water supply (both for drinking and other purposes), electricity supply, sanitation, cookhouses, fire prevention and fire-fighting equipment, air conditioning, cookers, refrigerators, furniture and other requirements in connection with such accommodation or amenities. On completion of the Contract, the temporary camps/housing provided by the Contractor shall be removed and the site returned to its original condition, all to the satisfaction of the Engineer. The Contractor shall also provide facilities for the Employer's Personnel as stated in the Specification.

The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works."

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6.7 Health and Safety of Personnel

Delete sub-clause and substitute with the following:

"In addition to the requirements of Sub-Clause 4.8 [Health and Safety Obligations], the Contractor shall at all times take all necessary precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that:

- (a) medical staff, first aid facilities, sick bay, ambulance services and any other medical services stated in the Specification are available at all times at the Site and at any accommodation for Contractor's and Employer's Personnel; and
- (b) suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of 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. The Contractor shall maintain such records and make such reports concerning safety, health and welfare of persons and damage to property as the Engineer may from time to time prescribe.

The Contractor shall appoint a health and safety officer at the Site, responsible for maintaining health, safety and protection against accidents. This officer shall:

- (i) be qualified, experienced and competent for this responsibility; and
- (ii) have the authority to issue directives for the purpose of maintaining the health and safety of all personnel authorised to enter and/or work on the Site and to take protective measures to prevent accidents. The Contractor shall report to the Engineer details of any accident as soon as possible after its occurrence. In case of any fatality or serious accident, the Contractor shall, in addition, notify the Engineer immediately by the quickest means available.

Throughout the execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority."

The Contractor shall make all necessary arrangements for the transport to any place as required for burial, of any of his expatriate employees or members of their families who may decease in the Republic of Lebanon. The Contractor shall also be responsible to the extent required for the local burial of any of his local employees who may perish while engaged upon the Works."

7.4 Testing by the Contractor

Delete the fifth paragraph and substitute with the following:

"The Engineer shall give a Notice to the Contractor of not less than 72 hours of his/her intention to attend the tests. If the Engineer does not attend at the time and place stated in the Contractor's Notice under this Sub-Clause, the Contractor may proceed with the tests, unless otherwise instructed by the Engineer. These tests shall then be deemed to have been made in the Engineer's presence. If the Contractor suffers delay and/or incurs Cost from complying with any such instruction or as a result of a delay for which the Employer is responsible, the Contractor shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to EOT but no payment of such Cost Plus Profit."

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7.9 Restrictions on Eligibility

Add the following sub-clause:

- (a) Any Plant, materials, or services which will be incorporated in or required for the Works, as well as the Contractor's Equipment and other supplies, shall have their origin in any of the countries and territories eligible under the Lebanese Law and the funding agency guidelines.
- (b) For the Purpose of this clause, "origin" means the place where the materials and equipment were mined, grown, produced, or manufactured, or from which the services are provided.

8.1 Commencement of Works

Delete sub-clause and substitute with the following:

The Commencement Date shall succeed the date at which the following precedent conditions have all been fulfilled and the Engineer's notification to the Employer recording the agreement of both Parties on such fulfilment:

- (a) signature of the Contract Agreement by both Parties, and if required, approval of the Contract by relevant authorities of the Country;
- (b) except if otherwise specified in the Contract Data, effective access to and possession of the Site given to the Contractor together with such permission(s) under (a) of Sub-Clause 1.13 [Compliance with Laws] as required for the Commencement of Works;
- (c) receipt by the Contractor of the Advance Payment under Sub-Clause 14.2 [Advance Payment] provided that the corresponding bank guarantee has been delivered by the Contractor.

The Commencement Date shall be the date of receipt of a Notice to Commence from the Employer. If the said Employer's notice is not received by the Contractor within 240 days from his receipt of the Letter of Acceptance, the Contractor shall be entitled to terminate the Contract under Sub-Clause 16.2 [Termination by Contractor].

The Contractor shall commence the execution of the Works as soon as reasonably practicable but not exceeding 30 days after the Commencement Date, and shall then proceed with the Works with due expedition and without delay. The Contractor shall carry out the Works in accordance with the Program submitted by the Contractor, as updated with the approval of the Engineer, and complete them by the Intended Completion Date.

The Employer reserves the right to instruct the Contractor to execute all or any part of the works described in any bill shown in Volume III (Bill of Quantities) of any part and section of the project.

8.3 Programme

Add the following paragraph at the end of sub-clause:

"The Contractor shall submit for approval by the Engineer three (3) hard copies of the programme of works (work schedule) and one soft copy in an approved format. There shall be no excuse for not submitting the baseline programme (initial programme) and the monthly progress programmes on time and within the required criteria. If the Contractor does not submit the work programme on time and within the required criteria the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until

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the payment following the date on which the overdue work programme has been submitted in an approved format.

The Engineer may request the revised programme at any time and for any reason that he sees fit. If the Contractor does not submit the revised programme on time and within the required criteria the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the payment following the date on which the overdue revised programme has been submitted in an approved format.

The programme should include a detailed Cash Flow Estimate in a format and a level of detail approved by the Engineer. A revised cash flow estimate shall be submitted for approval by the Engineer within 14 days from the date requested by the Engineer.

The Contractor shall promptly report in writing to the Engineer the occurrence of any event or condition that might delay or prevent completion of the works in accordance with the programme and indicate steps being taken to meet the situation.

The programme shall indicate all the activities of the Contract in their correct sequence and order with a minimum detail at the Bill of Quantities level, and shall be based on a precedence network diagram using the Critical Path Method (CPM). The programme shall also be resource loaded (manpower, material and equipment) and cost loaded. This programme shall be the basis for monitoring the progress or otherwise of the works and will be considered as the “Baseline Programme”. The programme shall be computerized and prepared using a professional project management software package approved by the Engineer. This baseline programme shall be recurrently updated and submitted to the Engineer on a regular basis within the first week of every month for the preceding month”.

8.5 Extension of Time for Completion

Add the following paragraph at the end of sub-clause:

“In determining any extension of the Time for Completion under this Sub-Clause, the Engineer shall be entitled to take into account the effect of work omitted by any order issued by him pursuant to Clause 13 but he shall have no power to reduce the Time for Completion stated in the Contract Data.”

8.8 Delay Damages

Add the following paragraph at the end of sub-clause:

“The Contractor shall be obliged to bear the additional cost for the Engineer during the period of delays if the delay exceeds 20% of the programmed Contract Period as submitted by the Contractor in accordance with Sub-Clause 8.3, and results from an action or omission by the Contractor as determined by the Engineer. This additional cost for the Engineer shall be calculated on the basis of the Engineer's remuneration from the Employer for his services on the Contract and as follows:

- a) if the delay is determined to be solely due to the Contractor's actions or inaction, then the Contractor shall bear 50% of the Engineer's supervision fees for the period exceeding 20% of the Time of Completion as defined in Sub-Clause 8.2.
- b) if the delay is determined to be due to both the Contractor's and Engineer's actions or inaction, then the Contractor shall bear 25% of the Engineer's supervision fees for the period exceeding 20% of the Time of Completion as defined in Sub-Clause 8.2.”

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8.10 Consequences of Employer's Suspension

Delete the first paragraph and substitute with the following:

“If the Contractor suffers delay and/or incurs Cost from complying with an Engineer's instruction under Sub-Clause 8.9 [Employer's Suspension] and/or from resuming the work under Sub-Clause 8.13 [Resumption of Work], the Contractor shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to EOT but no payment of such Cost Plus Profit.”

8.11 Payment for Plant and Materials after Employer's Suspension

Delete Sub-Clause 8.11.

10.1 Taking Over of the Works and Sections

Delete sub-paragraphs (b) and (c) in the first paragraph and substitute with the following:

- (b) the Engineer has given a Notice of No-objection to the as-built records and final measurements for the Works or Section submitted under Sub-Clause 4.4.2 [As-Built Records];
- (c) the Engineer has given a Notice of No-objection to the operation and maintenance manuals under Sub-Clause 4.4.3 [Operation and Maintenance Manuals],

Add the following paragraph at the end of sub-clause:

“Notwithstanding any provisions to the contrary elsewhere in this Clause, the Employer shall issue or may authorize the Engineer on his behalf to issue a partial provisional acceptance for sections or for the whole of the works followed by the Taking-Over Certificate for the whole Works or for sections or parts of the Works.

Notwithstanding the foregoing, no Taking-Over Certificate shall be issued until all work including plants, civil, electrical, and mechanical and rehabilitation works within a section have been substantially completed and all damage to public or particular properties has been substantially repaired.

The Works or Section shall not be considered to be completed for the purposes of taking over in accordance with this Clause until the relevant as-built drawings have been submitted to and approved by the Engineer.

Three hard copies and one soft copy completed within a period of 4 weeks following the Completion of Works or Section shall be submitted to the Engineer's approval in compliance with Sub-Clause 4.4.2 – As-Built Records of Sub-Clause 4.4.”

Add new paragraph at the end of this Sub-Clause:

Taking-Over of Sections or Parts:

The Contractor shall take into consideration that putting new services and utilities into operation during construction and opening of new roads or sections of constructed roads to traffic during construction shall not constitute a case for Taking-Over of sections or parts under Sub- Clauses 10.2 unless provided for elsewhere under the Contract.”

In case of partial provisional acceptance, the defect liability period for this part shall run as from the date of such provisional acceptance.

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11.1 Completion of Outstanding Work and Remedying Defects

Delete sub-clause and substitute with the following:

To the intent that the Works shall, at or as soon practicable after the issue of the Taking-Over Certificate and prior to the expiration of the Defects Notification Period, be delivered to the Employer in the Condition required by the Contract, fair wear and tear excepted, to the satisfaction of the Engineer, the Contractor shall:

- a) attend to and complete and/or correct all work, if any, outstanding on the date stated in the Taking-Over Certificate as soon as practicable after such date, but in any event within 28 days of the date of issue of such Taking-Over Certificate and,
- b) execute all such work of amendment or reconstruction, and remedying defects, shrinkages or other faults as the Engineer may, whether during or within 14 days of the expiration of the relevant Defects Notification Period, as a result of inspections made by or behalf of the Engineer prior to its expiration, instruct the Contractor to execute.

Provided that at all times due regard shall be taken by the Contractor to occupancy, operational and utilization requirements of the Taken-Over Works, and reasonable arrangements be made for access to enable execution and completion of all such work and remedying all such defects within the times prescribed or other times as may be agreed giving regard to occupancy, operation and utilization.

11.3 Extension of Defects Notification Period

Add the following paragraph at the end of sub-clause:

“The provisions of this paragraph shall apply to all replacements or renewals of Plant carried out by the Contractor to remedy defects and damages as if the replacements and renewals had been taken over on the date they were completed. The Defects Notification Period for the Works shall be extended by a period equal to the period during which the works cannot be used by reason of a defect or damage. If only part of the Works is affected the Defects Notification Period shall be extended only for that part. In neither case shall the Defects Notification Period extend beyond 3 years from the date of Taking-Over.

However, with respect to defects appearing after the interconnection of two or more sections which have been taken over separately, the Contractor’s responsibility shall remain to exist for all interconnected sections until the latest of the Defects Notification Periods has expired.”

11.9 Performance Certificate

Delete the third paragraph from sub-clause.

Add the following paragraph at the end of Sub-Clause 11.9:

Defects Notification Certificate:

For Section 1:

After the expiration of the Defects Notification Period and after successful filling of the reservoir (or maximum 2 years), and after the Contractor formally notifies its request(s) for inspection and verification that the Contractor has discharged all its obligations with respect to this section, and as soon, thereafter, as any works instructed pursuant to Clause 11 have been completed to the satisfaction of the Engineer, the Contractor may give a notice to that effect to the Engineer with

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a copy to the Employer. Such notice shall be deemed to be a request by the Contractor to the Engineer and the Employer to issue a Performance Certificate. The Employer after due recommendation by the Engineer shall within 60 days issue or authorize the Engineer to issue on his behalf a Defects Notification Certificate. The Defects Notification Certificate shall be a condition precedent to the payment to the Contractor of the second portion of the Retention Money in accordance to the Conditions set out in Sub-Clause 14.11, and the performance certificate for section 1 will be then released.

For Section 2:

The performance certificate for section 2 will be released upon the end of the O&M period and after the approval of the Engineer.

11.10 Unfulfilled Obligations

Delete the last paragraph from sub-clause.

11.11 Clearance of Site

Add the following paragraph at the end of Sub-Clause 11.11:

“Disposal of Contractor’s Equipment, etc.:

If the Contractor fails to remove any Contractor’s equipment, surplus material and Temporary Works pursuant to Sub-Clause 11.11 within such reasonable time after completion of the Works as may be allowed by the Engineer then the Employer may:

- (a) sell any which are the property of the Contractor, and
- (b) return any which are not the property of the Contractor to the owner thereof at the Contractor’s expense.

After deducting from any proceeds of sale the costs of and expenses in connection with such sale and return, the Employer shall pay the balance (if any) to the Contractor but to the extent that the proceeds of any sale are insufficient to meet all such costs and expenses, the excess shall be a debt due from the Contractor to the Employer and shall be deductible or recoverable by the Employer from any monies due or that may become due to the Contractor under the Contract or may be recovered by the Employer from the Contractor as a debt due.

Engineer’s or Employer’s Temporary Facilities:

The Contractor shall maintain on Site until the end of the Defects Notification Period or for such shorter period as may be instructed by the Engineer, all temporary facilities provided for the Engineer or the Employer’s staff and all facilities and equipment reasonably required by the Engineer for inspection or testing of the Works during the Defects Notification Period.”

11.12 Assignment and Sub-Contracting, Additional Remedies

Add the following sub-clause:

“If the Contractor assigns or subcontracts the whole or any part of the Works in contravention of Sub-Clauses 1.7 or 5.1 or if a Subcontractor assigns or subcontracts the whole or part of the subcontracts works in contravention of Sub-Clause 5.1, the Engineer may, subject to the prior consent of the Employer, take action in respect of either one or both of the following:

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- (a) instruct the Contractor to dismiss and remove immediately, or within such other time as may be specified in the instruction, the Subcontractor, or the Sub-subcontractor from the Site;
- (b) deduct, as penalty from moneys otherwise due to the Contractor, up to 15% of the value of the works assigned, subcontracted or sub-subcontracted, based on the Contract Price, as estimated by the Engineer.

If there is insufficient money due to the Contractor to cover the deduction referred to in Sub-Clause 11.12 the Employer shall have the right to call on the Contractor's performance security in order to recover the said moneys.

The Contractor shall not be entitled to any extension of time for completion under Sub-Clause 8.5 arising out of any delay caused by the dismissal and removal of the Subcontractor or sub-Subcontractor from the Site."

12.2 Method of Measurement

Add the following paragraph at the end of sub-clause:

"For the purpose of ascertaining and determining the value of the Works as stated in this Clause, the Measurement of the Works as executed and associated As-Built Drawings shall be carried out by the Contractor progressively and timely, and submitted to the Engineer for his approval".

12.3 Valuation of the Works

Add at the beginning of the first paragraph of this Sub-Clause the following sentence:

"Subject to the provisions under Sub-Clause 13.1, and ..."

In Sub-Clause 12.3 (b) (i), amend the text "10%" to read "25%"

In Sub-Clause 12.3 (b) (ii), amend the text "0.01%" to read "2%"

Delete Sub-Clause 12.3 (c) and substitute by the following:

- (c) "the work is instructed as a variation under Clause 13 [Variations and Adjustments] and sub-paragraph (a) or (b) applies."

Delete the fifth paragraph and substitute with the following:

"Each new rate or price shall be derived from any relevant rates or prices specified in the Bill of Quantities or other Schedule, with reasonable adjustments to take account of the matters described in sub-paragraph (a), (b) and/or (c), as applicable. If no specified rates or prices are relevant for the derivation of a new rate or price, it shall be derived from the reasonable Cost of executing the work, together with the applicable percentage for overhead and profit taking account of any other relevant matters."

13.1 Right to Vary

Delete sub-paragraph (iv) and substitute with the following:

- (iv) omission of any work without payment to the Contractor of any monetary compensation, including but not limited to loss of profit and overhead recovery on the omitted works.

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Add the following paragraph at the end of sub-clause:

“The Contractor shall proceed with the varied work immediately upon receipt of an instruction to that effect from the Engineer, regardless of whether or not an agreement on price has been reached.”

13.2 Value Engineering

Add the following paragraph at the end of sub-clause:

“For the purpose of evaluating and agreeing suitable rates or prices as prescribed under Sub-Clause 13.2, the Contractor shall, whenever so requested by the Engineer, submit to the Engineer a complete substantiated build up of his proposed rates and/or prices in such detail and format required by the Engineer, allocated to component costs of 'labour', 'materials', 'plant', 'equipment', 'other charges' and 'overhead and profit'. If the Contract rates and prices cannot be used as a basis for valuation due to the absence of comparable items in the Contract, the Contractor shall submit to the Engineer a complete substantiated build up of the rate and/or prices in such detail and format required by the Engineer including the direct cost of labour, materials, plant, equipment and other charges and overhead and profit.”

13.3 Variation Procedure

Delete sub-paragraph (b) in Sub-Clause 13.3.2.

13.4 Provisional Sums

Delete last sentence “*If the Engineer ... Contractor’s discretion.*” from the third paragraph.

13.5 Daywork

Delete last sentence “*If the Engineer ... Contractor’s discretion.*” from the third paragraph.

13.6 Adjustments for Changes in Law

Delete first paragraph and replace with the following:

Subject to the provisions under Sub-Clause 13.1, the Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws) or Decrees or decisions of Council of Ministries, made after the Base Date, which affect the Contractor in the performance of obligations under the Contract.

13.7 Adjustments for Changes in Cost

Delete sub-clause and substitute with the following:

Subject to the provisions under Sub-Clause 13.1, the amounts payable to the Contractor pursuant to Clause 14, shall be adjustable only in respect of rise or fall in cost for the following items:

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	Description	Equation
A	Reinforcement Steel	$P_1 = P_0 * \{0.15 * L_1 / L_0 + 0.70 * L_{mc1} / L_{mc0} * E_1 / E_0 + 0.15\}$
		Applicable to the cost of completed steel reinforcement works
B	Excavation, BackFilling, and Aggregate Base and Sub-base Courses	$P_1 = P_0 * \{0.15 * L_1 / L_0 + 0.25 * F_1 / F_0 + 0.10 * E_{qp1} / E_{qp0} * E_1 / E_0 + 0.50\}$
C	Concrete Works	$P_1 = P_0 * \{0.45 * C_1 / C_0 + 0.15 * L_1 / L_0 + 0.10 * F_1 / F_0 + 0.30\}$
		Applicable to the cost of Concrete excluding the Steel Reinforcement price.
D	Industrial Steel, Steel Beams and Air Conditioning Ducts	$P_1 = P_0 * \{0.15 * L_1 / L_0 + 0.70 * L_{mb1} / L_{mb0} * E_1 / E_0 + 0.15\}$
		Applicable to the cost of Industrial Steel, Steel Beams and Air Conditioning Ducts installed including Labor and workmanship.
E	Copper	$P_1 = P_0 * \{0.15 * L_1 / L_0 + 0.70 * C_{f1} / C_{f0} * E_1 / E_0 + 0.15\}$
		Applicable to the cost of Copper installed including labor and workmanship.
F -1	Aluminum Works including Glass	$P_1 = P_0 * \{0.15 * L_1 / L_0 + 0.10 * V_{er1} / V_{er0} * E_1 / E_0 + 0.60 * A_{lu1} / A_{lu0} * E_1 / E_0 + 0.15\}$
		Applicable to the cost of Aluminum Works including Glass installed including labor and workmanship.
F-2	Aluminum Works excluding Glass	$P_1 = P_0 * \{0.15 * L_1 / L_0 + 0.70 * A_{lu1} / A_{lu0} * E_1 / E_0 + 0.15\}$
		Applicable to the cost of Aluminum Works excluding Glass installed including labor and workmanship.
G	Ductile Iron Pipes	$P_1 = P_0 * \{0.15 * L_1 / L_0 + 0.70 * T_{f1} / T_{f0} * E_1 / E_0 + 0.15\}$
		Applicable to the cost of installed Pipes.
H	Steel Pipes	$P_1 = P_0 * \{0.15 * L_1 / L_0 + 0.70 * T_{a1} / T_{a0} * E_1 / E_0 + 0.15\}$
		Applicable to the cost of installed Pipes.
I	Pumps, Air Compressors, Hydraulic Systems	$P_1 = P_0 * \{0.15 * L_1 / L_0 + 0.70 * P_{u1} / P_{u0} * E_1 / E_0 + 0.15\}$
		Applicable to the cost of installed Pumps.
J	GRP Pipes	$P_1 = P_0 * \{0.15 * L_1 / L_0 + 0.14 * R_{t1} / R_{t0} * Y_{n1} / Y_{n0} + 0.28 * G_{f1} / G_{f0} * Y_{n1} / Y_{n0} + 0.43\}$
		Applicable to the cost of installed Pipes.
K	Polyethylene Pipes	$P_1 = P_0 * \{0.15 * L_1 / L_0 + 0.70 * E_{t1} / E_{t0} * Y_{n1} / Y_{n0} + 0.15\}$
		Applicable to the cost of installed Pipes.

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	Description	Equation
L	Bituminous Binder and Wearing Course Prime and Tack Coat	$P_1 = P_0 * \{0.15 + 0.15 * L_1 / L_0 + 0.45 * [(1.12 * B_1 + 66) / (1.12 * B_0 + 66)] + 0.25 * F_1 / F_0\}$ when contract price is in USD
M	Electrical Works related to Buildings and Similar	$P_1 = P_0 * \{0.15 * L_1 / L_0 + 0.55 * C_{f1} / C_{f0} * E_1 / E_0 + 0.15 * L_{ma1} / L_{ma0} * E_1 / E_0 + 0.15\}$
		Applicable to the cost of Electrical Works completed and not supplied.
N	Wood Works	$P_1 = P_0 * \{0.15 * L_1 / L_0 + 0.70 * B_{O1} / B_{O0} * E_1 / E_0 + 0.15\}$ Applicable to the cost of Wood Works installed including labor and workmanship.

Where:

Alu_0 = “Aluminium Brut” index as issued by the french establishment INSEE for the Calendar month in which the bid opening took place.

Alu_1 = Weighted Average (Moyenne Pondérée) for “Aluminium Brut” index as issued by the french establishment INSEE during the period of executed works included in the monthly statement.

B_0 = Average price for “Bitumine 3.5 Pct” in American \$ as per Platts Bulletin for the Calendar month in which the bid opening took place.

B_1 = Weighted Average (Moyenne Pondérée) for “Bitumine 3.5 Pct” Average Price in American \$ as per Platts Bulletin during the period of executed works included in the monthly statement.

Bo_0 = “BT18a – Menuiserie bois et sa quincaillerie intérieure y compris” index as issued by the french establishment INSEE for the Calendar month in which the bid opening took place.

Bo_1 = Weighted Average (Moyenne Pondérée) for “BT18a – Menuiserie bois et sa quincaillerie intérieure y compris” index as issued by the french establishment INSEE during the period of executed works included in the monthly statement.

C_0 = Cement (Ciment en Vrac) ton Price as issued by the Cementeries on bid opening day.

C_1 = Weighted Average (Moyenne Pondérée) for the Cement (Ciment en Vrac) ton Price as issued by the Cementeries during the period of executed works included in the monthly statement.

Cf_0 = “Fils en cuivre ou alliage” index as issued by the french establishment INSEE for the Calendar month in which the bid opening took place.

Cf_1 = Weighted Average (Moyenne Pondérée) for “Fils en cuivre ou alliage” index as issued by the french establishment INSEE during the period of executed works included in the monthly statement.

E_0 = Closing exchange rate for the Euro vs the contract currency as per the bulletin published by the Central Bank of Lebanon on bid opening date.

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- E_1 = Weighted Average (Moyenne Pondérée) closing exchange rate for the Euro vs the contract currency as per the bulletin published by the Central Bank of Lebanon, during the period of executed works included in the monthly statement.
- Eqp_0 = Average for both “Machines agricoles françaises exportées” and “Véhicules utilitaires” Indices as issued by the french establishment INSEE for the Calendar month in which the bid opening took place.
- Eqp_1 = Weighted Average (Moyenne Pondérée) for “Machines agricoles françaises exportées” and “Véhicules utilitaires” Indices as issued by the french establishment INSEE during the period of executed works included in the monthly statement.
- Et_0 = “Polyethylene (high density)” index as issued by Bank of Japan, Research and Statistics Department for the Calendar month in which the bid opening took place.
- Et_1 = Weighted Average (Moyenne Pondérée) for “Polyethylene (high density)” index as issued by Bank of Japan, Research and Statistics Department during the period of executed works included in the monthly statement.
- F_0 = Gaz Oil (Mazout) Market Price as issued by the Ministry of Industry on bid opening day.
- F_1 = Weighted Average (Moyenne Pondérée) Gaz Oil (Mazout) Market Price as issued by the Ministry of Industry during the period of executed works included in the monthly statement.
- Gf_0 = “Glass fiber and Glass Fiber Products” index as issued by Bank of Japan, Research and Statistics Department for the Calendar month in which the bid opening took place.
- Gf_1 = Weighted Average (Moyenne Pondérée) for “Glass fiber and Glass Fiber Products” index as issued by Bank of Japan, Research and Statistics Department during the period of executed works included in the monthly statement.
- L_0 = Minimum monthly wage excluding any additional benefits i.e transportation, etc..., on bid opening day.
- L_1 = Weighted Average (Moyenne Pondérée) monthly wage excluding any additional benefits i.e transportation, etc..., for the Calendar month during the period of executed works included in the monthly statement.
- Lma_0 = “Fils en aciers non alliés de qualité” index as issued by the french establishment INSEE for the Calendar month in which the bid opening took place.
- Lma_1 = Weighted Average (Moyenne Pondérée) for “Fils en aciers non alliés de qualité” index as issued by the french establishment INSEE during the period of executed works included in the monthly statement.
- Lmb_0 = “Petites barres rondes en aciers non alliés de qualité” index as issued by the french establishment INSEE for the Calendar month in which the bid opening took place.
- Lmb_1 = Weighted Average (Moyenne Pondérée) for “Petites barres rondes en aciers non alliés de qualité” index as issued by the french establishment INSEE during the period of executed works included in the monthly statement.

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Lmc_0 = “Barres Crénelées ou nervurés pour béton armé” index as issued by the french establishment INSEE for the Calendar month in which the bid opening took place.

Lmc_1 = Weighted Average (Moyenne Pondérée) for “Barres Crénelées ou nervurés pour béton armé” index as issued by the french establishment INSEE during the period of executed works included in the monthly statement.

P_0 = Price as shown in the Original Bill of Quantities

P_1 = Adopted Price for contractor reimbursement.

Pu_0 = “Pompes, compresseurs et systèmes hydrauliques exportés” index as issued by the french establishment INSEE for the Calendar month in which the bid opening took place.

Pu_1 = Weighted Average (Moyenne Pondérée) for “Pompes, compresseurs et systèmes hydrauliques exportés” index as issued by the french establishment INSEE during the period of executed works included in the monthly statement.

Rt_0 = “Thermosetting resins” index as issued Bank of Japan, Research and Statistics Department for the Calendar month in which the bid opening took place.

Rt_1 = Weighted Average (Moyenne Pondérée) for “Thermosetting resins” index as issued by Bank of Japan, Research and Statistics Department during the period of executed works included in the monthly statement.

Ta_0 = “Tubes en acier et accessoires” index as issued by the french establishment INSEE for the Calendar month in which the bid opening took place.

Ta_1 = Weighted Average (Moyenne Pondérée) for “Tubes en acier et accessoires” index as issued by the french establishment INSEE during the period of executed works included in the monthly statement.

Tf_0 = “Pièces de fonderie en fonte” index as issued by the french establishment INSEE for the Calendar month in which the bid opening took place.

Tf_1 = Weighted Average (Moyenne Pondérée) for “Pièces de fonderie en fonte” index as issued by the french establishment INSEE during the period of executed works included in the monthly statement.

Ver_0 = “Verre et articles en verre” index as issued by the french establishment INSEE for the Calendar month in which the bid opening took place.

Ver_1 = Weighted Average (Moyenne Pondérée) for “Verre et articles en verre” index as issued by the french establishment INSEE during the period of executed works included in the monthly statement.

Yn_0 = Closing exchange rate for the Yen vs the contract currency as per the bulletin published by the Central Bank of Lebanon on bid opening date.

Yn_1 = Weighted Average (Moyenne Pondérée) closing exchange rate for the Yen vs the contract currency as per the bulletin published by the Central Bank of Lebanon, during the period of executed works included in the monthly statement.

Construction items listed in the preamble of the BOQ are subject to price adjustment. In case a construction item includes more than one material/trade subject to price adjustment, then this

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item is subject to adjustment using the corresponding formulas for the major materials and applied to their respective shares in the unit price of this item.

Unit Price adjustment will be calculated up to five decimal places.

The price adjustment formulae shall apply after the end of the works and before releasing the retention certificate and the performance security, on the monthly payment certificates and the cumulative increases “A” that occurred (or the cumulative decreases “B” that occurred) and shall be calculated on the value of the works in the successive monthly payment certificates, according to the following:

- a) a price adjustment formula shall apply only if the amount of the cumulative increase (or the cumulative decrease) of an adjusted Contract price exceeds **3%** of the original contract amount “C”.
- b) when $A > 0.03C$, indemnities for the increase of prices equivalent to $A - 0.03C$ shall be paid to the Contractor in the successive monthly payment certificates.
- c) when $B > 0.03C$, an amount equivalent to $B - 0.03C$ shall be deducted from the Contractor’s monthly payment certificates, due to the decrease of prices.
- d) the Employer has the right to recover any increase paid to the Contractor if the cumulative increase of an adjusted Contract price falls below 3% of the original contract amount; also, the Employer has the obligation to return to the Contractor any deduction already applied on the monthly payment certificates, if the decrease falls below 3% of the original contract amount.

14.1 The Contract Price

Delete sub-paragraph (b) and substitute with the following:

- (b) The Contractor shall pay all taxes, duties and fees required to be paid by him under the Contract as per Clause 21, and the Contract Price shall not be adjusted for any of these costs except as stated in Sub-Clause 13.6 [Adjustments for Changes in Law].

Delete sub-paragraph (d) and substitute with the following:

- (d) The Contractor must have submitted with his Bid the following information concerning the Contract Price:
 - (i) A breakdown of all lump sums included in the bid;
 - (ii) A breakdown of all unit rates and prices contained in the priced Bill of Quantities, showing the costs of labour, materials, plant, equipment and other charges.The Engineer shall have the right to request, and the Contractor shall provide a further breakdown of all unit rates and prices including a detailed breakdown of "other charges".

14.2 Advance Payment

Add the following sentence at the end of the second paragraph:

“The advance payment shall be used exclusively toward site mobilisation, launching of works, material purchase at an early stage of the Project for the purpose of limiting the Contractor’s burden related to price variation.”

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Delete last sentence of the first paragraph in Sub-Clause 14.2.1 and replace with the following:

“This guarantee shall be an unconditional bank guarantee issued by a Lebanese Bank or foreign Bank through its correspondent Bank in Lebanon, and shall be according to the sample form included in the tender documents.”

Replace sub-paragraph (a) in Sub-Clause 14.2.3. with the following:

- (a) Deductions shall commence in the next interim Payment Certificate (excluding the advance payment); and

Replace sub-paragraph (d) in Sub-Clause 14.2.3. with the following:

- (c) deductions shall be made at the amortisation rate stated in the Contract Data of the amount of each Interim Payment Certificate (excluding the advance payment and deductions and release for retention moneys) in the currencies and proportions of the advance payment until such time as the advance payment has been repaid.

14.3 Application for Interim Payment

Delete sub-clause and replace with the following:

The Contractor shall submit a Statement in two paper-original copies and one electronic copy to the Engineer at the end of each month, in a tabulated form approved by the Engineer with supporting documents showing the amounts to which the Contractor considers himself to be entitled. The Statement shall include the following items, as applicable, which shall be taken into account in the sequence listed:

- (a) the estimated Contract value of the Temporary and Permanent Works executed up to the end of the month in question, determined in accordance with Clause 12, at base unit rates and prices;
- (b) the actual value certified for payment for the Temporary and Permanent Works executed up to the end of the previous month, at base unit rates and prices;
- (c) the estimated Contract value at base unit rates and prices of the Temporary and Permanent Works for the month in question, obtained by deducting (b) from (a);
- (d) the value of any variations executed up to the end of the month in question, less the amount certified in the previous Interim Payment Certificate, expressed in the relevant amounts, pursuant to Clause 12 and Clause 13;
- (e) any amount to be withheld under;
 - (i) the retention provision of Sub-Clause 14.9, determined by applying the percentage set forth in Sub-Clause 14.9 and,
 - (ii) the suspension and payment deduction provisions of Sub-Clause 6.7 as to Safety, Health and Environmental Regulations;
 - (iii) the withholding provisions of Sub-Clause 8.3;
- (f) any amount to be deducted as repayment of the Advance Payment under the provision of Sub-Clause 14.2.
- (g) subject to the Conditions of Contract and to item (h) of this sub-clause, any other sum expressed in the applicable currency or currencies to which the Contractor may be entitled to under the Contract.
- (h) the Employer's financial procedures require that overrun in quantities of Bill of Quantities and items with new rates or for extra payment, be processed in the form of comparative

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schedules of quantities and approved by the Employer prior to inclusion for payment in the interim certificates.

- (i) amounts approved in respect of Daywork executed up to the end of the month in question, less the amount for Daywork certified in the previous Interim Payment Certificate subject to Conditions of Contract and to item (h) of this Sub-Clause.

14.4 Schedule of Payments

In Sub-Clause 14.4(a), delete the words "sub-paragraph (i) of".

14.6 Issue of IPC

Delete sub-clause 14.6.3 and replace with the following:

“The Engineer may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate. A Payment Certificate shall not be deemed to indicate the Engineer’s acceptance, approval, consent or Notice of No-objection to any Contractor's Document or to (any part of) the Works.

If the Contractor considers that an IPC does not include any amounts to which the Contractor is entitled, these amounts shall be identified in the next Statement (the "identified amounts" in this paragraph) The Engineer shall then make any correction or modification that should properly be made in the next Payment Certificate.”

14.7 Payment

Replace in (a): 21 days by 56 days

Replace in (b) (i): 56 days by 84 days

Replace in (b) (ii): 28 days by 56 days

Replace in (c): 56 days by 84 days

14.8 Delayed Payment

Delete sub-clause and replace with the following:

If the Contractor does not receive payment in accordance with Sub-Clause 14.7, the Contractor shall be entitled to receive financing charges calculated monthly on the amount unpaid during the period of delay. This period shall be deemed to commence on the date for payment specified in Sub-Clause 14.7, irrespective (in the case of its sub-paragraphs (b) and (c)) of the date on which any Interim Payment Certificate is issued.

These financing charges shall be calculated at the annual interest at the rate stated in the Contract Data. The Contractor shall not be entitled to compound interest under any circumstances.

The Contractor shall be entitled to this payment without formal notice or certification, and without prejudice to any other right or remedy.

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14.9 Release of Retention Money

Delete sub-clause and replace with the following:

When the temporary Taking-Over Certificate has been issued for the Works, the first half of the Retention Money shall be certified by the Engineer for payment to the Contractor. If a Taking-Over Certificate is issued for a Section or part of the Works, a proportion of the Retention Money shall be certified and paid. This proportion shall be half (50%) of the proportion calculated by dividing the estimated contract value of the Section or part, by the estimated final Contract Price.

Promptly after the successful full filling of the reservoir (or maximum 2 years) and upon the expiration of the Defects Notification Period, the outstanding balance of the Retention Money of section 1, shall be certified by the Engineer for payment to the Contractor. This proportion shall be half (50%) of the proportion calculated by dividing the final contract value of Section 1 by the final Contract Price.

For section 2 (Operation and Maintenance), the Retention Money shall be released post issuing the Taking-Over certificate.

However, when certifying any release of Retention Money under Sub-Clause 14.6 [Issue of IPC], if any work remains to be executed under Clause 11 [Defects after Taking Over], the Engineer shall be entitled to withhold certification of the estimated cost of this work until it has been executed.

When calculating these proportions, no account shall be taken of any adjustments under Sub-Clause 13.6 [Adjustments for Changes in Law] and Sub-Clause 13.7 [Adjustments for Changes in Cost].

Unless otherwise stated in the Particular Conditions, when the Taking-Over Certificate has been issued for the Works and the first half of the Retention Money has been certified for payment by the Engineer, the Contractor shall be entitled to substitute a guarantee, in the form annexed to the Particular Conditions or in another form approved by the Employer and issued by a Lebanese Bank or a foreign Bank through its correspondent Bank in Lebanon, for the second half of the Retention Money. The Contractor shall ensure that the guarantee is in the amounts and currencies of the second half of the Retention Money and is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects, as specified for the Performance Security in Sub-Clause 4.2. On receipt by the Employer of the required guarantee, the Engineer shall certify and the Employer shall pay the second half of the Retention Money. The release of the second half of the Retention Money against a guarantee shall then be in lieu of the release under the second paragraph of this Sub-Clause. The Employer shall return the guarantee to the Contractor within 21 days after receiving a copy of the Performance Certificate.

14.10 Statement at Completion

In the first sentence of the first paragraph replace the words "... a Statement at completion..." with the words "...a Statement at completion in two paper-originals and one electronic copy".

Replace sub-paragraph (c) with the following:

- (d) an estimate of any other amounts which the Contractor considers have or will become due after the Date of Completion of the Works under the Contract or otherwise. These estimated amounts shall be shown separately (to those of sub-paragraphs (a) and (b) above).

Section VI. Particular Conditions (PC)

14.11 Final Statement

In Sub-Clause 14.11.1 (b) replace the words “one paper-original” with the words “two paper-originals”.

In Sub-Clause 14.11.1 (c) replace sub-paragraph (iii) with the following:

- (iii) an estimate of any other amounts which the Contractor considers have or will become due after the issue of the Performance Certificate, under the Contract or otherwise. These estimated amounts shall be shown separately (to those of sub-paragraphs (i) and (ii) above).

In Sub-Clause 14.11.1 delete the words “Except for any amount under sub-paragraph (iii) above,” from the first sentence of the last paragraph.

14.12 Discharge

Delete sub-clause and substitute with the following:

When submitting the Final Statement, the Contractor shall submit to the Employer with copy to the Engineer a discharge, which confirms that the total of the Final Statement represents full and final settlement of all moneys due to the Contractor under or in connection with the Contract. This discharge shall become effective when the Contractor has received the Performance Security and the outstanding balance of this total, in which event the discharge shall be effective on such date.

16.1 Suspension by Contractor

Delete sub-clause and substitute with the following:

The Contractor may, if the Employer fails to pay the amount due under any certificate of the Engineer within 60 days after the expiry of the time stated in Sub-Clause 14.6 and 14.7 within which payment is to be made, subject to any deduction that the Employer is entitled to make under the Contract, after giving 60 days prior notice to the Employer, with a copy to the Engineer, reduce the rate of work in a manner that the Contractor shall clearly specify and reflect in a revised programme of work, showing the rate of work to be reduced and intended reduction in resources, fully documented and submitted for the Engineer’s verification.

The Contractor’s action shall not prejudice his entitlements to financing charges under Sub-Clause 14.8 and to termination under Sub-Clause 16.2.

If the Contractor subsequently receives such Payment Certificate evidence or payment or any part of the amount due, (as described in the relevant Sub-Clause and in the above notice) before giving a notice of termination, the Contractor shall resume normal working as soon as is reasonably practicable, but in any case, not exceeding 30 days from such payment.

If the Contractor suffers delay and/or incurs Cost as a result of reducing the rate of work in accordance with this Sub-Clause, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 to an extension of time for any such delay, if Completion is or will be delayed, under Sub-Clause 8.5 [Extension of Time for Completion].

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.7 [Agreement or Determination] to agree or determine these matters.

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16.2 Termination by Contractor

Delete sub-clause and substitute with the following:

The Contractor shall be entitled to terminate the Contract if:

- (a) The Employer interferes with or obstructs or refuses any required approval for the issue of any certificate.
- (b) The Contractor does not receive the Engineer's instruction recording the agreement of both Parties on the fulfillment of the conditions for the Commencement of Works under Sub-Clause 8.1.

In any of these events or circumstances, the Contractor may, upon giving 21 days' notice to the Employer, terminate the Contract.

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

16.3 Contractor's Obligations after Termination

Add (d) Deliver to the Engineer all Employer-Supplied Materials and/or Employer's Equipment made available to the Contractor in accordance with Sub-clause 2.6 (Employer-Supplied Materials and Employer's Equipment).

17.1 Responsibility for care of the Works

In the first paragraph replace "the date of completion" with "issue of taking-over certificate of the works".

17.7 Use of Employer's Accommodation / Facilities

The Contractor shall take full responsibility for the care of the Employer-provided accommodation and facilities, if any, from the handing over to the Contractor until cessation of occupation.

If any loss or damage happens to any of the above items while the Contractor is responsible for their care arising from any cause whatsoever other than those for which the Employer is liable, the Contractor shall, at its, own cost, rectify the loss or damage to the satisfaction of the Engineer.

18.4 Consequences of an Exceptional Event.

Add the following at the end of paragraph (b)

of such cost, including the cost of rectifying or replacing the works and/or goods damaged or destroyed by Exceptional Events, to the extent they are not indemnified through the insurance policy referred to in sub-clause 19.2 (Insurance to be provided by the Contractor).

18.5 Optional Termination

Delete sub-paragraph (b) and substitute with the following:

- (b) The Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor: this Plant and Materials shall become the property of (and be at the risk of)

Section VI. Particular Conditions (PC)

the Employer when paid for by the Employer, and the Contractor shall place the same at the Employer's disposal;

Delete sub-paragraph (e).

19.1 General Requirements

Add the following paragraph at the end of sub-clause:

"The insurers shall be registered at the Ministry of Commerce of the Republic of Lebanon and shall be licensed to operate in Lebanon in accordance with the Lebanese Law.

All insurances required by the Contract shall be effected with insurers approved by the Employer and the terms of all insurance policies shall be approved by the Employer. Before commencing work on Site, the Contractor shall provide evidence to the Employer that the insurances have been effected and, not later than 30 days from the Commencement Date, the Contractor shall provide copies of the policies to the Employer and shall notify the Engineer accordingly."

19.2 Insurance to be Provided by the Contractor

Add the following paragraph at the end of sub-clause:

"The insurances shall also cover, to the extent specifically required in the bidding documents of the Contract, loss or damage to a part of the Works which is attributable to the use or occupation by the Employer of another part of the Works, and loss or damage due to Employer's Risks according to the following list, excluding (in each case) risks which are not insurable at commercially reasonable terms, with deductibles per occurrence of not more than the amount stated in the Contract Data.

Employer's Risks

- a) loss or damage due to the use or occupation by the Employer of any Section or part of the Permanent works, except as may be provided for in the Contract;
- b) loss or damage to the extent that it is due to the design of the Works, other than any part of the design provided by the Contractor or for which the Contractor is responsible; and
- c) any operation of the forces of nature (insofar as it occurs on the Site) which an experienced Contractor:
 - i) could not have reasonably foreseen, or
 - ii) could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures:
 - Prevent loss or damage to physical property from occurring by taking appropriate measures, or
 - Insure against such loss or damage.

The insurance of works shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred. Any payments of the insurer of works are to be made payable to the Employer to his account.

The insuring Party shall maintain this insurance to provide cover until the date of issue of the Taking-Over Certificate, for loss or damage for which the Contractor is liable arising from a cause occurring prior to the issue of the Taking-Over Certificate, and for loss or damage caused by the Contractor in the course of any other operations such as Operation & Maintenance (including those under Defects Notification Period)."

Section VI. Particular Conditions (PC)

“The insurance of works shall provide for Hull policy coverage for physical loss or damage to vessels hull and machinery.

In addition to the insurances required in the General Conditions of Contract, defect insurance (10 years) to be provided by the Contractor, starting at the completion of works. It should cover any defect in any element of the membrane complex or in its physical external protection. It shall consist of a Professional Liability Insurance released by an international reputable insurance company with a local leader or branch. This insurance should cover all type of defects that can occur during the ten years following the completion of works. The maximum coverage of this insurance should be one Million Dollar.

The bidder is required to provide a commitment statement, accompanied by a letter from an insurance company, assuring the intention to release of professional liability insurance for a duration of 10 years post-completion of the works. This insurance should comprehensively cover any defect that may arise during this period for any element of the membrane complex or its physical protection.

21.6 Arbitration

Delete sub-clause and replace with the following:

Settlement of Disputes:

Any dispute in respect of which amicable settlement has not been reached within 60 days after the day on which notice of intention to commence arbitration was given, shall be finally settled according to the appropriate procedure stated herein.

- (a) Where the Contractor is a national of Lebanon or a company established in accordance with the laws of Lebanon, the dispute shall be submitted to the competent Lebanese Court in accordance with Lebanese Law.
- (b) Where the Contractor is not a national of Lebanon or a non-Lebanese company, (including a Joint Venture when the lead Partner is a foreigner) the dispute shall be finally settled in accordance with UNICITRAL rules as are present in force.

Arbitration shall be heard by an Arbitral Tribunal of three (3) arbitrators. Each Party to the Contract shall appoint one arbitrator within thirty (30) days from the Notice of Arbitration by one Party to the other. The two appointed arbitrators shall then jointly appoint a third arbitrator as Chairman of the Arbitral Tribunal. If the arbitrators appointed by the Parties do not succeed in appointing a third arbitrator within sixty (60) days after the latter of the two has been appointed, the third arbitrator shall, at the request of either Party, be appointed by the President of the tribunal of first instance of Beirut in accordance with the Lebanese Law.

The place of arbitration shall be later determined.

The language of Arbitration shall be the English language.

The Applicable law shall be the Lebanese Law.

The Award of Arbitration shall be final and binding.

According to the law No. 440 dated 29/7/2002, the validity of this clause is subject to the issuing of a decree by the Council of Ministers authorizing the Client to go to arbitration for the settlement of disputes.

In the absence of such decree the disputes between the parties shall be deferred to the competent Lebanese Courts.

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Additional Clauses Taxes, Duties and Shares

Add Clause 22 with the following Sub-Clauses: 22.1, 22.2, 22.3, and 22.4.

22.1 Foreign Taxation

The tendered prices by the Contractor shall be deemed to have include all taxes, duties and other charges imposed outside the Employer's country on the production, manufacture, sale and transport of the Contractor's equipment, plant, materials, and supplies to be used in or furnished under the Contract, and on the services performed under the Contract.

22.2 Local Taxation

All duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause, as of the date of the deadline for submission of bids, shall be included in the rates and prices; except for the following local taxes and duties: income tax, stamp duties, and VAT.

Income tax and stamp duties figured separately in the BOQ collection sheet (Summary Bill) shall be borne by the Employer as follows:

1. If the Contractor is a Non-Resident Company:
 - The Contractor has to pay to the Ministry of Finance, within a period of five working days starting from the date of signature of the Contract, the first part of the stamp duties amounting 0.4% of the Contract price. The Contractor shall be reimbursed for the stamp duties amount by the Employer upon submission of the corresponding receipts.
 - The Employer shall pay to the Ministry of Finance the second part of the stamp duties amounting 0.4% of the amount of each payment certificate.
 - The Employer shall pay directly to the Ministry of Finance the income tax amounting 2.25% of the amount of payment certificates.
2. If the Contractor is a Resident Company:
 - The Contractor has to pay to the Ministry of Finance, within a period of five working days starting from the date of signature of the contract, the first part of the stamp duties amounting 0.4% of the contract price. The Contractor shall be reimbursed for the stamp duties amount by the Employer upon submission of the corresponding receipts.
 - The Employer shall pay to the Ministry of Finance the second part of the stamp duties amounting 0.4% of the amount of each payment certificate.
 - The Contractor has to pay according to the Lebanese Law, to the Ministry of Finance the income tax, which the Contractor shall be reimbursed for by the Employer with a ceiling of 2.25% of the amount of payment certificates, and that upon submission by the Contractor of the corresponding receipts and Ministry of Finance clearance (براءة ذمة مالية).

The above shall not prejudice the provisions of any Treaty against Double Taxation which is applicable.

The custom duties on imported materials that are imbedded in the permanent works shall be paid by the Contractor, unless the Employer has made arrangements for duty and tax exemption.

On the other hand, the Grand Total Tender Price shall include separately sums of income tax, stamp duties and VAT, as shown in Volume 3 – Bill of Quantities - Summary Bill.

Section VI. Particular Conditions (PC)

Nothing in the Contract shall relieve the Contractor from his responsibility to pay any tax that may be levied in Lebanon in respect of the Contract according to the applicable legislation.

VAT shall be applicable separately according to Appendix 3.

22.3 Income Tax on Staff

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

22.4 Duties on Contractor's Equipment

Notwithstanding the provisions of Sub-Clause 22.2, the Contractor's Equipment, including essential spare parts therefore, imported by the Contractor for the sole purpose of executing the Contract shall be temporarily exempt from the payment of import duties and taxes upon initial importation, provided the Contractor shall post with customs authorities at the port of entry an approved export bond or bank guarantee, valid until the time completion of the Contract plus six months, in an amount equal to the full import duties and taxes which would be payable on the assessed imported value of such Contractor's Equipment and spare parts, and callable in the event that the Contractor's Equipment is not exported from the Employer's country on completion of the Contract. A copy of the bond or guarantee endorsed by the customs authorities shall be provided by the Contractor to the Employer upon the importation of individual items of Contractor's Equipment and spare parts. Upon export of individual items of Contractor's Equipment and spare parts, or upon completion of the Contract, the Contractor shall prepare, for approval by the customs authorities, an assessment of the residual value of the Contractor's Equipment and spare parts to be exported, based on the depreciation scale(s) and other criteria used by the customs authorities for such purposes under the provisions of the applicable law. Import duties and taxes shall be due and payable to customs authorities by the Contractor on (a) the difference between the initial imported value and the residual value of the Contractor's Equipment and spare parts to be exported; and (b) on the initial imported value of that Contractor's Equipment and spare parts remaining in the Employer's country after completion of the Contract. Upon payment of such dues within 28 days of being invoiced, the bond or bank guarantee shall be reduced or released accordingly; otherwise the security shall be called in the full amount remaining.

Section VII. Annex to the Particular Conditions - Contract Forms

Section VII. Annex to the Particular Conditions - Contract Forms

Table of Forms

CFM-1	Notification of Award - Letter of Acceptance
CFM-2	Contract Agreement
CFM-3	Bank Guarantee for Good Performance of the Contract
CFM-4	Bank Guarantee for Advance Payment

Section VII. Annex to the Particular Conditions - Contract Forms

Notification of Award

LETTER OF ACCEPTANCE

[Letterhead paper of the Employer]

[date]

To: *[name and address of the Contractor]*

This is to notify you that your Bid dated *[date]* for execution of the *[name of the Contract and identification number, as given in the Contract Data]* for the Accepted Contract Amount of the equivalent of *[amount in numbers and words] [name of currency]*, as corrected and modified in accordance with the Instructions to Bidders, is hereby accepted by our Agency.

You are requested to furnish the Performance Security within 10 days in accordance with the Conditions of Contract, using for that purpose one of the Performance Security Forms included in Section IX, Annex to the Particular Conditions - Contract Forms, of the Bidding Document

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Agency: _____

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Agency: _____

Attachment: Contract Agreement

NOT APPLICABLE - REFER TO CLAUSE 3 OF THE CONTRACT AGREEMENT

Section VII. Annex to the Particular Conditions - Contract Forms

Contract Agreement

THIS AGREEMENT made the _____ day of _____,
between _____ of _____
(hereinafter “the Employer”), of the one part, and _____ of _____
(hereinafter “the Contractor”), of the other part:

WHEREAS the Employer desires that the Works known as
_____ should be executed by the Contractor, and has
accepted a Bid by the Contractor for the execution and completion of these Works and
the remedying of any defects therein,

The Employer and the Contractor agree as follows:

- 1- In this Agreement words and expressions shall have the same meanings as are
respectively assigned to them in the Contract documents referred to.
- 2- The following documents shall be deemed to form and be read and construed as part
of this Agreement. This Agreement shall prevail over all other Contract documents.
 - (i) the Contract Agreement
 - (ii) the Form of Bid
 - (iii) the addenda Nos _____ (if any)
 - (iv) the Particular Conditions
 - (v) the General Conditions
 - (vi) the Specification
 - (vii) the Drawings
 - (viii) the priced Bill of Quantities
 - (ix) the price analysis
 - (x) the completed Schedules; and
 - (xi) any other document forming part of the Contract including the
Contractor’s Bid insofar as it is not covered by any of the foregoing;
- 3- This agreement shall be considered embodying the employer’s letter of Acceptance
referred to in the Conditions of Contract. All actions and/or activities under the
contract that relate to the date of the Letter of Acceptance shall be deemed to relate
to the date of this agreement.
- 4- In consideration of the payments to be made by the Employer to the Contractor as
indicated in this Agreement, the Contractor hereby covenants with the Employer to
execute the Works and to remedy defects therein in conformity in all respects with
the provisions of the Contract.
- 5- The Employer hereby covenants to pay the Contractor in consideration of the
execution and completion of the Works and the remedying of defects therein, the
Contract Price or such other sum as may become payable under the provisions of
the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed
in accordance with the laws of _____ on the day, month
and year indicated above.

Signed by _____ (for the Employer)
Signed by _____ (for the Contractor)

SPECIMEN FORM

BANK GUARANTEE FOR GOOD PERFORMANCE OF THE CONTRACT

To: Council for Development and Reconstruction
Tallet El Serail
P.O. Box 11/3170
Beirut, Lebanon

Dear Sirs,

Re: Guarantee for Good Performance of the Contract No _____

According to the terms of contract, dated _____, for the
_____, concluded
between the Council for Development and Reconstruction
(hereafter called CDR) and

(hereafter called the Contractor),
the Contractor undertakes to produce a Bank Guarantee for good performance of
the contract of _____% of the value of the contract or the amount of _____.

We hereby unconditionally and irrevocably guarantee jointly and severally with the
Contractor as a primary obligator and not as a surety merely, to pay the CDR upon its first
demand and without cavil or argument any amounts up to the maximum of _____
in fresh USD, in the event according to the binding opinion of the CDR, the Contractor would
fail to comply with his contractual obligations.

The failure of the Contractor to comply with his contractual obligations shall be advised to us
in writing with a copy to the Contractor.

This guarantee shall enter into effect on the date of entry into force of the Contract and shall
remain valid until (*insert date*) or until 28 days after the date of issuing the
Performance Certificate, whichever comes later.

DATE:

SIGNATURE OF THE BANK

SPECIMEN FORM

BANK GUARANTEE FOR ADVANCE PAYMENT

To: Council for Development and Reconstruction
Tallet El Serail
P.O. Box 11/3170
Beirut, Lebanon

Dear Sirs,

Re: Guarantee for Good Performance of the Contract No _____

According to the terms of contract, dated _____, for the
_____, concluded between
the Council for Development and Reconstruction
(hereafter called CDR) and _____,
(hereafter called the Contractor), the CDR undertakes to pay the Contractor ____% of
the value of the contract or the amount of _____ in
fresh USD by way of advance payment. The said advance payment shall be paid to the
Contractor upon receipt by the CDR of the original of this guarantee.

We hereby unconditionally and irrevocably guarantee jointly and severally with the
Contractor as a primary obligator and not as a surety merely, to pay the CDR upon its
first demand and without cavil or argument any amounts up to the maximum of
_____, in the event according to the binding opinion of the
CDR, the Contractor would fail to comply with his contractual obligations.

The failure of the Contractor to comply with his contractual obligations shall be
advised to us in writing with a copy to the Contractor.

This guarantee shall enter into effect on the date of payment to the Contractor of the
advance payment, either totally or partially, and shall remain valid until. (*insert date*)
or until
the CDR has received full repayment of the same amount from the Contractor,
whichever comes later.

DATE:

SIGNATURE OF THE BANK

APPENDIX 1 - SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

**Council for Development and Reconstruction
Beirut, Lebanon**

APPENDIX 1 - SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

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PREAMBLE

PART I - GENERAL SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

PART II - SUPPLEMENTARY SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

Preamble

The Safety, Health and Environmental Regulations are in two parts:

PART I - General Safety, Health and Environmental Regulations;

PART II - Supplementary Safety, Health and Environmental Regulations.

PART II shall have priority over PART I.

Part I - General Safety, Health and Environmental Regulations

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Annex 2 Sample Street Closure Permit

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Part I - General Safety, Health and Environmental Regulations

1 Introduction

- 1.1 The prevention of injury and/or illness to site personnel and the public, damage to the Works and to public and private property, protection of the environment, and compliance with applicable laws, are primary objectives of CDR (the Employer). Because of the importance CDR places on meeting these objectives, selected minimum requirements are outlined in these Safety, Health and Environmental Regulations with which Contractors shall comply while working on CDR contracts. Given that these Regulations cannot cover every eventuality, the Contractor shall be expected to exercise good judgment in all such matters, even though not mentioned in these Regulations, and shall take any and all additional measures, as required or necessary, to meet his responsibility for safety, health and environmental matters during the period of the Contract.

CDR and its representatives shall not be held liable for any actions taken by the Contractor that are attributed to following the minimum requirements stated hereinafter.

- 1.2 The Contractor shall, throughout the execution and completion of the Works and the remedying of any defects therein:
- (a) have full regard for the safety of all persons on the Site and keep the Site and the Works in an orderly state appropriate to the avoidance of danger to any person;
 - (b) know and understand all laws governing his activities along with any site requirements and work site hazards. Such information shall be communicated by the Contractor to his personnel and subcontractors;
 - (c) take all necessary measures to protect his personnel, the Employer's personnel, other persons, the general public and the environment;
 - (d) avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of carrying out the Works.
 - (e) ascertain and comply with any regulations concerning noise, pollution and other nuisance in addition to the obligations imposed by the Conditions of Contract and by law.
 - (f) take necessary precautions to prevent nuisance from smoke, dust, rubbish, water, polluted effluent and other causes.

2 Compliance with Regulations

- 2.1 The Contractor shall comply with the requirements of these Safety, Health and Environmental Regulations and all other applicable regulations or requirements under Lebanese laws, laid down by relevant authorities or issued by the Employer or the Engineer concerning safety, health and the environment, in force or introduced or issued from time to time during the period of the Contract.

In so far as these Regulations are applicable, they shall apply to sites and personnel outside the Site associated with the performance of the Contract.

- 2.2 The Regulations equally apply to subcontractors and all other parties engaged by the Contractor and their personnel. The Contractor shall ensure all such parties are fully aware of and comply with the Regulations.

- 2.3 The Contractor shall comply with all notifications and written or verbal instruction regarding safety issued pursuant to these Regulations by the Employer, Engineer or relevant authorities within the time specified in the notification or instruction.

Whenever the Contractor is required to obtain the approval, agreement, permission, etc of the Engineer, such approval, agreement, permission, etc shall not relieve the Contractor of his responsibilities and obligations under these Regulations or the Contract.

- 2.4 The Contractor shall adopt a positive approach, awareness and responsibility towards safety, health and the environment, and take appropriate action, by:

- (a) ensuring the Regulations are enforced and followed by the Contractor's personnel. Any failure by the Contractor's personnel to follow the Regulations, shall be regarded as a failure by the Contractor.
- (b) paying attention to possible injury to unauthorized persons entering the site, particularly children.

- 2.5 Whenever in these Regulations the Contractor is required to provide test certificates for equipment and personnel or to comply the relevant authorities' requirements and no independent test facilities are available or no relevant authorities exist in Lebanon, the Contractor shall provide:

- a) in lieu of independent test certificates:
 - for equipment - details of the tests and the date of the tests that have been carried out by the Contractor and a written statement that the Contractor has satisfied himself that the item of equipment is fit and safe for use;
 - for personnel - details of the training and experience and a written statement that the Contractor has satisfied himself that the person has the required level of competency;
- b) in lieu of relevant authorities' requirements - details of the Contractor's own rules, regulations, requirements and procedures regarding safety, health and the environment.

If the Engineer is dissatisfied with the details provided by the Contractor, the Contractor shall provide further details or carry out further tests or provide further written statements as may be reasonably required by the Engineer.

When the Engineer has satisfied himself regarding the Contractor's own rules, regulations, requirements and procedures provided in accordance with (b) above, such rules, etc shall be deemed to form part of these Regulations and to which Clause 3 shall equally apply.

3 Failure to Comply with Regulations

3.1 General

3.1.1 Should the Contractor fail to comply with any of the Regulations or requirements:

- (a) the Engineer may suspend the Works or part of the Works until the Contractor has taken necessary steps, to the satisfaction of the Engineer, to comply with the regulations or requirements.
- (b) the Employer may, following written notice to the Contractor, carry out themselves or arrange for another contractor to carry out such measures as they consider appropriate on behalf of the Contractor. Any such actions by the Employer shall not affect or diminish the Contractor's obligations or responsibilities under the Contract.
- (c) the Engineer may, following written notice to the Contractor, deduct from payments to the Contractor the amounts stipulated in Sub-Clause 3.2. Such notice shall specify:
 - (i) the nature of the failure or failures;
 - (ii) the period after the date of the notice within which the Contractor shall remedy each failure; and
 - (iii) the amount to be deducted.

Such suspension of payment will remain in force until such time as the Contractor has rectified the breach or breaches to the satisfaction of the Engineer. No interest shall be paid on the suspended payments.

3.1.2 Failure to comply with the Regulations or requirements shall be considered a breach of contract by the Contractor and may result in termination of the Contract by the Employer.

3.1.3 In the event of the Employer or Engineer taking action based on Sub-Clause 3.1.1(a) or (b) or 3.1.2, the Contractor shall not be entitled to any additional costs or extension to the Contract Completion Date.

3.1.4 All costs incurred by the Employer pursuant to Sub-Clause 3.1.1(b) and the deductions from payments imposed on the Contractor by the Engineer under Sub-Clause 3.1.1(c) shall be deducted from amounts otherwise due to the Contractor.

3.2 Deductions from Payments

3.2.1 Failures by the Contractor to comply with the Regulations or requirements are classified as follows:

D1 - breaches of Sub-Clause 5.6 (personal protective equipment);
D2 - breaches of Clause 7 (work in Public Areas);
D3 - breaches other than D1 and D2.

3.2.2 The basic deduction from payment for each classification in Sub-Clause 3.2.1, is as follows:

for D1 – USD 100/person/day;
for D2 – USD 500/location/day;
for D3 – USD 100/occurrence/day.
Limit of cumulative total deductions shall not exceed 1% of Contract price.

3.2.3 Deductions from payments will be applied as follows:

- (a) for the first breach of each regulation or requirement - the basic deduction. If the same or similar breaches occur in different situations or locations at the same time, the Engineer may apply deductions for each situation or location; this will not apply to breaches related to personal protective equipment.
- (b) for a second or subsequent breach of the same Regulation or requirement or failure to rectify a previous failure within the time specified by the Engineer - twice the basic deduction.

4 General Requirements

4.1 Preamble

4.1.1 All references to safety shall be deemed to include health and the environment.

4.2 Safety Officer

4.2.1 The Contractor shall appoint a competent Safety Officer who shall be responsible for safety, health and the environment. The Safety Officer shall be given sufficient time by the Contractor to carry out his duties; minimum requirements shall be as follows:

Workforce on Site of over 250- full time Safety Officer;

Workforce on Site of 100-250 - 50% of Safety Officer's time;

Workforce on Site below 100 - as required for the Works but a minimum of 5 hours per week of Safety Officer's time where more than 20 workers.

4.2.2 The Contractor shall provide the Safety Officer with appropriate identification, including a white hard hat with red cross symbol and an identification badge. The appointment of the Safety Officer shall be in writing and copied to the Engineer. The appointment shall include specific instructions to enforce these Regulations and delegated authority to take any action, measure or to issue

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instructions regarding their enforcement. All persons on Site shall be made aware of the name and authority of the Safety Officer and instructed to comply with any instruction or direction on safety matters, verbal or in writing, issued by the Safety Officer.

- 4.2.3 The Safety Officer shall be provided with a mobile phone or other similar means of communication. The Safety Officer shall be accessible and available at all times including outside normal working hours.

4.3 Safety Training

- 4.3.1 The Contractor shall provide safety induction training for all site personnel upon starting on site.
- 4.3.2 The Contractor shall provide safety refresher/reinforcement training at regular intervals for his staff.

4.4 Safety Meetings

- 4.4.1 The Contractor shall hold regular safety meetings to provide safety instructions and receive feedback from site personnel on safety, health and environmental matters. A weekly Safety Meeting shall be chaired by the Safety Officer and minutes shall be taken of the meeting. The meeting/minutes shall cover all relevant issues including actions to be taken. A copy of the minutes shall be given to the Engineer. The Safety Officer should attend the Contractor's weekly site meetings and "Safety" should be an item on the agenda.

4.5 Safety Inspections

- 4.5.1 The Safety Officer shall make regular safety inspections of the work site. The Safety Officer shall prepare a report of each inspection. This report shall include details of all breaches of these Regulations and any other matters or situations relating to safety found during the inspection, instructions issued by the Safety Officer and actions taken by the Contractor. A copy of the Safety Officer's inspection reports shall be given to the Engineer.

4.6 Control of Substances Hazardous to Health

- 4.6.1 Hazardous materials shall be stored in approved safety containers and handled in a manner specified by the manufactures and/or prescribed by relevant Authorities (see Sub-Clause 2.5).
- 4.6.2 Only properly trained and equipped personnel shall handle hazardous materials.

4.7 Potential Hazards

- 4.7.1 The Contractor shall inform employees of potential hazards, take appropriate steps to reduce hazards and be prepared for emergency situations.
- 4.7.2 The Contractor shall make an assessment of every operation involving hazardous substances. The assessment shall be recorded on a Hazardous and Flammable Substances Assessment Method Statement which shall be submitted to the Engineer prior to the delivery and use of the substance on Site.

4.8 Accident Reporting

- 4.8.1 The Contractor shall report all accidents and dangerous occurrences to the Engineer. The Contractor shall prepare a report on each accident or dangerous occurrence and a copy of the report, together with witness statements and any other relevant information, shall be submitted to the Engineer. A reportable accident or dangerous occurrence shall include any accident to any person on Site requiring medical attention or resulting in the loss of working hours or any incident that resulted, or could have resulted, in injury, damage or a danger to the Works, persons, property or the environment.
- 4.8.2 In the event of an accident or dangerous occurrence, the Contractor shall be responsible for completing all statutory notifications and reports. Copies of all statutory notifications and reports shall be passed to the Engineer.
- 4.8.3 All accidents and dangerous occurrences shall be recorded in a Site Accident Book. The Site Accident Book shall be available at all times for inspection by the Engineer.
- 4.8.4 The Contractor shall immediately rectify any situation or condition that could result in injury, damage or a danger to the Works, person, property or the environment. If the situation or condition cannot be corrected immediately, the Contractor shall provide temporary barriers and appropriate warning signs and devices and/or take other appropriate action necessary for the protection of persons, property and the environment.

4.9 Notices, Signs, Etc

- 4.9.1 All safety, health, environmental and other notices and signs shall be clearly displayed and written in both Arabic and either English or French. All requirements, instructions, procedures, etc issued by the Contractor concerning these Regulations shall be printed in both Arabic and English and displayed and readily available to Contractor's personnel.

4.10 First Aid and Medical Attention

- 4.10.1 The Contractor shall have comprehensive First Aid Kit(s) on Site at all times. First Aid Kits shall be conveniently located and clearly identifiable.
- 4.10.2 The Contractor shall have one employee on site trained in first aid for every 25 employees. Such persons shall be provided with appropriate identification, including a red hard hat with a white "red cross" symbol and an identification badge.
- 4.10.3 The Contractor shall make contingency arrangements for calling a Doctor and transporting injured persons to hospital. The telephone numbers of the emergency services and the name, address and telephone number of the Doctor and nearest hospital shall be prominently displayed in the Contractor's site office.

4.11 Employee Qualifications and Conduct

- 4.11.1 The Contractor shall employ only persons who are fit, qualified and skilled in the work to be preformed. All persons shall be above the minimum working age.
- 4.11.2 Contractor's personnel shall use the toilet facilities provided by the Contractor.

4.11.3 The Contractor shall ensure:

- (a) that no firearms, weapons, controlled or illegal substances or alcoholic beverages are brought onto the Site and that no personnel under the influence of alcohol or drugs are permitted on Site.
- (b) that all personnel obey warning signs, product or process labels and posted instructions.
- (c) that drivers or operators of vehicles, machinery, plant and equipment follow the rules for safe operations. Drivers shall wear seat belts and obey all signs and posted speed limits.

4.12 Security

- 4.12.1 The Contractor shall take all measures necessary, including watching and lighting at night, to prevent unauthorized entry to the Site and to safeguard the Site, the Works, materials, Plant, Contractor's Equipment and Temporary Works against damage from trespass and theft.

5 Safety Requirements

5.1 Personal Protective Equipment

- 5.1.1 The Contractor shall provide personal protective equipment, including hard hats, safety glasses, respirators, gloves, safety shoes, and such other equipment as required, and shall take all measures or actions for the protection and safety of Contractor's personnel.
- 5.1.2 Non-metallic hard hats shall be worn at all times by all personnel at the worksite with the exception of those areas where the Engineer has indicated it is not necessary to do so.
- 5.1.3 Safety glasses shall meet international standards and be available for use and worn in specified worksite areas. As a minimum, safety glasses shall be worn for the following types of work: hammering, chipping, welding, grinding, use of electrically powered or pneumatic equipment, insulation handling, spray painting, working with solvents, and other jobs where the potential of an eye injury exists. Face shields and/or monogoggles shall be worn where possible exposure to hazardous chemicals, cryogenic fluids, acids, caustics, or dust exists and where safety glasses may not provide adequate protection.
- 5.1.4 When handling acids, caustics, and chemicals with corrosive or toxic properties, suitable protection, such as acid suits or chemical resistant aprons and gloves, shall be worn to prevent accidental contact with the substance.
- 5.1.5 Personnel shall not be permitted to work whilst wearing personal clothing or footwear likely to be hazardous to themselves or others.
- 5.1.6 The wearing of safety shoes with steel reinforced toes is recommended for all Contractor's personnel on site. In all cases, Contractor's personnel shall wear substantial work shoes that are commensurate with the hazards of the work and the worksite area.
- 5.1.7 Hearing protection, including muffs, plugs or a combination thereof, shall be provided for all personnel operating in areas where the noise level exceeds 90 decibels. Such protection shall also be provided for operators working with equipment exceeding such a level. This may include equipment such as excavators, shovels, jackhammers, saws, drills, grinders, and the like are being used.

- 5.1.8 The Contractor shall encourage employees to wear substantial work gloves whenever practical and safe to do so.

5.2 Fire Protection and Prevention

- 5.2.1 The Contractor shall take all necessary measures to prevent personal injury or death or damage to the Works or other property, including but not limited to
- (a) provision of fire fighting facilities in all vulnerable areas and as instructed by the Engineer
 - (b) marking escape routes and illuminating them if necessary
 - (c) instructing workmen in fire precautions and use of firefighting equipment
 - (d) displaying notices on fire safety and procedures in the event of a fire on Site.
- 5.2.2 The Contractor shall comply with fire protection instructions given by the Authorities having jurisdiction in regard to fire protection regulations.
- 5.2.3 The Contractor shall, upon moving on site, provide to the Engineer and the Authorities a fire prevention and evacuation plan. This shall include drawing(s) showing the fire assembly points. The fire prevention and evacuation plan and drawing(s) shall be updated from time to time as the Works progress. The Contractor shall ensure all personnel are fully informed on escape routes and assembly points and any changes thereto.
- 5.2.4 Fuel storage will not be permitted in construction work areas. Contractors may establish fuel storage tanks in special areas set aside for the purpose and approved by the Engineer. Storage tanks shall be adequately bounded to control spillage. Fire extinguishers shall be provided and installed in a suitable nearby location.
- 5.2.5 Highly combustible or volatile materials shall be stored separately from other materials and as prescribed by relevant authorities and under no circumstances within buildings or structures forming part of the permanent Works. All such materials shall be protected and not exposed to open flame or other situations which could result in a fire risk.
- 5.2.6 No combustible site accommodation shall be located inside or within 10 meters of a building or structure forming part of the permanent Works. Where units have to be used in these circumstances, they shall be constructed of non-combustible materials and have a half-hour fire rating inside to outside and outside to inside. Non-combustible furniture shall be used where practical.
- 5.2.7 All temporary accommodation and stores shall be provided with smoke detectors and fire alarms.
- 5.2.8 Smoking shall be banned in high-risk areas.
- 5.2.9 Expanded polystyrene with or without flame retarding additive, polythene, cardboard and hardboard shall not be used as protection materials.
- 5.2.10 Plywood and chipboard shall only be used as protection on floors. Vertical protection shall be non-combustible. Debris netting and weather protection sheeting shall be fire retardant.
- 5.2.11 When using cutting or welding torches or other equipment with an open flame, the Contractor shall provide a fire extinguisher close by at all times. All flammable material shall be cleared from areas of hot works, or work locations prior to welding or oxy/gas burning operations. All

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hot works shall cease half an hour before the end of a work shift to allow for thorough checking for fires or smoldering materials. Where appropriate, areas of hot works are to be doused in water before the shift ends.

- 5.2.12 An adequate number of fire extinguishers of types suited to the fire risk and the materials exposed shall be provided. These shall be placed in accessible, well-marked locations throughout the job site. Contractor's personnel shall be trained in their use. Extinguishers shall be checked monthly for service condition and replaced or recharged, as appropriate after use.
- 5.2.13 Only approved containers shall be used for the storage, transport and dispensing of flammable substances. Portable containers used for transporting or transferring gasoline or other flammable liquids shall be approved safety cans.
- 5.2.14 Fuel burning engines shall be shut off while being refueled
- 5.2.15 Adequate ventilation to prevent an accumulation of flammable vapors shall be provided where solvents or volatile cleaning agents are used.
- 5.2.16 Flammables shall not be stored under overhead pipelines, cable trays, electrical wires, or stairways used for emergency egress.
- 5.2.17 Paints shall be stored and mixed in a room assigned for the purpose. This room shall be kept under lock and key.
- 5.2.18 Oily waste, rags and any other such combustible materials shall be stored in proper metal containers with self-closing lids and removed every night to a safe area or off site. Every precaution shall be taken to prevent spontaneous combustion.

5.3 Electrical Safety

- 5.3.1 All temporary electrical installations, tools and equipment shall comply with current regulations dealing with on-site electrical installations.
- 5.3.2 The Contractor shall establish a permit-to-work system for work on or in proximity to energized circuits of any voltage. Contractor's personnel shall not commence work on such circuits unless a permit to work has been issued and adequate safety measures have been taken and the work operation has been reviewed and approved by the Engineer.
- 5.3.3 Only authorized personnel shall be allowed to work or repair electrical installations and equipment.
- 5.3.4 Portable tools and equipment shall be 220 volt, unless otherwise agreed by the Engineer.
- 5.3.5 When portable or semi-mobile equipment operates at voltages in excess of 110 volts, the supply shall be protected by a Residual Current Device (RCD) regardless of any such device fitted to the equipment. The RCD must have a tripping characteristic of 30 milliamps at 30 milliseconds maximum.
- 5.3.6 All static electrically powered equipment, including motors, transformers, generators, welders, and other machinery, shall be properly earthed, insulated, and/or protected by a ground fault interruption device. In addition, the skin of metal buildings and trailers with electric service shall be earthed. Metal steps, when used, shall be securely fixed to the trailer.

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- 5.3.7 Lamp holders on festoon lighting shall be molded to flexible cable and be of the screw in type. Clip on guards shall be fitted to each lamp unit.
- 5.3.8 All tungsten-halogen lamps shall be fitted with a glass guard to the element. These lamps must be permanently fixed at high level.
- 5.3.9 Electrical equipment shall be periodically inspected and repaired as necessary by competent persons.
- 5.3.10 Any work on electrical equipment and systems shall be made safe through locking, tagging, and/or isolation of the equipment before work commences. Prior to the start of the work, the equipment or systems shall be tested to insure that they have been properly de-energized and isolated.
- 5.3.11 Electrical repair work on energized systems shall be avoided whenever possible.
- 5.3.12 Electrical troubleshooting shall be conducted only after getting written approval of the Engineer.
- 5.3.13 Unauthorized personnel shall not enter enclosures or areas containing high voltage equipment such as switchgear, transformers, or substations.

5.4 Oxygen/Acetylene/Fuel Gases/Cartridge Tools

- 5.4.1 Compressed oxygen shall never be used in the place of compressed air.
- 5.4.2 Flash-back (Spark) arrestors shall be fitted to all gas equipment.
- 5.4.3 Liquid Petroleum Gas (LPG) cylinders shall not be stored or left in areas below ground level overnight. Cylinders must be stored upright.
- 5.4.4 The quantity of oxygen, acetylene and LPG cylinders at the point of work shall be restricted to a maximum of one day's supply. Cylinders shall be kept in upright vertical rack containers or be safely secured to a vertical support.
- 5.4.5 Cartridge tools shall be of the low velocity type. Operators must have received adequate training in the safe use and operation of the tool to be used.

5.5 Scaffolding/Temporary Works

- 5.5.1 No aluminum tube shall be used, except for proprietary mobile towers, unless otherwise agreed with the Engineer.
- 5.5.2 Drawings and calculations shall be submitted to the Engineer, prior to commencement of work on site, for all Temporary Works, including excavations, falsework, tower cranes, hoists, services and scaffolding. Design shall conform to international standards.
- 5.5.3 The Engineer will not approve Temporary Work designs but the Contractor shall take account of any comments on such designs made by the Engineer.
- 5.5.4 The Contractor shall inspect and approve all Temporary Works after erection and before access, loading or use is allowed. Completed and approved Temporary Works shall be tagged with a scaff-tag or similar safety system and the Safe Structure insert displayed. For scaffolding, one

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tag shall be displayed every 32 m² of face area. A central record system shall be kept on all Temporary Work. Temporary Works shall be inspected weekly and similarly recorded.

- 5.5.5 All mobile scaffold towers shall be erected in accordance with the manufacturer's instructions and a copy of these shall be submitted to the Engineer prior to any use on site. Additionally, all towers shall be erected complete with access ladder, safety rails and kick boards whatever the height.
- 5.5.6 The Contractor shall repair or replace, immediately, any scaffold including accessories, damaged or weakened from any cause.
- 5.5.7 The Contractor shall ensure that any slippery conditions on scaffolds are eliminated as soon as possible after they occur.
- 5.5.8 All scaffolds used for storing materials, for brick or block laying, for access to formwork or for any other purpose where materials may accidentally fall, shall be provided with wire mesh guards or guards of a substantial material, in addition to kick boards.

5.6 Use of Ladders

- 5.6.1 Manufactured ladders shall meet the applicable safety codes for wood or metal ladders. Metal ladders shall not be used where there is any likelihood of contact with electric cables and equipment. All metal ladders shall be clearly marked: "Caution - Do not use around electrical equipment".
- 5.6.2 Job made ladders shall not be permitted.
- 5.6.3 Extension or straight ladders shall be equipped with non-skid safety feet, and shall be no more than 12 m in height. The maximum height of a stepladder shall be 2 m. Ladders shall not be used as platforms or scaffold planks.
- 5.6.4 Ladders rungs and steps shall be kept clean and free of grease and oil.
- 5.6.5 Extension and straight ladders shall be tied off at the top and/or bottom when in use. Only one person shall be allowed on a ladder at a time.
- 5.6.6 Defective ladders shall be taken out of service and not used. Ladders shall not be painted and shall be inspected for defects prior to use.

5.7 Elevated Work

- 5.7.1 The Contractor shall provide all personnel, while working at an elevated position, with adequate protection from falls. Details of such protection shall be submitted to and approved by the Engineer.
- 5.7.2 The Contractor shall carry out daily inspections of all elevated work platforms. Defects shall be corrected prior to use.
- 5.7.3 Roofing & Sheet Material Laying
 - (a) A Method Statement detailing the procedures to be adopted shall be submitted to and agreed with the Engineer prior to commencement of work on site.

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- (b) Mobile elevating work platforms or the equivalent shall be used to install roofing and sheet materials wherever practicable and a suitable base is available.

5.7.4 Erection of Structures

- (a) A Method Statement detailing the procedures to be adopted shall be submitted and agreed with the Engineer prior to commencement of work on site.
- (b) Safety harnesses and lines shall be provided by the Contractor for use by the erection personnel and worn at all times.
- (c) Mobile elevating work platforms or the equivalent shall be used to erect structures wherever practicable and a suitable base is available.

5.7.5 Mobile Elevating Work Platforms

Operators shall be trained in the safe use of such platforms and hold a current Certificate of Competence (see Sub-Clause 2.5).

5.7.6 Hoists

- (a) A copy of the current Test Certificate (see Sub-Clause 2.5) shall be submitted to the Engineer before any hoist (personnel or material) is brought into operation on the site. Where the range of travel is increased or reduced a copy of the revised Test Certificate shall be submitted.
- (b) Each landing gate shall be fitted with a mechanical or electrical interlock to prevent movement of the hoist when any such gate is in the open position.
- (c) Safety harnesses must be worn and used by personnel erecting, altering and dismantling hoists.

5.7.7 Suspended Cradles

- (a) Suspended cradles shall be installed, moved and dismantled by a specialist contractor.
- (b) Suspended cradles shall comply with local regulations.
- (c) All powered suspended cradles shall incorporate independent safety lines to overspeed braking devices and independent suspension lines for personal safety harness attachment.

5.8 Use of Temporary Equipment

- 5.8.1 The safe design capacity of any piece of equipment shall not be exceeded, nor shall the equipment be modified in any manner that alters the original factor of safety or capacity.
- 5.8.2 Mobile equipment shall be fitted with suitable alarm and motion sensing devices, including backup alarm, when required.
- 5.8.3 The Contractor shall ensure that the installation and use of equipment are in accordance with the safety rules and recommendations laid down by the manufacturer, taking into account the other installations already in place or to be installed in the future.

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- 5.8.4 The Contractor shall inspect Equipment prior to its use on the Works and periodically thereafter to ensure that it is in safe working order. Special attention shall be given to such items as cables, hoses, guards, booms, blocks, hooks and safety devices. Equipment found to be defective shall not be used and immediately removed from service, and a warning tag attached.
- 5.8.5 Natural and synthetic fiber rope made of material such as manila, nylon, polyester, or polypropylene shall not be used as slings if approved by the Engineer.
- 5.8.6 Only trained, qualified and authorized personnel shall operate equipment. All drivers and operators shall hold a current Certificate of Training Achievement for the equipment being used (see Sub-Clause 2.5).
- 5.8.7 A safety observer shall be assigned to watch movements of heavy mobile equipment where hazards may exist to other personnel from the movement of such equipment, or where equipment could hit overhead lines or structures. The observer shall also ensure that people are kept clear of mobile equipment and suspended loads.
- 5.8.8 When mobile or heavy equipment is traveling onto a public thoroughfare or roadway, a flagman shall insure that traffic has been stopped prior to such equipment proceeding. While the mobile or heavy equipment is traveling on a public roadway, a trailing escort vehicle with a sign warning of a slow-moving vehicle that is dangerous to pass shall be provided.
- 5.8.9 Cranes:
- (a) The Contractor shall give a minimum of 48 hours notice to the Engineer prior to bringing a mobile crane on site.
 - (b) No cranes shall be erected on the site without the prior approval of the Engineer. The Engineer may direct the Contractor as to locations where cranes may not be located. The Contractor shall take such directions into account when submitting his proposals for crane location points, base footings, pick up points and swing radius. Compliance with any such direction shall not entitle the Contractor to any extension of the Period of Completion or to any increase in the Contract Price.
 - (c) Safety harnesses shall be worn and used at all times by personnel engaged on the erection, alterations and dismantling of tower cranes.
 - (d) The Contractor shall provide a copy of the current Test Certificate (see Sub-Clause 2.5) to the Engineer before any crane (tower or mobile) is brought into operation on the Site.
 - (e) All lifting tackle must hold a current Test Certificate (see Sub-Clause 2.5). All lifting tackle must be thoroughly examined every 6 months and an inspection report raised.
 - (f) All fibrous/web slings shall be destroyed and replaced 6 months after first use.
 - (g) All crane drivers/operators shall hold a Certificate of Training Achievement for the class of crane operated (see Sub-Clause 2.5).
 - (h) All banksmen/slingers shall hold a Training Certificate from a recognized training agency (see Sub-Clause 2.5).
 - (i) Only certified slingers/banksmen shall sling loads or guide crane/load movement.

- (j) The maximum weekly working hours of a crane driver or banksman shall be restricted to 60 hours.
- (k) Under no circumstances, shall a crane or load come within 4 m of any energized overhead power line or other critical structure.

5.9 Locking-out, Isolating, and Tagging of Equipment

- 5.9.1 Equipment that could present a hazard to personnel if accidentally activated during the performance of installation, repair, alteration, cleaning, or inspection work shall be made inoperable and free of stored energy and/or material prior to the start of work. Such equipment shall include circuit breakers, compressors, conveyors, elevators, machine tools, pipelines, pumps, valves, and similar equipment.
- 5.9.2 Where equipment is subject to unexpected external physical movement such as rotating, turning, dropping, falling, rolling, sliding, etc., mechanical and/or structural constraints shall be applied to prevent such movement.
- 5.9.3 Equipment which has been locked-out, immobilized, or taken out of service for repair or because of a potentially hazardous condition shall be appropriately tagged indicating the reason it has been isolated and/or taken out of service.
- 5.9.4 Where safety locks are used for locking out or isolating equipment, the lock shall be specially identified and easily recognized as a safety lock.

5.10 Installation of Temporary or Permanent Equipment

- 5.10.1 During installation and testing the Contractor's specialist engineer shall be in attendance.
- 5.10.2 All control mechanism panel and wiring diagrams shall be available and printed in both Arabic and either English or French.

5.11 Laser Survey Instruments

- 5.11.1 Details of the types and use of laser instruments shall be submitted and agreed with the Engineer.

5.12 Working in Confined Spaces

- 5.12.1 Confined spaces, including tanks, vessels, containers, pits, bins, vaults, tunnels, shafts, trenches, ventilation ducts, or other enclosures where known or potential hazards may exist, shall not be entered without prior inspection by and authorization from the Site Safety Officer and the issuance of a Hazardous Work Permit.
- 5.12.2 Prior to entering the confined space, the area shall be completely isolated to prevent the entry of any hazardous substances or materials which could cause an oxygen deficient atmosphere. All equipment that could become energized or mobilized shall be physically restrained and tagged. All lines going into the confined space shall be isolated and/or blanked.
- 5.12.3 Personnel working in a confined space where emergency escape or rescue could be difficult, shall wear a safety harness attached to a lifeline.
- 5.12.4 A qualified attendant(s), trained and knowledgeable in job-related emergency procedures, shall be present at all times while persons are working within the confined space. The attendant shall

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be capable of effecting a rescue, have necessary rescue equipment immediately available, and be equipped with at least the same protective equipment as the person making entry.

- 5.12.5 All equipment to be used in a confined space shall be inspected to determine its acceptability for use. Where a hazard from electricity may exist, equipment utilized shall be of low voltage type.
- 5.12.6 The atmosphere within the confined space shall be tested to determine it is safe to enter. Acceptable limits are:
- oxygen: 19.5% lower, 22% higher;
 - flammable gas: not to exceed 10% of lower explosion limit;
 - toxic contaminants: not to exceed the permissible exposure limit.

Subsequent testing shall be done after each interruption and before re-entering the confined space, as well as at intervals not exceeding 4 hours. Continuous monitoring is preferable and may be necessary in certain situations.

- 5.12.7 Adequate ventilation shall be provided to ensure the atmosphere is maintained within acceptable limits.

5.13 Demolition

- 5.13.1 A detailed Method Statement detailing the demolition procedures/techniques to be used shall be submitted to and approved by the Engineer prior to commencement of work on site.

The Method Statement must include full details of measures to be taken to ensure that there are no persons remaining in the building/structure and to distance members of the public and Contractor's personnel from the building/structure prior to demolition.

5.14 Use of Explosives

- 5.14.1 The Contractor shall not use explosives without the written permission from the Engineer and relevant authorities (see Sub-Clause 2.5).
- 5.14.2 The Contractor shall observe all regulations regarding proper purchasing, transportation, storage, handling and use of explosives.
- 5.14.3 The Contractor shall ensure that explosives and detonators are stored in separate special buildings. These secured buildings shall be constructed, located and clearly marked in Arabic and English:

"DANGER - EXPLOSIVES"

all as approved by the Engineer and relevant authorities (see Sub-Clause 2.5).

- 5.14.4 The Contractor shall ensure that all possible precautions are taken against accidental fire or explosion, and ensure that explosives and detonators are kept in a proper and safe condition.
- 5.14.5 The Contractor shall ensure that explosives and detonators are always transported in separate vehicles and kept apart until the last possible moment and that metallic tools are not used to open boxes of explosives or detonators.

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5.14.6 Blasting Procedure: the Contractor shall carry out blasting operations in a manner that will not endanger the safety of persons and property. The Contractor shall, along with other necessary precautions:

- (a) clear all persons from buildings and the area affected by the blasting. All such persons shall be given adequate notice of the actual time and date of blasting,
- (b) ensure that police and other local authorities are kept fully informed, in advance, of the blasting programme so that they may be present when blasting takes place if they so require,
- (c) erect warning notices around the area affected that blasting operations are in progress,
- (d) carry out a thorough search of buildings and the area affected prior to blasting,
- (e) ensure that blasting is only carried out by experienced shot firers. Priming, charging, stemming and shot firing shall be carried out with greatest regard for safety and in strict accordance with the rules and regulations of the relevant authorities (see Sub-Clause 2.5).
- (f) ensure that explosive charges are not excessive, charged boreholes are properly protected and proper precautions are taken for the safety of persons and property,

5.14.7 The Contractor shall maintain an up-to-date inventory of all explosives and explosive devices and shall submit a monthly report to the Engineer, detailing the use of all explosives by date and location.

5.15 Excavation and Trenching

5.15.1 An excavation permit signed by the Engineer must be issued before excavation proceeds in any work location. The Contractor shall investigate and identify the location of existing services by study of the drawings, a visual/physical study of the site, sweeping by appropriate detection equipment and where necessary hand excavation of trial holes.

Following this investigation, the Contractor shall submit a written request for an excavation permit to the Engineer.

The Engineer will return the permit signed and dated to indicate:

- services which are to be maintained.
- services which are to be isolated.
- any special precautions to be taken.

A sample Excavation Permit is given in Appendix 1.

5.15.2 The issue of an Excavation Permit by the Engineer shall not relieve the Contractor of his responsibilities under the Contract.

5.15.3 The side of all excavations and trenches exceeding 1.3 meters in depth which might expose personnel or facilities to danger resulting from shifting earth shall be protected by adequate temporary supports or sloped to the appropriate angle of repose.

Appendix 1 - Safety, Health and Environmental Regulations

- 5.15.4 All excavations, slopes and temporary supports shall be inspected daily and after each rain, before allowing personnel to enter the excavation.
- 5.15.5 Excavations 1.3 meters or more in depth and occupied by personnel shall be provided with ladders as a means for entrance and egress. Ladders shall extend not less than 1 meter above the top of the excavation.
- 5.15.6 The Contractor shall provide adequate barrier protection to all excavations. Barriers shall be readily visible by day or night.
- 5.15.7 Excavated or other materials shall not be stored at least 0.65 meters from the side of excavations.
- 5.15.8 The Contractor shall:
 - (a) ensure that stability and structural integrity of the Works are maintained during construction and shall provide temporary supports where necessary and shall not overload any part of the Works with materials, Plant or Contractor's Equipment.
 - (b) provide and maintain during the execution of the Works all shoring, strutting, needling and other supports as may be necessary to preserve stability of buildings, whether new or existing, on the site or adjoining property that may be endangered or affected by the Works.
 - (c) submit to the Engineer an outline of the methods proposed to be used for the support necessary to preserve stability of buildings or other structures, together with the relevant drawings, details, calculations, specifications and subsoil investigation, as necessary for approval. Such approval shall not pass to the Employer or the Engineer the responsibility for maintaining the stability of the buildings or relieve the Contractor from his responsibility.

5.16 Concrete Reinforcement Starter Bars

- 5.16.1 The Contractor shall ensure concrete reinforcement starter bars are not a danger to personnel. Where permitted by the Engineer, starter bars shall be bent down. Alternatively, the starter bars shall be protected using either hooked starters, plastic caps, plywood covers or other methods agreed with the Engineer.

6 Environmental and Health Requirements

6.1 Protection of the Environment

- 6.1.1 The Contractor shall be knowledgeable of and comply with all environmental laws, rules and regulations for materials, including hazardous substances or wastes under his control. The Contractor shall not dump, release or otherwise discharge or dispose of any such material without the authorization of the Engineer.
- 6.1.2 Any release of a hazardous substance to the environment, whether air, water or ground, must be reported to the Engineer immediately. When releases resulting from Contractor action occur, the Contractor shall take proper precautionary measures to counter any known environmental or health hazards associated with such release. These would include remedial procedures such as spill control and containment and notification of the proper authorities.

6.2 Air Pollution

- 6.2.1 The Contractor, depending on the type and quantity of materials being used, may be required to have an emergency episode plan for any releases to the atmosphere. The Contractor shall also be aware of local ordinances affecting air pollution.
- 6.2.2 The Contractor shall take all necessary measures to limit pollution from dust and any windblown materials during the Works, including damping down with water on a regular basis during dry climatic conditions.
- 6.2.3 The Contractor shall ensure that all trucks leaving the Site are properly covered to prevent discharge of dust, rocks, sand, etc.

6.3 Water Pollution

- 6.3.1 The Contractor shall not dispose of waste solvents, petroleum products, toxic chemicals or solutions in the city drainage system or watercourse, and shall not dump or bury garbage on the Site. These types of waste shall be taken to an approved disposal facility regularly, and in accordance with requirements of relevant Authorities. The Contractor shall also be responsible to control all run-offs, erosion, etc.

6.4 Solid Waste

6.4.1 General Housekeeping

- (a) The Contractor shall maintain the site and any ancillary areas used and occupied for performance of the Works in a clean, tidy and rubbish-free condition at all times.
- (b) Upon the issue of any Taking-Over Certificate, the Contractor shall clear away and remove from the Works and the Site to which the Taking-Over Certificate relates, all Contractor's Equipment, surplus material, rubbish and Temporary Works of every kind, and leave the said Works and Site in a clean condition to the satisfaction of the Engineer. Provided that the Contractor shall be entitled to retain on Site, until the end of the Defects Liability Period, such materials, Contractor's Equipment and Temporary Works as are required by him for the purpose of fulfilling his obligations during the Defects Liability Period.

6.4.2 Rubbish Removal and Disposal

- (a) The Contractor shall comply with statutory and municipal regulations and requirements for the disposal of rubbish and waste.
- (b) The Contractor shall provide suitable metal containers for the temporary storage of waste.
- (c) The Contractor shall remove rubbish containers from site as soon as they are full. Rubbish containers shall not be allowed to overflow.
- (d) The Contractor shall provide hardstandings for and clear vehicle access to rubbish containers.
- (e) The Contractor shall provide enclosed chutes of wood or metal where materials are dropped more than 7 meters. The area onto which the material is dropped shall be

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provided with suitable enclosed protection barriers and warning signs of the hazard of falling materials. Waste materials shall not be removed from the lower area until handling of materials above has ceased.

- (f) Domestic and biodegradable waste from offices, canteens and welfare facilities shall be removed daily from the site.
- (g) Toxic and hazardous waste shall be collected separately and be disposed of in accordance with current regulations.
- (h) No waste shall be burnt on Site unless approved by the Engineer.

6.4.3 Asbestos Handling and Removal

The Contractor shall comply with all local regulations regarding the handling of asbestos materials. In the absence of local regulations, relevant International Standards shall apply.

6.4.5 Pest Control

The Contractor shall be responsible for rodent and pest control on the Site. If requested, the Contractor shall submit to the Engineer, for approval, a detailed programme of the measures to be taken for the control and eradication of rodents and pests.

6.5 Noise Control

- 6.5.1 The Contractor shall ensure that the work is conducted in a manner so as to comply with all restrictions of the Authorities having jurisdiction, as they relate to noise.
- 6.5.2 The Contractor shall, in all cases, adopt the best practicable means of minimizing noise. For any particular job, the quietest available plant/and or machinery shall be used. All equipment shall be maintained in good mechanical order and fitted with the appropriate silencers, mufflers or acoustic covers where applicable. Stationary noise sources shall be sited as far away as possible from noise-sensitive areas, and where necessary acoustic barriers shall be used to shield them. Such barriers may be proprietary types, or may consist of site materials such as bricks or earth mounds as appropriate.
- 6.5.3 Compressors, percussion tools and vehicles shall be fitted with effective silencers of a type recommended by the manufacturers of the equipment. Pneumatic drills and other noisy appliances shall not be used during days of rest or after normal working hours without the consent of the Engineer.
- 6.5.4 Areas where noise levels exceed 90 decibels, even on a temporary basis, shall be posted as high noise level areas.

6.6 Protection of Archaeological and Historical Sites

- 6.6.1 Excavation in sites of known archaeological interest should be avoided. Where this is unavoidable, prior discussions must be held with the Directorate of Antiquities in order to undertake pre-construction excavation or assign an archaeologist to log discoveries as construction proceeds. Where historical remains, antiquity or any other object of cultural or archaeological importance are unexpectedly discovered during construction in an area not previously known for its archaeological interest, the following procedures should be applied:

- a) Stop construction activities.
- b) Delineate the discovered site area.
- c) Secure the site to prevent any damage or loss of removable objects. In case of removable antiquities or sensitive remains, a night guard should be present until the responsible authority takes over.
- d) Notify the responsible foreman/archaeologist. Who in turn should notify the responsible authorities, the General Directorate of Antiquities and local authorities (within less than 24 hours).
- e) Responsible authorities would be in charge of protecting and preserving the site before deciding on the proper procedures to be carried out.
- f) An evaluation of the finding will be performed by the General Directorate of Antiquities. The significance and importance of the findings will be assessed according to various criteria relevant to cultural heritage including aesthetic, historic, scientific or research, social and economic values.
- g) Decision on how to handle the finding will be reached based on the above assessment and could include changes in the project layout (in case of finding an irrevocable remain of cultural or archaeological importance), conservation, preservation, restoration or salvage.
- h) Implementation of the authority decision concerning the management of the finding.
- i) Construction work could resume only when permission is given from the General Directorate of Antiquities after the decision concerning the safeguard of the heritage is fully executed.

6.6.2 In case of delay incurred in direct relation to Archeological findings not stipulated in the contract (and affecting the overall schedule of works), the contractor may apply for an extension of time. However the contractor will not be entitled for any kind of compensation or claim other than what is directly related to the execution of the archeological findings works and protections.

7 Additional Requirements for Work in Public Areas

7.1 General

7.1.1 These additional requirements shall apply to all works carried out in Public Areas.

7.1.2 Public Areas are defined as areas still used by or accessible to the public. These include public roads and pavements, occupied buildings and areas outside the Contractor's boundary fencing.

7.1.3 All work in Public Areas shall be carried out to minimize disturbance and avoid dangers to the public.

7.1.4 Before commencing work, the Contractor shall ensure that all necessary resources, including labour, plant and materials, will be available when required and that the works will proceed without delays and be completed in the shortest possible time. Periods of inactivity and slow progress or delays in meeting the agreed programme for the works, resulting from the Contractor's failure to provide necessary resources or other causes within the control of the Contractor, will not be accepted. In the event of such inactivity, slow progress or delays, the Contractor shall take immediate action to rectify the situation, including all possible acceleration measures to complete the works within the agreed programme. Details of the actions and acceleration measures shall be submitted to the Engineer. If the Engineer is dissatisfied with the Contractor's proposals, the

Contractor shall take such further actions or measures as required by the Engineer. All costs incurred shall be the responsibility of the Contractor.

7.2 Method Statement

7.2.1 The Contractor shall submit to the Engineer a method statement for each separate area of work in Public Areas. The Method Statement shall include:

- (a) a general description of the Works and methodology of how it will be carried out.
- (b) details of the measures and temporary works to minimize disturbance and safeguard the public. These shall include temporary diversions, safety barriers, screens, signs, lighting, watchmen and arrangements for control of traffic and pedestrians and advance warning to be given to the public.
- (c) details of temporary reinstatement and maintenance of same prior to final reinstatement.
- (d) for works involving long lengths of trenches or works to be completed in sections, the lengths or sections of each activity (eg up to temporary reinstatement, temporary reinstatement, final reinstatement) to be carried out at any one time.
- (e) details of the availability of necessary resources (labour, plant, materials, etc) to complete the work.
- (f) a programme showing start and completion dates and periods for all activities of each length or section, including temporary works, and the works overall.
- (g) such further information as necessary or required by the Engineer.

7.2.2 The Contractor shall not commence work, including temporary works, until approval of the Contractor's Method Statement by the Engineer.

7.2.3 Method Statements shall be updated based on actual progress or as and when required by the Engineer.

7.3 Closure of Roads, Etc

7.3.1 The closure or partial closure of roads, pavements and other public areas will only be permitted if approved by the Engineer and Relevant Authorities. The Contractor shall detail for each closure the extent of area to be closed, the reasons and duration of the closure and, where appropriate, proposed diversions.

A sample Street Closure Permit is given in Annex 2.

7.3.2 Access to Properties Affected by the Works:

The Contractor shall identify, protect and maintain accesses to all properties affected by the works.

7.3.3 The Contractor shall ascertain and comply with any regulations concerning traffic and parking in addition to the obligations imposed by the Conditions of Contract and by law.

- 7.3.4 The Contractor shall provide and maintain all necessary diversion, diversion signs, barricades, fencing, lighting, flagmen or stop/go Signs where the Works affect the safety of traffic and the public on existing roads or temporary diversion roads.

7.4 Trench and Other Excavations

- 7.4.1 The requirements covering trench and other excavations will depend on the location and type of the excavation and the potential risks to the public.

- 7.4.2 The following guidelines apply particularly to trenches but shall also apply to other types of excavations:

- (a) before commencing work the Contractor shall:
 - notify the Engineer on the location and duration of the work. An excavation permit signed by the Engineer must be issued in accordance with Sub-Clause 5.15.1 before excavation proceeds in any work location.;
 - obtain permission from relevant authorities including the police when required. The Contractor's attention is drawn to the requirements of Legislative Decree No 68 dated 9 September 1983, issued by the President of the Republic of Lebanon, and in particular to the provisions therein regarding prior notification by the Contractor to and the issue of excavation licenses by the Director of Roads or the Head of the Municipal Authority concerned, as applicable, before the commencement of excavations within the limits of streets, roads and other areas defined under the said Decree.
 - erect all temporary works such as barriers, warning signs, lighting, etc;
 - have available adequate materials for temporary supports to sides of excavations and necessary labour, plant and materials to complete the work within the shortest possible time;
- (b) in carrying out the works the Contractor shall, unless otherwise permitted or required by the Engineer:
 - not open more than one excavation within a radius of 250 metres;
 - limit the length of trench excavation open at one time to 150 metres;
 - maintain and alter or adapt all temporary works including supports to sides of excavations;
 - remove all surplus excavated material the same day it is excavated;
 - complete the works, including final reinstatement within ten days;
 - where final reinstatement is not achieved within the required time, to carry out temporary reinstatement;
 - ensure that any temporary reinstatement is maintained at the correct level until final reinstatement is achieved.

7.4.3 The above guidelines shall not relieve the Contractor of his obligations and responsibilities.

7.5 Safety Barriers

7.5.1 Safety barriers shall be provided to the perimeter of work areas and to trench and other types of excavations and to existing openings such as manholes, draw pits and the like. When exposed to the public, safety barriers shall be provided to both sides of trenches and around all sides of openings.

7.5.2 The Contractor shall provide details of the type or types of safety barriers for each excavation for the approval of the Engineer prior to commencing work. No work shall commence until the safety barriers are in place.

7.5.3 The type of safety barrier used shall be appropriate to the particular location and the potential risks to the public. Examples of different types of safety barriers are given below along with attached figures:

- Type 1 - excavated material;
- Type 2 - non-rigid barrier of rope or florescent tape strung between metal rods driven into the ground;
- Type 3 – non-rigid barrier type K2, K5a, K5c and K8.
- Type 4 - rigid concrete barrier. Such barriers should be secured by means of dowels driven into the ground.

7.5.4 The following are guidelines on the type of safety barriers that could be used in differing situations. They apply particularly to trenches but also apply to other types of excavations, existing openings and to the perimeter of work areas:

- areas not subject to vehicular traffic - Types 1 or 2;
- roadways (low traffic speed) - Types 1 and 3 or Types 2 and 3;
- roadways (high traffic speed) - Type 3 (short term 1 to 2 days) or Type 4 (long term more than 2 days).

7.5.5 The above examples of the types of barriers and the guidelines on situations in which they could be used shall not relieve the Contractor of his obligations and responsibilities.

8 Contractor's Site Check List

8.1 A sample Contractor's Site Check List is included in Annex 3. This is included to assist contractors should they wish to introduce such a system as part of their site management procedures. The list is not exhaustive and further items will need to be added by the Contractor.

8.2 The list is issued for guidance only, and does not, in any way, revise or limit the requirements covered elsewhere in these Regulations.

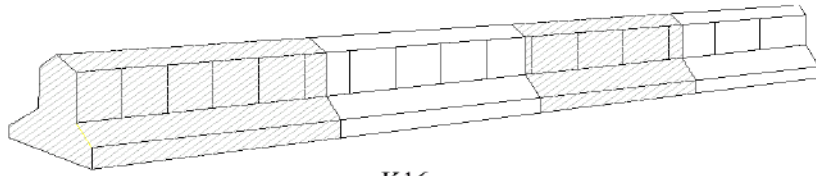
9 Protection of Other Property and Services

- 9.1 Roads And Footpaths: the Contractor shall protect public and private roads, footpaths and the like from damage by site traffic or other causes arising from the execution of the Works and shall repair any damage to the satisfaction of the relevant public authority or private owner.
- 9.2 Trees, Hedges, Shrubs, Lawns: the Contractor shall protect and preserve, trees, hedges, shrubs, lawns etc., and shall replace to approval, or treat as instructed, any plants or areas damaged or removed without approval.
- 9.3 Existing Features: the Contractor shall prevent damage to existing buildings, fences, gates, walls, roads, paved areas and other features on the Site or adjacent thereto which are to remain in position during the execution of the Works.
- 9.4 Existing Services
The Contractor shall:
- (a) notify all service authorities and private owners before commencing any work which may affect or damage existing drains and services and observe all service authorities' regulations and/or recommendations work adjacent to existing services.
 - (b) ascertain the positions of all services not indicated in the Contract Documents and check the positions of those which are so indicated.
 - (c) adequately protect, maintain and prevent damage to all services and shall not interfere with their operation without the consent of the service authority or owner.

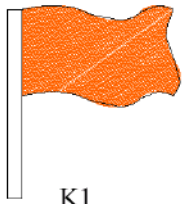
If any damage is caused to existing services as a result of execution of the Works, the Contractor shall notify the Project Manager Representative/Engineer's Representative and the service authority or private owner and make arrangements to repair the damage to the satisfaction of the service authority or private owner as appropriate.

- 9.5 Adjoining Property
The Contractor shall:
- take all reasonable precautions to prevent damage to adjoining property and, if any damage is caused as a result of the execution of the Works, make good to the satisfaction of the owner.
 - obtain permission of the owners if it is necessary to erect Temporary Works or otherwise use adjoining property and pay all charges.
 - advise owners or occupiers of adjoining property of the dates on which work which may affect them is to be executed
- 9.6 Existing Condition of roads, paths, features, services and adjoining property which is at risk from damage shall be recorded by photographs or surveys as appropriate.
- 9.7 Occupied Premises
The Contractor shall:
- (a) where the works are to be carried out in or around occupied premises ascertain the times and nature of the occupation and use. Carry out the Works with minimum inconvenience, nuisance and danger to the occupants and users.
 - (b) if the danger to the occupied premises is such as to involve the safety of persons advise the Employer to evacuate temporarily such persons until the danger is eliminated. The expense of evacuation, temporary accommodation and re-occupation of the premises and other expenses shall be borne by the Employer.

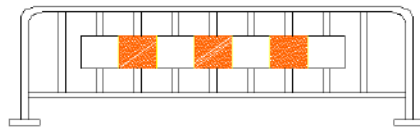
TEMPORARY TRAFFIC CONTROL DEVICES



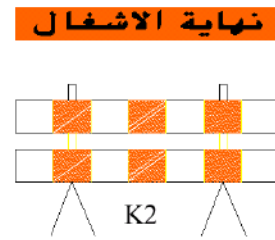
K16



K1



K2



K2



K5a



K8



K5c

K13b

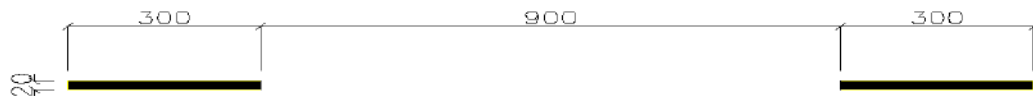
TEMPORARY MARKING

THESE LINES ARE YELLOW AND CAN BE
REMOVED WITHOUT ANY RESIDUAL TRACE.
DIMENSIONS ARE IN CM



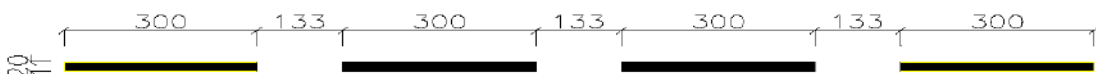
FOR CONTINUOUS EDGE LINE AND FOR SEPARATING THE TRAFFIC IN OPPOSITE DIRECTIONS

MR2 TEMPORARY



FOR SEPARATING THE TRAFFIC IN THE SAME DIRECTION

TYPE T1

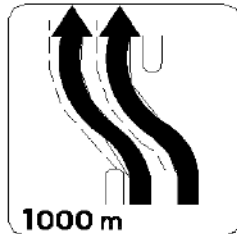


FOR SEPARATING THE TRAFFIC IN THE SAME DIRECTION

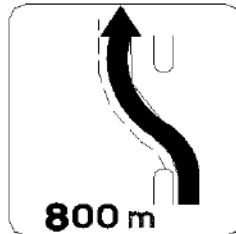
TYPE T3

TEMPORARY GUIDE SIGNS

BLACK TEXT AND GRAPHICS ON YELLOW SIGN PLATE



KD8



NOTICE PAVEMENT CHANGE
KD8



KD2



NOTICE THE DIVERSION
KD2



NOTICE REDUCTION IN
NUMBER OF LANES
KD10



KC1



KD5

TEMPORARY WARNING SIGNS



AK2



AK3



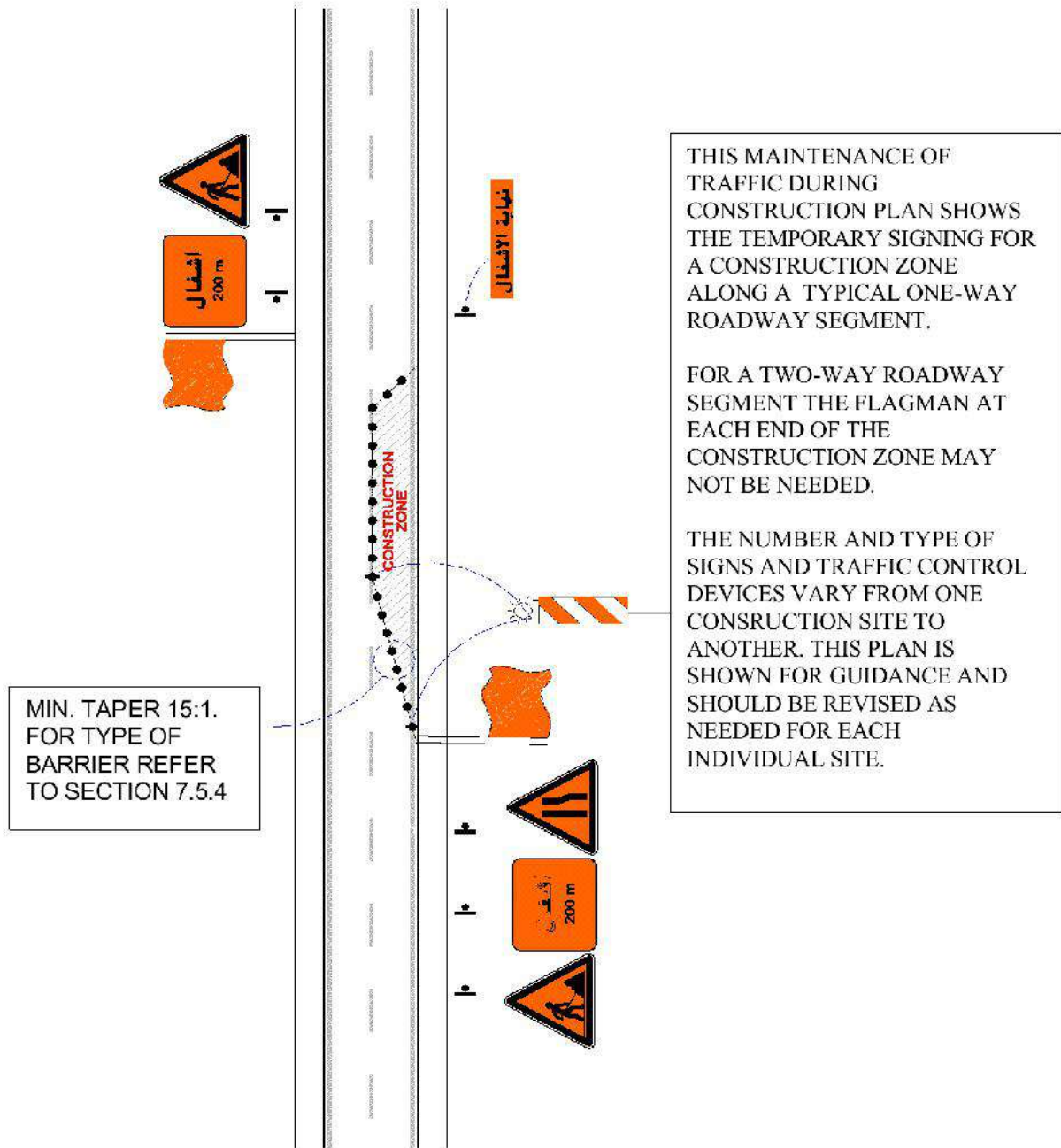
AK22a



AK5

SIZE TO BE DETERMINED BASED ON ROADWAY SPEED - USE 60KPH OR 80 KPH

TEMPORARY ROAD WORKS MAINTENANCE OF TRAFFIC DURING CONSTRUCTION TYPICAL LANE CLOSURE



Annex 1 - Sample Excavation Permit

To: (Engineer)

From: (Contractor)

Date:

CDR Contract No:

Request for Excavation Permit No:

Please give approval for excavation to proceed in the following area:

Work to start on:

Existing services have been checked and identified by:

Drawings # Physical Survey #

Catscan # Trial Holes Excavation #

Signed (Contractor):

Approval of Engineer

The above excavation may proceed, subject to the following:

Services to be maintained:

Services to be isolated before work proceeds:

Other matters:

Signed (Engineer):

Date:

Annex 2 - Sample Street Closure Permit

To: (Engineer)

From: (Contractor)

Date:

CDR Contract No:

Request for Street Closure Permit No:

Please give approval for the closure of the following street(s) from to..... (*dates*)

Street(s):

Reasons:

Proposed diversions:

Signed (Contractor):

Approval of the Engineer

The above street(s) may be closed for the periods stated subject to the following conditions:

Approval has been given by relevant authorities and the police;

Other:

Signed (Engineer):

Date:

Annex 3 - Sample Contractor's Site Check List

Safe Access:

- arrangements for visitors and new workers to the site
- safe access to working locations
- walkways free from obstructions
- edge protection to walkways over 2m above ground
- holes fenced or protected with fixed covers
- tidy site and safe storage of materials
- waste collection and disposal
- chutes for waste disposal, where applicable
- removal or hammering down of nails in timber
- safe lighting for dark or poor light conditions
- props or shores in place to secure structures, where applicable

Ladders:

- to be used only if appropriate
- good condition and properly positioned
- located on firm, level ground
- secure near top. If not possible, to be secured near the bottom, weighted or footed to prevent slipping
- top of ladder minimum 1 metre above landing place

Scaffolding:

- design calculations submitted
- proper access to scaffold platform
- properly founded uprights with base plates
- secured to the building with strong ties to prevent collapse
- braced for stability
- loadbearing fittings, where required
- uprights, ledgers, braces and struts not to be removed during use
- fully boarded working platforms, free from defects and arranged to avoid tipping or tripping
- securely fixed boards against strong winds
- adequate guard rails and toe boards where scaffold 2m above ground
- designed for loading with materials, where appropriate
- evenly distributed materials
- barriers or warning notices for incomplete scaffold (ie not fully boarded)
- weekly inspections and after bad weather by competent person
- record of inspections

Excavation:

- underground services to be located and marked and precautions taken to avoid them

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- adequate and suitable timber, trench sheets, props and other supporting materials available on site before excavation starts
- safe method for erecting/removal of timber supports
- sloped or battered sides to prevent collapse
- daily inspections after use of explosives or after unexpected falls of materials
- safe access to excavations (eg sufficiently long ladder)
- barriers to restrict personnel/plant
- stability of neighbouring buildings risk of flooding
- materials stacked, spoil and vehicles away from top of excavations to avoid collapse
- secured stop blocks for vehicles tipping into excavations

Roof work:

- crawling ladders or boards on roofs more than 10 degrees
- if applicable, roof battens to provide a safe handhold and foothold
- barriers or other edge protection
- crawling boards for working on fragile roof materials such as asbestos cement sheets or glass. Guard rails and notices to same
- rooflights properly covered or provided with barriers
- during sheeting operations, precautions to stop people falling from edge of sheet
- precautions to stop debris falling onto others working under the roof work

Transport and mobile plant:

- in good repair (eg steering, handbrake, footbrake)
- trained drivers and operators and safe use of plant
- secured loads on vehicles
- passengers prohibited from riding in dangerous positions
- propping raised bodies of tipping lorries prior to inspections
- control of on-site movements to avoid danger to pedestrians, etc
- control of reversing vehicles by properly trained banksmen, following safe system of work

Machinery and equipment:

- adequate and secured guards in good repair to dangerous parts, eg exposed gears, chain drives, projecting engine shafts

Cranes and lifting appliances:

- weekly recorded inspections
- regular inspections by a competent persons
- test certificates
- competent and trained drivers over 18 years of age
- clearly marked controls
- checks by driver and banksman on weight of load before lifting
- efficient automatic safe load indicator, inspected weekly, for jib cranes with a capacity of more than one tonne
- firm level base for cranes
- sufficient space for safe operation
- trained banksman/slinger to give signals and to attach loads correctly, with knowledge of lifting limitations of crane

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- for cranes with varying operating radius, clearly marked safe working loads and corresponding radii
- regularly maintenance
- lifting gear in good condition and regularly examined

Electricity:

- measures to protect portable electric tools and equipment from mechanical damage and wet conditions
- checks for damage to or interference with equipment, wires and cables
- use of the correct plugs to connect to power points
- proper connections to plugs; firm cable grips to prevent earth wire from pulling out
- "permit-to-work" procedures, to ensure safety
- disconnection of supplies to overhead lines or other precautions where cranes, tipper lorries, scaffolding, etc might touch lines or cause arcing

Cartridge operated tools:

- maker's instruction being followed
- properly trained operators, awareness of dangers and ability to deal with misfires
- safety goggles
- regular cleaning of gun
- secure place for gun and cartridges when not in use

Falsework/formwork:

- design calculations submitted
- method statement dealing with preventing falls of workers
- appointment of falsework coordinator
- checks on design and the supports for shuttering and formwork
- safe erection from steps or proper platforms
- adequate bases and ground conditions for loads
- plump props, on level bases and properly set out
- correct pins used in the props
- timberwork in good condition
- inspection by competent person, against agreed design before pouring concrete

Risks to the Public:

- identify all risks to members of the public on and off site, eg materials falling from scaffold etc., site plant and transport (access/egress) and implement precautions, eg scaffold fans/nets, banksmen, warning notices etc
- barriers to protect/isolate persons and vehicles
- adequate site perimeter fencing to keep out the public and particularly children. Secure the site during non-working periods
- make safe specific dangers on site during non-working periods, eg excavations and openings covered or fenced, materials safely stacked, plant immobilised, ladders removed or boarded

Fire - general:

- sufficient number and types of fire extinguishers
- adequate escape routes, kept clear

- worker awareness of what to do in an emergency

Fire - flammable liquids:

- proper storage area
- amount of flammable liquid on site kept to a minimum for the day's work
- smoking prohibited; other ignition sources kept away from flammable liquids
- proper safety containers

Fire - compressed gases, eg oxygen, LPG, acetylene:

- properly stored cylinders
- valves fully closed on cylinders when not in use
- adopt "hot work" procedures
- site cylinders in use outside huts

Fire - other combustible materials:

- minimum amount kept on site
- proper waste bins
- regular removal of waste material

Noise:

- assessment of noise risks
- noisy plant and machinery fitted with silencers/muffs
- ear protection for workers if they work in very noisy surroundings

Health:

- identify hazardous substances, eg asbestos, lead, solvents etc and assess the risks
- use of safer substances where possible
- control exposure by means other than by using protective equipment
- safety information sheets available from the supplier
- safety equipment and instructions for use
- keep other workers who are not protected out of danger areas
- testing of atmosphere in confined spaces; provision of fresh air supply if necessary. Emergency procedures for rescue from confined spaces

Manual handling:

- avoid where risk of injury
- if unavoidable, assess and reduce risks

Protective clothing:

- suitable equipment to protect the head, eyes, hands and feet where appropriate
- enforce wearing of protective equipment

Welfare:

- suitable toilets

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- clean wash basin, hot/warm water, soap and towel
- room or area where clothes can be dried
- wet weather gear for those working in wet conditions
- heated site hut where workers can take shelter and have meals with the facility for boiling water
- suitable first aid facilities

Work in Public Areas

- all risks to the public identified
- method statement approved
- road closures approved
- temporary diversions in place
- safety barriers erected/maintained
- safety signs and lighting installed/maintained
- labour, materials, plant and other resources sufficient to meet programme
- temporary reinstatement completed and properly maintained
- permanent reinstatement completed at earliest possible date

Part II - Supplementary Safety, Health and Environmental Regulations

None

APPENDIX 2 - SCHEDULE OF AS-BUILT DRAWINGS AND OPERATING AND MAINTENANCE MANUALS

1) As-Built Drawings

The Contractor shall prepare, and submit to the Project Manager for his approval, as-built drawings of the following:

- a) Contract Drawings as listed in Volume 4 in accordance to the requirements of the Contract Documents.

2) Operating and Maintenance Manuals

The Contractor shall provide, and submit to the Project Manager for his approval, operating and maintenance manuals sufficient for the proper operation and maintenance of the structures (if any) all mechanical, electrical and other service installations of the Works to the satisfaction of the Project Manager.

The Contractor shall provide one original and two copies of the operating and maintenance manuals.

APPENDIX 3 - VALUE ADDED TAX (VAT) PROCEDURES

Law # 379 dated 14/12/2001 amended by Law No. 64 dated 26/10/2017

- 1- The Contractor/Consultant shall be registered in the Ministry of Finance – VAT Department to be able to invoice the VAT to the Council for Development and Reconstruction or obtain its refund from the Ministry of Finance, according to the financing source of the contract.
- 2- The Contractor/Consultant shall submit its offer without calculating the VAT in its unit price.
- 3- Method of invoicing the VAT for contracts totally financed by the Lebanese State:
The Contractor/Consultant shall invoice the VAT to the CDR upon submittal of its statements by adding 11% VAT on the net value of the statement, separately from the value of the statement.
- 4- Method of VAT invoicing/refund for contracts partially financed by foreign sources:
For the section locally financed, the Contractor/Consultant shall invoice the VAT to the CDR in accordance with clause 2 above.
For the section financed by foreign sources, the Contractor/Consultant shall obtain the VAT refund directly from the Ministry of Finance.
- 5- Methods of VAT refund for contracts totally financed by foreign sources:
The contracts totally financed by foreign sources shall be exempted from the VAT. In the event the Contractor/Consultant is bound to pay this tax, the latter shall obtain its refund directly from the Ministry of Finance and not from the Council for Development and Reconstruction. (Refer to Article 19 – clause 4 of Law # 379, and Article 3 (b) of implementation Decree # 7336 dated 31/01/2002.)

This document was approved by virtue of decision # 147/2002 dated 07/03/2002, taken by the Board of Directors of the CDR, and amended as per Law No. 64 dated 26/10/2017.

APPENDIX 4 – POWER OF ATTORNEY FOR FIRM'S REPRESENTATIVE

The representative of the moral person that will be declared successful bidder has the necessary prerogatives to carry out any legal proceeding or measure in connection with the tender, and that said representative should submit for this purpose an official document proving that he is the holder of such prerogatives, namely when the act is of disposal nature such as to waive, to release, to cash, to disclaim and to acknowledge, provided that said document is not older than three months from the date of the tender submission.